

## General Summary

How do young secondary school pupils use digital media and resources during their history education? The central question of this research is: to understand not only the ways in which digitally-minded learners engage in and interact with new media technologies, especially the World Wide Web, as sources of historical information, or as aids in their history education, but also the extent to which they learn with those technologies. In order to grasp the contours of the subject, this research first reviewed a number of subjects: the various and often conflicting ways in which scholars, experts, policy-makers, and politicians have conceptualised history education; the history of the Web and its integration into history education, as well as the literature about the Internet Generation; and the digitisation of cultural heritage whose targeted audiences include both history teachers and learners of history. By means of case studies, this research also explored some of the prevailing assumptions in relation to history education, namely that digital media make history education livelier, more multiple-source-driven, as well as favouring and stimulating historical thinking. In what follows, I shall present a chapter-by-chapter summary of the points discussed.

Chapter 1 presents the various ways in which an ‘understanding of the world’ has been conceptualised as the main goal of history education. I mention how history education has been presented as preparing pupils to make sense of situations, phenomena, and events in the present, while also enabling them to foresee what the future might be like. History education has also been considered as a pipeline that connects learners with ‘their roots’, thereby imbuing in them an awareness of their identity. I point out that while politicians are generally enthusiastic about this way of ‘understanding the world’, scholars and history didactics experts are generally opposed to its being a part of history education. Closely linked to this is an understanding of the world through the lenses of citizenship education. Education officials and politicians regard this as a key aim of history education, as it informs pupils about ‘our democratic values’ and ‘our culture’. Opposing this view, history education scholars generally feel that the best way to prepare democratically minded citizens is to allow them to practice the application of democratic values during history lessons.

Two broad categories of approaches to history education can be distinguished: on the one hand politicians, who are generally interested in history education as an

identity-fostering and citizenship education framework, prefer that a specific body of knowledge – with a set of ‘must-know’ figures and events – is placed at the heart of history education. On the other hand there are the scholars and history didactics experts who generally regard the aim of history education as being to make learners alert, increasing their awareness of how history functions as a discipline by, for instance, getting them to acknowledge the nature of historical accounts with their multiple perspectives and to question the taken-for-grantedness of accounts. However, one trend within this approach presents a limited body of key historical knowledge as *sine qua non*. A related topic in this discussion is the relevance of any given body of knowledge at any given time. Some history education scholars propose a balance that allows learners to know subjects relevant to their era, while understanding how history works in order to be able to interpret for themselves the relevance of historical events and processes in the future.

Lastly, this chapter contains a discussion of the contents presented by the various stakeholders as being suitable for history education. The scholarly literature presents world history – or the international approach to history – as the most suitable form in which history education contents should be delivered. As such, although world history does accommodate local, regional, and national histories, it goes beyond local boundaries to integrate non-national perspectives and contexts. Some advocates of local history have conceptualised local historical figures, events, and processes as laboratory materials that make the study of history more direct while leading to a much broader, transnational, understanding. In the eyes of the politicians, however, national history, protected from the influence of globalisation and the effects of immigration, and aimed at preserving and perpetuating the national identity, is seen as the most suitable form that history contents should take.

The idea behind Chapter 2 is to provide a short but comprehensive background of four of the main aspects relevant to this research, namely, the Web, official policies leading to its integration in education, the Internet Generation, and the early attempts of history teachers to appropriate the Web. On the matter of the Web, I refer to the fact that just after its birth in the early 1990s, activists and hackers made it available to a wider Dutch public and even managed to associate themselves with local official institutions in creating the freely accessible Digital City. Unlike this involvement of local official institutions in digital cities and villages, central government remained in the margins.

The main loser in this situation was the educational sector, as its finance generally depends to a large extent on government rather than private investment.

On the subject of government policies aimed at connecting education to the Web, I review the various steps the Ministry of Education, Culture and Science took to bridge the gap between education and the rest of society in terms of connectivity. I discuss the Big Project [*Groot Project*], the multi-million investment plan that ran from 1997 until 2005, highlighting its successive stages. Although the implementation of the plan witnessed many shifts in focus, it ultimately managed to fill the gap. All schools had been equipped with computers connected to the Web by 2005.

The Internet Generation, central to my research, is presented as referring to the cohort of people born around or since 1980, who grew up – or are growing up – with digital technologies. Interactivity is identified as one major feature about which members of the Internet Generation are enthusiastic. They are particularly keen on media objects that offer them the possibility of engaging with them bi-directionally. The desire for control over media contents is another major characteristic of the Internet Generation. In one sense, control refers to the freedom to choose which path to take when examining media objects and their contents. In another sense it implies the possibility of engaging with many of those contents and objects simultaneously, without losing track of any of them. Image-mindedness is also identified as an important characteristic, one that is amplified by the visually inclined nature of the Web itself.

Lastly, this chapter traces the early appropriation of the Web by some history teachers. A number of pioneer initiatives by individual teachers reveals how the Web was seducing history teachers. Some hailed the new ways in which it made providing historical contexts easy; others discovered that it created a favourable environment for collaborative learning that brought to the surface previously undiscovered strengths and weaknesses of certain pupils; yet others found that it was an empowering tool as it enabled pupils to self-publish their own historical accounts.

Chapter 3 is dedicated to the digitisation of cultural heritage collections, a process that is presented as having multiple motivations. Preservation emerges as the initial motivating factor, on which access and all other subsequent uses depend. Once access had been provided to preserved materials, other uses emerged, mainly educational and ideological ones. Digitisation is often cited as a way of providing sources for pupils and teachers, but also as providing identity-shaping and citizenship-fostering

materials. Another motive is the desire to bring formerly united collections back together again and also to unite objects that relate to the same theme. An advantage of such [re-]unification is that new collections are formed that transcend geographical distances and boundaries. Attention is drawn to the fact that each motive has the potential for presenting new opportunities for generating income.

This chapter also discusses the different levels of selectiveness among digitisation projects, ranging from non-selective and time-based or theme-based projects to strictly selective ones. Though selection is an essential stage prior to digitisation both for financial and practical reasons, in some cases, the selection process itself became an expensive and time-consuming task. In other cases, collections were too small to necessitate selection. In yet other cases, decisions were made to select a theme or a period within which no further selection was made. However, stricter selections tended to be made in most cases. The most frequently used selection criteria are the fragility and old age of objects, their uniqueness, their rarity, and their historical or intellectual significance. The latter criterion is extremely broad as the importance of objects depends on who is making the consideration and with what purposes in mind.

Discussing the post-digitisation organisation of contents and the enhancement of their pedagogical value, this chapter presents hyperlinking as an effective way of placing objects in their historical contexts. I draw a parallel between hyperlinking and the links that historians make between related historical events and processes in order to make sense of them. This chapter shows that heritage institutions have largely underused hyperlinks, which resulted in the pedagogical uses of heritage objects being limited in at least two ways: firstly, Digital Natives, whose expectations lead them to assume that related objects will be interconnected, probably interpret the lack of links by thinking that the objects being presented have no history or context, as none is provided; secondly, those same Digital Natives, whose research almost always begins with online search operations, will rarely find themselves landing on the poorly indexed and ranked heritage sites. The reason for this poor indexing and ranking is related to poor hyperlinking, because the more hyperlinks to and from a site, the better its ranking and the greater that site's visibility and findability will be. I identify three reasons explaining this poor hyperlinking, namely the more or less conservative vision of heritage professionals in restricting their task to selecting and preserving collections and making them available, without ever concerning themselves with the interpretation and

organisation of their contents, which results in fund allocation policies that preclude hyperlinking; institutions' policies regarding the preservation of their identity and their corporate interests; and the impasse surrounding the use of public funds in a networked knowledge landscape that has resulted in a proliferation of the most unpredictable ways of generating profit.

This chapter closes with a review of the trends among heritage institutions since the arrival of Web 2.0. I signal the increasing presence of such institutions on Social Media sites, where they not only communicate with their audiences but also present parts of their collections. This practice has brought digitised objects closer to the users, who, in the process, are taking over some of the tasks previously entrusted to heritage professionals. One such task is assigning meanings to objects. In addition, Social Media provide institutions with an opportunity to gather exchanges made about their objects, which eventually results in multiple narratives about objects. I also review a few educational projects centred on contents generated by users – mostly teachers and pupils – based on digitised heritage objects. These projects increase the control of teachers and pupils over contents, while also facilitating their creativity. Nonetheless, there is little certainty regarding the future of these projects, mainly due to funding issues.

Chapter 4 outlines the methodological approach used for the field research. It begins by framing the central research question – how do pupils interact with digital media during their history class? – which I explored based on three assumptions raised in existing literature on the subject. I opted for an ethnographic approach, applying it to two case studies. My interest was mainly to understand, describe, and then interpret the uses of digital media and resources by the selected secondary school pupils. Within that approach, I opted to play the part of a moderate participant observer by sitting among the pupils and following their exchanges, their interactions with the teachers and digital media, and by conducting unstructured interviews with them. The latter technique proved efficient in that it ensured that exchanges remained natural. My exchanges with teachers were mostly based on semi-structured interviews. Though I strove to win the pupils' trust, I refrained from becoming their peer. I used content analysis, to explore two variables – historical thinking and variety of sources – in the pupils' written assignments. At the end of this chapter I briefly introduce the field data collecting

techniques that I used, namely note-taking, sound and video recording, and photography.

Chapter 5 presents the findings of the first case study at the Baarnsch Lyceum in Baarn. It opens with a descriptive introduction of the class involved in my research, placing it within the context of the broader educational system. I indicate that the second-year bridge-class was in the HAVO/VWO trajectory that leads to higher education. I also describe the 13- to 14-year-old pupils, highlighting not only their attentive attitude when digital audiovisual media were used, but also their lack of attention when these media were not used. The connection between use of the Web and the pupils' historical thinking is discussed: in some cases, the attractiveness of the Web-based audiovisual resources appeared to trigger not only pupils' attention, but also their engagement in the thinking process. In other cases, the ease with which pupils interacted with Web-based texts and still-images [copy-pasting, ripping, image-downloading] prompted them to compile long quotations taken from the Web, though this did leave some room for certain forms of historical thinking. These consisted mostly in identifying the sources and the relevant fragments and then converting them into a new coherent narrative. In yet other cases, a few pupils found another way of using Web-based texts that implies some degree of historical thinking: paraphrasing. Finally, I examine the Web sources used by the pupils and reach the conclusion that most of them had used a variety of sources, including, among others, personal, heritage, religious, news, academic, and educational websites.

Chapter 6 is about the second case study at the Helen Parkhurst Dalton School in Almere. It first discusses how the Dalton approach to teaching and learning in combination with the one-child-one-connected-laptop policy created an atmosphere that stimulated the pupils to make frequent use of the Web during both teacher-led lecture time and 'independent work' time. It appeared that the freedom enjoyed by the pupils in terms of media use led to various forms of interactions with digital media in general, and with the Web in particular. During teacher-led lecture time pupils would search for details about information that had either been provided by the teacher or which emanated from the textbook. During 'independent-work' time their interactions would be even more varied, ranging from Web-surfing in search of relevant information for their assignments to using it in other ways in order to relax from their intellectual efforts. In this respect, the Web appeared to be a crucial factor in creating an

atmosphere conducive to learning. I also explore ways in which the Web interfered with the historical thinking process of the pupils.

It seems that Web image display tools made it easier for the pupils to compare and then judge visual representations of the concepts about which they were learning, or about which they were writing assignments. Moreover, the easy and unlimited access to various websites enabled pupils to make summaries. Through certain forms of content analysis, content-harmonising, and content-structuring – all of which involve making comparisons, judgments, and selections –, they were also able of producing short illustrated texts and maps. Lastly, I pay attention to the variety of Web sources used for WebQuest assignments. Ten sorts of websites were used including not only Wikipedia, the Canon of the Netherlands, and heritage sites, but also, among others, personal, educational, commercial, official, and news sites. It was by weighing up the information contained in each of them that the pupils managed to write their assignments.

While Chapters 5 and 6 are descriptive in nature, Chapter 7 is more analytical as it maps the findings of the case studies into patterns so that interconnections among the various uses and impacts of the Web might be understood comprehensively rather than in isolation. On the basis of these findings, I suggest that the Web and its properties, attractive as they are for the pupils, served as a triggering factor for historical thinking. The underlying point of this argument is that the Web has proven to have the power to captivate the interest of the Internet Generation learners. When thus interested, they become mentally disposed to develop their judgment and other thinking skills. The Web-based video in particular revealed these captivating features which, in many cases, prompted pupils to go beyond the surface message and deduct the unsaid from that which was said. Furthermore, the Web has emerged as central to multitasking, serving as a *disabstracting* tool, that is, as a virtual place where learners can go in search of clarifications about comments made by the teacher or accounts found in the textbook. Involving suspension and resumption, or discontinuity within continuity, this phenomenon appeared in the form of a triangular learning process in one case study, and showed clear indications that it facilitated the development of historical thinking.

In addition, the wide variety of online sources of historical information demanded recourse to some source-evaluation skills, which in their turn fostered historical thinking in the sense that they required pupils to extract the details deemed the most

relevant and integrate them into their assignments, either in the form of summaries or as quotations. Taking into account recent adolescent cognitive psychology literature, which distinguishes adolescent thinking from expert thinking, I regard quote-compilation not merely as an intellectual weakness that has been aggravated by the Web, but rather as involving some amount of historical thinking. Though it is true that the Web has made quote-compilation easier, it has also given rise to such skills as finding the relevant Website or page, then finding the right excerpt and – more importantly – converting the various excerpts into a coherent account. Summarising, which implies more advanced thinking skills and more efforts, is another activity that the Web appears to have facilitated, as it involves searching for the right sources and relevant details that corroborate one another.

Among online sources used for assignments, I distinguish between conventional and unconventional sources. The analysis of those sources shows that there was convergence of sources in the assignments, as both categories were used. This convergence was mostly due to the new relevance and authoritativeness criteria brought about by the Web and its search engines, but also to the fact that the marks of conventionality of physical objects are not transferable to cyberspace. These factors, among others, do tend to blur the distinction between conventional and unconventional sources. I discuss the burgeoning trend among heritage institutions to make their digitised objects available on unconventional platforms such as Wikipedia [the most frequently cited of all online sources in the assignments]. Based on what has been going on in other new-media-driven sectors, I suggest that this collaboration with Wikipedia and similar sites could have a significant impact on history education, and help increase the visibility of conventional sources which are so disfavoured by the new rules employed by search engines.

Finally, I attempt to connect the findings of the two case studies to two discussions currently going on in scholarly circles, namely about the digital divide and the New Learning – New Heritage twins. This research shows that where pupils had permanent and unrestricted access to digital media as well as the freedom to surf the Web whenever they pleased, those same pupils apparently started to engage in fruitful multitasking and produced written pieces of prose that demanded a great deal of effort. In the case study in which the pupils had no digital technologies at their disposal and no access to the Web, they would frequently tune out by shifting to their private digital

devices in order to surf the Web clandestinely. These pupils eventually produced assignments that tended to be quote-compilations.

Another important finding concerns the intersection of New Learning and New Heritage, two phenomena that rely heavily on digital media, in particular on the Web. While New Learning emphasises autonomy and a more learner-controlled learning process, New Heritage implies not only digitised objects, but also all other related types of virtualisation, including animations and simulations. Some examples presented in this research show that the use of New Heritage objects in the classroom triggers new ways of envisaging the past.

In conclusion, Chapter 8 contains some observations about what digital learners appear to do with digital media, the apparent place of digitised heritage as a source of historical information, and the contribution digital media appear to make towards achieving the key targets of history education. Digital learners who do have access to the Web appeared to engage in the convergence of conventional and unconventional sources, in multiple-text-based historical thinking and in multitasking. The latter includes the tendency to disabstract *here and now*. I recommend that pupils are provided with connected computers, preferably as owners, or at least that they are allowed to use their own devices, freely – though with guidance – even during class time. The investigation of certain other points, such as the link between the digital divide and quote-compilation and the *disabstraction* phenomenon, are suitable subjects for further research.

This chapter also includes remarks on the fact that digitised cultural heritage was underused in the two case studies, where even personal websites scored better. This is the result of poor hyperlinking which renders heritage sites invisible in search engines. Furthermore, in the eyes of digital learners, heritage sites seemed to have gained a reputation as image databases, as they tend to present images rather than explanatory texts with links. Moreover, no indications were evident to suggest that digitised heritage is fostering national identity and citizenship, as pupils made much more frequent use of other multiple-perspective sources such as Wikipedia. To remedy the underuse of digitised heritage, I recommend that institutions engage in large-scale hyperlinking both in-collection and cross-institutional, as this would provide more textual information relating to images, while a second recommendation is that they should join the convergence trend. Two steps must first be taken if the hyperlinking tactic is to succeed:

first, heritage institutions will have to concede some sacrifices in terms of corporate interests and identity, as well as redefining certain collection management tasks in order to realise greater involvement with contents; second, the relevant authorities will have to address the impasse relating to the use of tax-payers' money, which precludes many institutions from generating traffic – and thereby profits – for third-party organisations. Further research is needed to explore the impact and uses of the current trend among heritage institutions that involves providing teachers and learners not only with contents and platforms, but also with do-it-yourself tools.

Finally, the last chapter identifies four key targets of history education in the lower cycle and discusses some of the ways the Web appears to be contributing to their achievement. A few instances have shown that the Web appears to facilitate acquisition of the ability to [1] place events, people, and major developments within the framework of the ten historical eras; to [2] identify the global implications and connections of a local place, event, or figure and *vice-versa*; to [3] know how to use historical sources; and to [4] view current tensions against their historical background. Since three of the four key targets of history education in the lower cycle are about linking – events, people, and developments to historical eras; the local and the national to the international and *vice-versa*; and the present to the past – and since the Web is mainly about hyperlinking, I recommend the full integration of the Web into history teaching plans and strategies in a way that highlights and promotes all these links. Another recommendation is to provide pupils with an opportunity to encounter all sorts of historical sources, while also ensuring that they know how to deal with each of them. Further long-term research is needed to look into the Web's contribution to key targets, in particular research that involves a more experimental approach.