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ICTs IN HISTORY EDUCATION IN COUNTRIES OF SOUTH–EASTERN EUROPE

ANALYTICAL SURVEY

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UNESCO Institute for Information Technologies in Education (IITE)

COORDINATING AUTHOR
Terry Haydn (United Kingdom)

IITE PROJECT COORDINATION
Lev Gordon
Tatiana Shavrova

WORKING GROUP
Valentin Băluțoiu (Romania)
Katerina Marcheva (Bulgaria)
Marijana Marinovich (Croatia)
Jelena Popovich (Serbia and Montenegro)
Rebecca Royce (United Kingdom)
Antoaneta Siemenska (Bulgaria)
Alf Wilkinson (United Kingdom)
Katerina Zdravkova (FYRO Macedonia)

ICTs in History Education in Countries of South-Eastern Europe. Analytical survey

The materials of analytical survey provide a significant body of data to further our understanding on the use of information and communication technologies (ICTs) for History education. Most authors of the analytical survey are practicing computer science teachers who provide History teachers with ICTs, as well as instruction support specialists responsible for the quality of History education. A variety of authors presents the aspects of ICT application in History lessons more true-to-life.

This survey was prepared within the framework of the IITE sub-regional project for South-Eastern Europe *Information and Communication Technologies for the Development of Education and the Construction of a Knowledge Society*.

FOR FURTHER INFORMATION PLEASE CONTACT:
UNESCO Institute for Information Technologies in Education
8 Kedrova St. (Bld. 3), Moscow, 117292, Russian Federation
Tel.: 7 095 129 2990
Fax: 7 095 129 1225
E-mail: info@iite.ru
Web: www.iite.ru

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BACKGROUND

The World Summit on the Information Society (WSIS[1]) held in Geneva, Switzerland, in December 2003 emphasised that we are in the midst of an information revolution, where the accelerating convergence of telecommunications, broadcasting multimedia, information and communication technologies creates new products and services, as well as redefines ways of doing business and trade. Now the impact on education and training is hardly seen; though a growing need of paradigm changes is obvious, if new media are to be used effectively and to the advantage of everyone.

WSIS-proposed action plan states that to benefit the world community a successful and continued growth of the new dynamics brought about by information and communication technologies (ICTs) requires global discussion. It is the aim of the present publication to contribute to such discussion by indicating how History learning and teaching in the 21st century might surf the wave formed by different technical resources now available. Effective implementation presumes partnerships with public and private entities, common formats and standardisation, elaboration of information resources, databases, knowledge and information infrastructures equally accessible in every country and region. However, for this to happen, the prerequisites for effective use of new resources in History learning and teaching must be identified clearly.

As a part of its contribution to international efforts to achieve the Education for All goals, UNESCO will continue to stimulate intellectual debate and disseminate knowledge on key issues of education. During the past decade, UNESCO regularly prepared and published a series of educational studies and several editions of two periodic reports, namely, *World Education Report* and *Education for All: Status and Trends*, which have provided a source of reference for national policy-makers and professional users.

UNESCO General Conference resolution states the intention to "...encourage the review of historical research and the teaching of History with a view to enhancing the processes of dialogue, cross-fertilization, and convergence between cultures in the framework of the follow-up to the United Nations Year of Dialogue among Civilization 2001; support the efforts of Member States wishing to revise their educational text books in this area, in cooperation with the Educational Sector; and promote follow-up activities for the implementation of intercultural projects aimed at promoting greater understanding between various cultures and spirituals and religions tradition."

UNESCO has been striving to assist its Member States in developing a holistic approach to education and training, promoting values, attitudes, and behaviors conducive to peaceful and democratic societies. Emphasis has been given to the production of educational materials for human rights education, upgrade of History textbooks and curricula, and elaboration of national plans of education integrating various dimensions of a peace culture: human rights, non-violence, tolerance, gender equity, democratic participation, intercultural understanding, cultural and linguistic diversity.

For this reason UNESCO Institute for Information Technologies in Education (IITE) has included the issues of ICT application in History education in the programme of its research activities. Within the framework of the programme IITE held the expert meetings and developed the analytical survey *ICT Application in History Education* to acquaint international community with the latest achievements in the field of ICT application in History education and didactic trends of ICT usage in the open approaches to History education.

History teaching and learning not only offers opportunities to gain knowledge but also encourages students to develop ability to analyse and evaluate events, to think independently. One of the missions of History education today is to eliminate prejudices and keep positive communication between different countries, religions, and cultures.

ICTs have facilitated broader access to information as well as the capacity for students to learn at their own pace; the assistant technology has generated the software which can help track and assess the performance of students. The technology has, of course, affected paper-based publishing considerably. There have appeared faster product cycles and

[1] http://www.itu.int/wsis/map/index.html

improved avenues to access and analyse customer behaviour and attitudes. Currently the Internet offers a means to add value to existing products in the form of additional, supporting information for textbooks or electronic discussions.

The potential benefits of electronic learning are numerous and exciting. Technology could make learning and resources accessible to a much wider range of people, including people with special needs and the disabled. In certain parts of Europe it covers those whose lives have been upset by war and conflict. There was little doubt that History and new technologies are well-matched partners. Technologies make resource materials available as well as the access to visual resources like paintings and architecture. However, making the information available still is some distance from effective and inspiring teaching and learning. Thus, it was vital to develop methods of historical information delivery meeting the demands of the end user, i.e. his/her needs in terms of internalising information and making use of it.

Four years ago the expert meeting *History Education and New Information Technologies* was co-hosted by IITE and the Council of Europe. The participants from ten countries took part in the meeting.

On 27 March 2004 IITE held the international workshop *ICTs in History Education* in Sofia, Bulgaria, within the framework of the sub-regional project for South-Eastern Europe *Information and Communication Technologies for the Development of Education and the Construction of a Knowledge Society*. The analysis of the activities showed that ICT applications in History education in SEE countries vary greatly. To provide the positive experience in this field the data from the UK secondary schools were included in the analytical survey.

There are two key issues which make this analytical survey particularly important.

The first is the ongoing call for revision of History textbooks in the light of political and educational changes. Political changes imply that there is a need to counter a strong ideological component of History textbooks.

The second major issue concerns the revision of History textbooks in the light of the changed thinking regarding educational methods and pedagogy. In Europe as in many other territories, ICTs were seen as a key feature of future education system. At the heart of such developments there must be understanding of how the technologies must be used.

For this reason the analytical survey was structured to cover the sections exposing the details of the key problems of ICT applications in History teaching with the individual cases of their solution in certain countries as examples. So, the would-be readers can gain the understanding of trends, forms and ways the information technologies are employed to teach History in various countries of Europe, as well as foresee how they will develop in the education systems of these countries.

It is acknowledged that History education can promote mutual respect and understanding. Technologies can enhance the process even more. However, an honest assessment must admit that History teaching can, and often did, achieve the opposite to mutual respect and understanding.

Terry Haydn
School of Education
University of East Anglia
United Kingdom

What Do They Do with the Information? Computers in the History Classroom: Some Lessons From the UK

Abstract

The paper examines the recent development of the use of computers in the teaching of History in schools in the United Kingdom (UK) in the context of substantial government investment in new technology and political enthusiasm for the use of computers in education. As in other countries, there is to at least some extent a "rhetoric-reality gap" between the claims made for the use of computers in schools and what is current practice. Consideration of the use of information and communications technology (ICT) in UK classrooms over the past ten years suggests that new technology is not an unproblematic tool in education and that considerable thought needs to be given to the instructional design of materials for use with computers. In particular, it is argued, attention needs to be given to the subject discipline of History, and what we are trying to achieve in school History, if the potential of computers for enhancing teaching and learning in History is to be realised.

> "The computer can be a fabulous tool... But the dirty little secret is that no one really knows what to do with this stuff." (Warhaftig, quoted in Banks et al, 1997)

Context

Politicians and policy-makers in the UK have invested great faith in the potential of information and communications technology to improve educational standards in schools. Over two billion pounds have been invested in new technology in schools between 1997-2001 (DfEE, 1997; DfES, 2000) and the UK now has one of the highest computers to pupil ratios in schools of any country (Abbott, 2001, OECD, 2000, Research Machines, 1997). Recent estimates are that there are now over a million computers in UK schools, with one computer for every 9 pupils in secondary schools (DfES, 2000). Regulations for the training of teachers in the UK now state that trainees cannot be passed to enter the profession unless they are computer literate and able to use computers in their teaching, and the government has also funded a massive programme of training in ICT for in-service teachers.

Study of the statements of politicians (of all parties) about computers and education shows that they are unreservedly enthusiastic about new technology. In the words of Prime Minister Tony Blair, "the future lies in the marriage of education and technology. The knowledge race has begun. The pace of technological change means the task in urgent. Knowledge is power. Information is opportunity" (Blair, 1995). Charles Clarke, Minister of State for the Department for Education and Employment, elevated new technology above even literacy and numeracy in declaring that "familiarity with ICT is the most vital life skill for the generation now going through school" (Clarke, 1999). Minister of Education Estelle Morris described ICT as "our new DNA... our new internal combustion engine" (quoted in *The Guardian*, 18 October 2001).

This inchoate political enthusiasm for new technology in education did not pass unremarked by the educational establishment in the UK. As Professor Stephen Heppell (1995) cynically remarked:

> Ever since Harold Wilson spoke of the white heat of technology, politicians and decision-makers have assumed that silicon offers a hot-wired short-cut to voters' hearts, especially when jobs, schools and national pride entered the equation. A succession of ministers, from Benn to Baker, embraced technology with photogenic relish; when did you last see an Education Minister in the media without a computer in the background?

The great computer delusion

It is not possible to examine the recent history of computers in education without concluding that they have not had the transformational effects that were hoped for, either in the UK or elsewhere (see for instance, Abbott, 2001; McKenzie, 1995; Stevenson, 1997; Trend et al, 1999). Although some institutions, such as banks and newspapers, might find it difficult to function without their ICT networks, it is difficult to think of many schools or History departments who would be unable to function or who would have to send all the children home, because "the network was down".

It should be emphasised that the "rhetoric-reality gap" (Trend et al, 1999) is not limited to the UK. Strommen (2000) claims that even in the United States, with one of the highest computer to pupil ratios in the world (Research Machines, 1997), "the technological changes that have swept through society have left the educational system largely unchanged." This would suggest that although access to ICT in schools might be part of the problem, there is more to it than simply whether there are enough computers to go round. One of the most recent surveys of the use of ICT in English schools

(DfEE, 1998) found that in spite of the substantial increase in the number of computers in schools, a declining percentage of head teachers reported them as having made a substantial contribution to teaching and learning; the figure falling to well under 20% of schools surveyed. If computers are so wonderful, why aren't teachers using them?

Recent research findings suggest that the belief that simply putting more computers into schools will in itself in some way improve educational outcomes is a misguided one. The general enthusiasm for new technology in some quarters has perhaps led to the assumption that because ICT is good for booking holidays, sending messages, and formulating accounts, it is equally good for teaching and learning (in all subjects), without looking closely at what it has to offer, both for learning in general and in relation to particular subject disciplines. One of the reasons for the "rhetoric-reality gap" is that politicians and policy-makers have radically different ideas about what computers are for in education.

ICT, learning and subject disciplines

ICT has massively increased the amount of information that can be transmitted across educational networks, but those involved directly in the process of teaching and learning are aware that there is no necessary correlation between the amount of information which is transferred and the amount of genuine learning and understanding which take place. The Information Revolution has taken place at a time when teachers in the UK are increasingly moving away from behaviourist and "transmission" understandings of learning, and becoming increasingly aware of its limitations. In the words of John Naughton (1998), "It's not every day that you encounter a member of the government who appears to understand the net. Most politicians (Clinton, Blair, Blunkett to name just three) see it as a kind of pipe for pumping things into schools and schoolchildren." As Bonnet (1997: 155) notes:

> Volume of content does not equate with richness of experience.... One of the chief dangers of information overload is that it can, at one and the same time, inhibit authentic thinking, and seduce us into believing that all we need to solve problems is yet more information.

Much of what has been written about learning and ICT over the past 30 years has been 'generic' rather than related to specific subject disciplines, in spite of the fact that particular ICT applications offer different advantages to different subjects. Integrated Learning Systems (ILS), or "drill and skill" exercises, for example, where pupils repeat similar tasks before moving to the next level, appear to offer opportunities for modern foreign language and maths teaching, but do not appear to work for teaching History. Data logging software is very useful to teachers of Physics, but is of no interest to History teachers. The vast majority of History teachers make regular use of television and video, but very few Maths teachers use television and video in their teaching (Sharp, 1995).

If we are to maximise the potential of new technology for improving teaching and learning in schools, we need to take account of the ways in which children learn when working with computers, and the nature of the subject discipline being taught. What does it mean "to get better at History", and what specific advantages do particular ICT applications offer which will help pupils to make progress in History? How "useful computers are to a teacher" depends on what we are trying to achieve in a subject (Haydn, 2002).

Changing views on the nature and purpose of school History in the UK

There has been a (contested) revolution in the way that History is taught in schools in the UK over the past 20 years (see, for example, Aldrich, 1991; Sylvester, 1994; Haydn, 2000). There is still a conservative lobby which wants to use school History to pass on a received version of the national past which celebrates British heroes, victories, and political institutions – exemplified by the lament of Member of Parliament John Stokes: "Why cannot we go back to the good old days when we learnt by heart the names of the kings and queens of England, the feats of our warriors, and our battles and the glorious deeds of our past?" (Stokes, 1990)

Amongst teachers of History in schools however, it is now generally accepted that there is more to progression in History than the aggregation of substantive or "subject content" knowledge (simply "knowing more stuff" about the past). It is also widely felt that part of the purpose of school History is to develop the "information literacy" of young people – to teach them to think for themselves, rather than to teach them what to think; to cultivate skills of critical and informed judgement in contexts where there is not a provably right answer. In the words of Norman Longworth (1981: 19), to teach young people "to sort out the differences between essential and non-essential information, raw fact, prejudice, half truth and untruth, so that they know when they are being manipulated, by whom, and for what

purpose." Helping young people to make intelligent judgements on the reliability of information from a range of media sources, in an era where they are faced with sophisticated techniques for the manipulation and distortion of information, is an important part of a historical education and education for citizenship.

In addition to developing an understanding of history as a body of knowledge, school History is about a form of knowledge approach which attempts to pick out the central features of a discipline and find ways of developing children's understanding of those features (Lee, 1994). A key part of this is helping to develop pupils' ability to compare, analyse, and evaluate historical sources, representations and interpretations of the past. This involves handling the difficulties involved "intelligently", in the sense of learning to use some of the procedures which historians would use to "make sense" of the differing accounts or explanations of the past (Britt et al, 2000; Lee and Ashby, 2000).

Examining competing claims about the past and making comparisons between the past and the present is seen as a way of making history powerful, rigorous, relevant, and interesting to pupils. Arnold (2000: 13) reminds us that the Greek word for history meant "to enquire", and more specifically, "indicated a person who was able to choose wisely between conflicting accounts", and goes on to note that:

> If the past came without gaps and problems, there would be no task for the historian to complete. And if the past always spoke plainly, truthfully and clearly to us, not only would historians have no work to do, we would have no opportunity to argue with each other. History is above all else an argument.

In the English National Curriculum for History, this is represented by the requirement that pupils should be taught "how and why historical events, people, situations and changes have been interpreted in different ways", "to evaluate interpretations", and "to consider the significance of the main events, people and changes studied." They are also required to "organize historical information" (DfEE, 1999: 20).

These changes in the nature and purpose of school History have a profound effect on the ways in which new technology can be helpful to the History teacher. Given that there is more to "getting better at History" than simply accumulating more facts about the past, ICT's power to increase the amount of information about the past which is available to teachers and learners of History is of only limited value. A key question is what they do with the information when they have accessed it. As Dede (1995: 12) points out:

> We have found that learner investigation and collaboration and construction of knowledge are vital, and these things don't follow teaching by telling, and learning by listening. It isn't that assimilation of knowledge isn't a good place to start, because it is hard to investigate something unless you know a bit about it. But assimilation is a terrible place to stop. The excitement about access to information is that it is the first step to expertise, to knowledge construction. Only if access to data is seen as a first step – rather than as an end in itself, will it be useful.

As Christine Counsell (1999) has pointed out, for many pupils, "more stuff" is the last thing they need. One of the things which many pupils find difficult about history is that it is so vast and unmanageable. Some pupils are already confused by the volume of information they are having to cope with; giving them access to even more information may be the last thing they need.

Another of the "myths" about learning with computers is that it is "interactive" learning. Computers do offer colour, movement, sound, and pictures to learners. This can make learning materials look much more attractive to pupils. Moreover, as Bill Gates (1995) points out, interactivity means that "the person controls what he or she sees or hears"; using hypertext links, learners can negotiate their own, individual pathways through learning materials.

The problem with this is that in terms of their interaction with the materials, learners sometimes do fairly low-level, meretricious or even pointless things with the information given, either uncritically accumulating information, or using hyperlinks to browse "pinball" fashion around a topic, often using them to avoid going near screens which have too much text on them. Josie Taylor (1996) from the Open University cites the avoidance of challenge and difficulty as a potential hazard of hypermedia interactivity:

> We certainly need to keep their attention and keep them going when they're learning, but if they think it's all to do with trial and error, pressing this button, that button, that's not learning, that's not getting the knowledge into their minds in an integrated way, in a way they can make use of, that's just mucking about.

The real potential of ICT lies not in the "bells and whistles" of multimedia, to provide "sugar-coating" for learning, but in its ability to access resources which would otherwise be inaccessible, and to manipulate and process those resources much more efficiently. Even these assets are only worth much if we can think of historically valid activities for pupils to do with these resources and processes.

What do they do with the information? Working towards genuine interactivity with History and ICT

In spite of Warhaftig's assertion that we haven't really worked out what to do with computers in schools, there is some evidence to suggest that teachers are gradually working out how to use computers to improve teaching and learning in History. Recent inspection of secondary schools in the UK suggests that although not all schools have worked out how to make best use of new technology, some teachers are finding ways to deploy computers in a way which enhances pupils' knowledge and understanding of the past, and enables them to make progress in their ability to communicate that knowledge and understanding (Harrison, 2002). Whereas early attempts at interactivity in History and ICT showed a limited understanding of the nature of historical knowledge, and insight into what History teachers are trying to do, the last few years have seen some more thoughtful approaches to getting ICT to do what History teachers need, and to providing more genuinely interactive experiences for pupils. Does the activity force the learner to think, rather than simply remember, does it put the seeds of a new idea in learners' minds? Does it go beyond "low order" tasks, such as retention and comprehension? Does it make them think about "connections" (either temporal or geo-political) that had not occurred to them before – including links to present day problems and dilemmas? Does the question posed intrigue the learner in a way that encourages them to read in more depth, and persevere in a difficult enquiry? Does it disturb their preconceptions? (Schick, 1995, 2000).

Part of this progress is learning from earlier mistakes and dead-ends in History and ICT. It is only over the past four to five years that word processing has been widely used in History classrooms to address high-order thinking and conceptual understanding, rather than to get pupils to "copy up in neat" handwritten work (see Appendix 2). Another "bad habit" in school History was the tendency for pupils to download and "cut and paste" large chunks of information from CD-ROMs or the Internet without actually reading them or doing anything with them beyond "pasting"; what Walsh (1998) terms "Encarta Syndrome".

For the teacher, the aim is to move pupils beyond the "hunter-gatherer" mentality (Counsell, 1999) and towards the marshalling and deployment of information to address a particular historical question. Part of the challenge for the teacher, is to select from the mountain of resources now available, materials which will enable them to exercise these information handling skills in the context of worthwhile historical enquiry. It also requires skilful judgement about the amount of information to make available, and the amount of support and guidance to give to pupils of differing abilities in their use of it. Word processing packages have several facilities which help pupils to sort, order, merge, and discard information quickly, without laborious and time consuming transcription. In the words of Walsh (1998: 6):

> The word processor can search, annotate, organize, classify, draft, reorganize, redraft and save that fundamental of the historian, the written word. When we consider these processes and the difficulties they pose for so many of our students, the true power of the word processor becomes clear. It is not a typewriter, it is an awesome tool for handling information.

PowerPoint, with the limits on how much information can be inserted to each slide, can be a useful tool in helping pupils to delineate between essential and tangential information. In "The Information Society", learning to handle information intelligently is an important skill, and given the nature of History as a subject discipline, and the attributes of ICT, few, if any subjects are better placed to equip pupils with this skill.

Christine Counsell (2000: 2) makes the point that it is not just about technology replacing effort, but about getting the emancipatory facets of technology to persuade learners that difficult and challenging activities are worth persevering with:

> I do not want my Year 7s to spend an hour typing in data; I do want them to see the historical relationship between two ideas. I do not want them to search for yet more information: I do want them to select items, to convert them into causes or consequences, and to experiment with language for doing so. I don't want them to fuss over box size on a leaflet design: I do want them to choose or reject alternative field headings in a database. I don't want them to do low-level word matching or phrase-spotting: I do want them to be so motivated to read for meaning, that they pause, and think and ponder and reconsider – and ask why. I want to clear away the clutter and to get pupils to focus on the interesting historical puzzle. I want to slow them down.

Another crucial attribute of ICT that contributes to learning in History is the potential it offers for presenting multiple perspectives on the past. Given the constraints of space in conventional textbooks, the Internet has increased opportunities for incorporating different perspectives on the past, and presenting history as contested, problematic, and above all, in Arnold's words, "an argument" (Arnold, 2000: 13). Almost any event or person in history can be "problematised" by presenting pupils with differing views as to how their contribution to history might be interpreted, and the significance which might be attached to their contribution to history.

In terms of advances in technology, the advent of the data projector may well be the "killer application" that revolutionises the use of ICT in History classrooms. Instead of marching pupils down to the specialist ICT room, with its suite of computers, for a whole lesson, to do a "set piece" special occasion lesson using computers, the facility for whole class projection means that ICT can be used routinely as a small "component" of a normal lesson, as the need arises, in the same way that History teachers use video and television to present or discuss a short extract.

Conclusion

Some of ICT's attributes can help History teachers to go beyond basic recall and comprehension interactivity. It can enable pupils to access materials and undertake activities which enable them to make connections between substantive or "subject content" knowledge, and their knowledge and understanding of the nature of historical knowledge – to understand what "facts" are, the processes which are undertaken to establish the validity of claims, and how historians attempt to get at "the truth", or at least what Arnold (2000) terms, "true stories".

Communications technology has led to an increase in the speed at which resources develop and improve. Over the past few years, many museum sites have improved out of all recognition, the National Grid for Learning in the UK has gone from an embarrassment to a potentially useful resource. Sites, such as the Webby Awards (http://www.webbies.com) and the Public Record Office (http://www.pro.gov.uk), have provided models for better instructional design and purposeful interactivity, and online newspaper archives have gone from providing a text only service to one which provides animations and cartoon/picture archives (it is now possible, for instance, to access high quality resources on September 11th), and other recent historical crises and events, on The Guardian's online site (http://www.guardian.org.uk).

Although we are not there yet, and very few History departments have fully harnessed the potential of ICT to improve teaching and learning in History, over the next few years, it seems likely that there will be a tendency for pupils to express a preference for History courses in which there is effective integration of ICT based resources and activities, and that departments which do not explore the potential of ICT will find that their courses are less popular.

Because the relationship between technology, learning, and subject disciplines is a complex one, it takes time to assimilate ICT into pedagogical practice. In spite of Warhaftig's opening assertion, we are gradually working out "what to do with all this stuff". Given time, support, and appropriate facilities, it is likely that over the next few years, nearly all History teachers will make increasing use of ICT, not because they feel under pressure to do so, but because they enjoy doing so, because it makes their job easier, and because they feel that it helps them to teach History more effectively.

The appendices attached are an attempt to show some of the ways in which ICT has been used in school History in the UK. They are not put forward as models of best practice, but as examples of the sort of instructional design that attempts to get pupils to do historically worthwhile activities with the historical sources they have accessed using ICT. In some cases the materials for the activities themselves have been attached, in others, examples of work deriving from the activities, and in others, simply a description of the activities.

Appendix 1. Using the Internet to access multiple perspectives on the past

The Internet has made it very easy for History teachers to get hold of differing interpretations of historical events and personalities. Reuben Moore (2000) provides a good example of the use of the Internet to set up a well structured interpretations exercise by selecting three contrasting reviews of the film "Michael Collins", and then using the following simple table to structure the pupil activity that stems from the three sources. This activity demonstrates that effective "interactivity" is not about the volume of information which is "shifted", but about the selection of appropriate sources, and the quality of the questions asked of them.

Michael Collins 1

A review of the film "Michael Collins" by Roger Ebert, in the Chicago Sun Times:
http://www.suntimes.com/ebert/ebert_reviews/1996/10/102509.html

"History will record the greatness of Michael Collins," the Irish President Eamon De Valera said, "and it will be recorded at my expense." Yes, and perhaps justly so, but even De Valera could hardly have imagined this film of Collins, which portrays De Valera as a weak, snivelling prima donna whose actions led to decades of unnecessary bloodshed in and over Ireland.

Michael Collins paints a heroic picture of the Irish military leader who signed a treaty saying it was the best we could hope for at this time.

Was De Valera really responsible for all these tragic consequences? Some argue so but others will find Michael Collins in need of an Irish villain to balance the British enemy. The film makes De Valera into a much more devious man than he was. The film suggests that De Valera was aware of the plot that Collins was to be killed.

- The film falters with the unnecessary character of Kitty Kiernan (Julia Roberts) who is in love with both men, but even though Kitty was a historical character, we never feel the scenes are necessary; they function to give the audience what they want, not as additional drama.

Michael Collins 2

The summary of Michael Collins from the company who made the film:
http://michaelcollins.warnerbros.com/cmp/welcome.html

- Neil Jordan's epic portrayal of the life of Michael Collins has won the Venice Festival's Golden Lion award.
- In Ireland, where national pride is a passion close to religion and romantic love, one man became a legend for his fierce devotion to his land and its independence. Liam Neeson stars as Michael Collins in a story about the real life patriot whose bravery and dedication to the Irish people changed history as it made him into a legend. It would cost him his life but would make him a hero of the ages.

Michael Collins 3

A perspective from a group of American politicians:
http://www.geocities.com/CapitolHill/Lobby/5598

In 1996, the movie Michael Collins was released. A very fine picture in many respects, we believe it was seriously flawed by the inaccurate and unfair portrayal of the great Irish leader, Eamon De Valera.

- De Valera was one of the greatest leaders of this century; a man who stuck to is faith, a man of principle, a man dedicated to peace and justice, a soldier who fought for freedom, a man who followed his conscience.

Table 1

Interpretation number	Did the writer think the film was good?	Why did the writer think it was good/ bad?	Why was each interpretation written?	In what ways has this affected how it was written?
1	–	–	–	–
2	–	–	–	–
3	–	–	–	–

Moore, R. (2000) Using the Internet to teach about interpretations in years 9 and 12, *Teaching History*, No. 101: 35-9.

Appendix 2. The use of the word processor to help pupils to organize and classify information

The provisionality of word-processed text allows the student to experiment, rearrange, reconsider, and re-plan work without laborious and time-consuming transcription. Tables are a helpful mechanism for organising into categories. Bold, italic, or underline can be used to differentiate between narrative and analysis, situation and event, fact and opinion, tangential or essential, long or short term causes. Once organized into tabular form, information can be inserted into writing frames as a form of "scaffolding" which leads students into the art of essay writing in analytic and discursive mode. Work can also be differentiated for students of differing abilities, by providing graded versions of exercises. In the same way that data-logging software helps science students to spend more time focusing on the interpretation of data rather than spending time laboriously constructing graphs by hand, the word processor enables History learners to spend more time on "high order" thinking, and the patterns and relationships between pieces of information, as against laborious transcription of information.

The causes of the English Civil War

The National Council for Educational Technology (NCET) and Historical Association project produced a set of activities and resources for teaching History topics through the use of word processing exercises. These included the events of 1066, the causes of the English Civil War, change agents in the Industrial Revolution, and a comparison of civilian experiences in England, France, and Germany in World War Two. The package provided a set of disks containing the activities and resources for a range of word processing packages, and a teacher information booklet (NCET/H/A, 1997).

The exercise on the causes of the English Civil War was an adaptation of a "card-sort exercise", where pupils had been asked to place various statements about the causes of the war into four columns according to whether they were irrelevant, not very important, fairly important or very important as factors leading to the outbreak of war (See Fig. 1).

Figure 1. The basic level text file

Charles' wife was French	Many people feared that Charles favoured the Catholics too much.	Charles spent a lot of money on paintings, his family, and the expenses of the royal court.	In 1626, parliament refused to raise money for the king.
Charles' wife was a Catholic. He had children through this marriage.	Charles was very fond of dogs, particularly spaniels.	Charles was only 4 feet 7 inches tall.	In 1625, England fought an unsuccessful military expedition against Spain.
In 1634 Charles extended the use of an unpopular tax called "Ship Money".	In 1628, a military operation against France was a failure.	Ever since Henry VIII had been king there had been problems over religion in England. It would be difficult for any monarch to please everyone in England over religion.	In 1640, Charles fought a war against the Scots. He had to pay them money to maintain their armies while they occupied two counties in Northern England.
There were long term money problems in England which went back to the days of Elizabeth I. Anyone who was on the throne would have to raise more money in taxes.	Some textbooks suggest that Charles firmly believed he should keep all the real power of ruling the country to himself and that no one had the right to question his decisions.	In 1642, Charles tried to arrest some of parliament's members and put them in prison. This caused riots and demonstrations in London. Charles left the city to raise an army to fight parliament.	Some textbooks suggest that over the previous 100 years, the power of the monarch declined (fell). These books also suggest that many people began to feel that parliament should have more power.

Pupils were also provided with a file which explained the rationale behind the exercise and some contextual information (See Fig. 2).

Figure 2. Rationale and contextual information

Why did a civil war break out in England in 1642?

If you look in History textbooks, more than one cause is usually given for the outbreak of the civil war in England in 1642. These are some of the causes which are often mentioned:

Charles I – The personality and beliefs of King Charles I

Money – Charles kept asking the English people to pay more taxes

Religion – There were serious disagreements over what should be done about religion at this time

Power – There were disagreements about how much power the king should have

War – Problems caused by wars with other countries

But which of these causes was most important?
Were there any connections between them?

To what extent was the outbreak of the civil war the fault of Charles I?

For nearly all the period between 1066 and 1642, the people of England accepted that they should be ruled by a king or queen. Why did this change in 1642?

Things to bear in mind:

Most people in England at this time did not like Catholics or people who might want to support or favour them.

Most people did not like having to pay higher taxes.

Wars cost a lot of money. Losing wars tends to make those who choose to fight them unpopular.

For less able pupils, a file providing a writing frame was provided (see Fig. 3). Having been previously asked to classify factors by using different text formats (bold, italic, underline, etc.); they then simply had to paste the sections of text into the appropriate paragraphs. The word processor thus provided "scaffolding" to help the pupils to organize their thoughts, and to move from a chronological to a thematic structure.

Figure 3. Writing frame for less able pupils

There were some long–term problems between king and parliament even before Charles came to the throne… (Insert text marked **bold**)

Many of these problems got worse during the course of Charles' reign. Religion was one such problem… (Insert text marked *italic*)

Money was also a problem… (Insert text marked underline)

Things were made worse by conflicts with other countries… (Insert text marked in CAPITALS)

How Charles was, as a person, also caused problems… (Insert text marked in Comic Sans font)

The last straw was when… (Insert text marked in Arial font)

In adapting the initial card-sort exercise for word-processing format, three levels of information were devised. The first level (see Fig. 1) was devised for use with younger high school pupils (in the UK, as part of the National Curriculum for History, pupils will study the causes of the English Civil War as 12 or 13 year olds). The intermediate level (see Fig. 4) adds to the complexity of the exercise by providing pupils with 32 "boxes" of information about the causes of the Civil War, as against 16. The highest level was not in the form of text boxes, but a narrative of about 1,000 words, bringing out some of the historiographical debates and complexities surrounding the outbreak of the war, and was seen as being more appropriate as extension work for more able pupils or for undergraduate work.

Figure 4. The intermediate level text file

In 1642, Charles went to the House of Commons with armed guards to try to arrest 5 M.P.s. They had already escaped.	In 1629, parliament criticised the king for allowing Catholics to sit at court and for raising money without its permission.	Throughout his reign, Charles spent a lot of money on paintings, his family, and the expenses of the royal court.	In 1626, parliament refused to grant the king more money for wars against Spain and France.
Charles' wife was a Catholic.	Charles was shy, quiet and had a bad stutter.	Charles was only 4 feet 7 inches tall.	Charles' wife was French.
In 1634 Charles imposed an unpopular new tax called "Ship Money".	Charles was sometimes indecisive, sometimes stubborn.	Charles was very fond of dogs, particularly spaniels.	In 1640, the Scots invaded England and refused to leave unless they were paid £850 pounds a day.
In 1638, Charles ordered the Scots to change the prayerbook they used in church services, and use the English prayerbook.	In 1637, Charles had some of the Puritans who opposed his religious policies mutilated (their ears were cut off).	In the summer of 1642, having gathered together his supporters, the king raised his standard at Nottingham and declared war on parliament.	Some of Charles' main advisors, Buckingham, Strafford, and Laud, were very unpopular with the people.
In 1628, Charles went to war with France and lost.	Throughout his reign Charles let Catholics attend his court.	Later in 1638, the Scots rioted and rebelled against Charles.	In 1639, the king raised an army to attack Scotland. It lost.
Later in 1629, Charles dissolved parliament and ruled without one for the next 11 years.	In 1640, there was a rebellion in Ireland. Some protestants were killed by Catholics. Charles has to think about raising an army to put down the rebellion.	In 1641, Charles had to go to parliament to ask for more money to pay the Scots and to raise an army to fight the Irish. He has to agree to give more power to parliament to get them to agree to this.	After the attempt to arrest the 5 M.Ps, there were riots and demonstrations against the king in London. He left for Oxford to gather support.
Some textbooks suggest that from about 1550 A.D, onwards, more and more people thought that parliament should have more say in the running of the country.	Charles' father, James Ist had been an unpopular king and many people thought of them as foreigners as they had come from Scotland.	There were big divisions over religion in England, between Catholics, the Church of England, and the Puritans. No one could please them all.	There were long term money problems in England which meant that anyone who was on the throne would have to raise more money in taxes.
Charles made religious changes which were very unpopular with many people through–out England, Scotland, and Wales.	Charles tried to rule without a parliament for 11 years, from 1629 to 1640, because they refused to raise extra taxes for him.	In 1625, when he came to the throne Charles carried on a campaign against Spain. It was a disastrous defeat.	Some textbooks suggest that Charles firmly believed he should keep all the real power of ruling the country to himself.

Students were also given a range of "task files", which varied according to the level they were working at, where they had to copy and paste or drag and drop information into appropriate boxes or spaces. At the more basic level, this involved discerning between situations and events, classifying into financial, religious, foreign policy, and "Charles as a person" factors; deciding which boxes were mistakes made by Charles and which were factors beyond his control; and separating long and short term factors. Irrelevant statements could quickly be deleted, crucially important ones put in bold text and so on. In terms of the ease with which text can be manipulated and re-ordered, the word processor leaves more time for students to think about the history, rather than transcribing information. They are also obliged to do something with the information, beyond simply accessing and downloading it.

The thinking behind the activities was to try to ensure that students had to think about the information and process it in some way, usually in discussion with fellow students. The students had to do something with the information after they had accessed it, to make some decisions about each box in terms of its status and its position in the argument about what led to the war. Was it Charles' fault? Was it really about the divine right of kings? If there were more boxes or text about religion than other factors, did this mean that religion was the most important factor in the outbreak of war? Which boxes would a Marxist historian tend to prioritise or a Whig Historian?

Another dimension for the exercise is for the teacher to "change the boxes" or provide additional information about historians' views on the causes of the war. More recent historiography in this area (see for instance, Cust and Hughes, 1997; Bennett, 1998; Coward and Durston, 1997) suggests that even the title "The English Civil War" is inappropriate and might more accurately be referred to as "The War of the Three Kingdoms" or "The War of the Atlantic Archipelago". The boxes which refer to the rise of the middle class and the king's belief in divine right would be regarded as quaint fiction by some modern historians, but run across most of the standard high school

textbooks in the UK. This can help students to grasp that although there is little disagreement over the main sequence of events leading to the civil war, there are differing interpretations of what caused the war, and that these interpretations have changed over time.

Evaluation of the project suggests that the curriculum materials did provide at least a starting point for getting History teachers to explore the use of ICT in their teaching. Over 2,000 copies of the word processing materials have been sold (the total number of high schools in the UK is approximately 3,700). This is not to say that they are all in regular use or that levels of knowledge and understanding of the causes of the civil war in UK schools have been radically transformed by this initiative. It has helped to move History teachers beyond using word processing for getting pupils to produce a neat version of work which they have already handwritten, and, as intended, it has led to the process of adaptation of the ideas in the examples provided to other historical contexts.

NCET/H/A (1997). History using IT: Improving students' writing in History using word processing, Coventry, NCET.

Appendix 3. Using the Internet and CD–ROMs to get pupils to think about which sources are helpful for answering particular historical questions

The Holocaust: what questions do we ask?

There are many ways of approaching this important and sensitive topic. We must not, however, make the assumptions that all our pupils either know about the Holocaust, or share adult perceptions of its importance. One danger is that it can be done in a way which leaves pupils thinking that it was something which happened many years ago, which has nothing much to do with their lives. Another is that pupils think that the Holocaust was just about the concentration camps and was caused, fairly unproblematically, by the personal wickedness of Adolf Hitler. If teaching focuses mainly on the camps and "The Final Solution", some of the pertinent and relevant questions about the Holocaust may not be posed. Another problem about teaching the Holocaust is the limited amount of lesson time which can be devoted to what is a very broad and complex topic.

The aims of the following approach are to use the resources made accessible by ICT to get pupils to think about the Holocaust in broader terms, to challenge their ideas about its causes and the questions it raises, to get them to think about the issues raised outside the classroom, after they have finished the taught sessions, and to realise that many of the questions raised by the Holocaust are relevant to the lives they will lead.

The first part of the lessons is to ask pupils what they know about the Holocaust and what images they think of when they close their eyes to think about it. How much and what they know will obviously vary from group to group, but there will be few classes where none of the pupils have any knowledge of the Holocaust and few where the camps and "The Final Solution" are not at the forefront of their thinking about the Holocaust. (An alternative approach is for the teacher to provide some of the more well known images of the camps – "Arbeit macht frei", the gates and railhead at Birkenau, on overhead projector or PowerPoint, before asking what pupils know. Images can be accessed from http://www. remember.org/image/index.htm.)

The next stage is ask the pupils why they think that study of the Holocaust has been made a "compulsory" topic of study, why young people should know about it, and what questions we might ask of the Holocaust. The amount of teacher "prompting" will vary from group to group, but most groups should be able to come up with a list similar to the one in Table 1 (I am not suggesting that this list is definitive).

The next stage is for the pupils to watch some video footage on the concentration camps. The last 30 minutes or so of The World at War is one possible option, containing as it does, a brief excerpt from a Nazi "public relations" documentary about the camps, but any programme which provides a substantial section on the camps would do.

The pupils are then referred back to the list of questions about the Holocaust, and asked "Which questions does this source (the video extract) help us to answer?" Most footage of the camps provides evidence of the reality of the Holocaust and helps us to understand the scale of the camps and what happened to the people in them, but is of little or no use in answering many of the other questions in Table 1. This helps to make the point to pupils that if we limit our study of the Holocaust to what happened in the concentration camps, it will limit our understanding of some of the important and relevant questions which the Holocaust poses.

Table 1. The Holocaust: what questions might we ask of it?

- Is the Holocaust 'special' or different in some way from other events in history; if so, why, what is its significance?
- To what extent can a study of Hitler and his policies explain the Holocaust?
- When did the Holocaust start?
- To what extent is it about Germany and German history?
- To what extent is the Holocaust about the Jews?
- Why didn't other countries do more to stop it?
- Why did ordinary "educated" people do terrible things?
- To what extent was it unique or different from other twentieth century genocides?
- To what extent was it about eugenics and 'the efficient society' and what messages does that have for us today? Is it possible to value people differently and yet still treat them equally?
- How can people deny the Holocaust when there is so much evidence to support it?
- Should it be illegal to deny the Holocaust, as in Germany?
- What does the Holocaust tell us about human nature and the human spirit?
- Are some questions about the Holocaust more important than others?
- Could it happen again – in Germany or England, or elsewhere?

The next step is to provide pupils with, or direct them to, a more wide-ranging collection of sources on the Holocaust (see Table 2), using the resources which can be accessed via the Internet (and CD-ROMs if available). The pupils are split into groups of between four and six pupils. Each pupil within the group is given an article to read, take notes on, and report back to the group as a whole. If you have eight articles/sources which address different facets of the Holocaust, give two different sets of four sources to adjacent tables and ask them to feed back to the adjacent table after the first round of feedback. The pupils are asked to consider which of our questions about the Holocaust their source is useful for, and what are the possible problems and limitations of the source as evidence. The reading and preparation of the summary of the article can be done either in class or as a homework. The articles offer a broader or more eclectic approach to the topic than it is possible within the constraints of most textbooks, and the aim is that the exercise will have disturbed their thinking about what the Holocaust is about, and that long after the taught sessions are over, pupils will think about some of the issues arising from the articles, including those which may seem "tangential" to the Holocaust itself, but which are relevant to the society they will grow up in.

Table 2. Dimensions of the Holocaust: what questions do we ask? ICT based resources

The following articles have been selected because they address aspects of the Holocaust which are not related specifically to the concentration camps, and because they address some of the questions in Table 1. They have been selected by using http://thepaperboy.com, http://www. remember.org, http://www.annefrank.ne, and http://vector.cshl.org/eugenics. You could obviously use many other Internet sources and CD–ROMs, such as Lest we forget, and Anne Frank House, and there is also a collection of quotes related to the Holocaust which can be accessed at http://www.uea.ac.uk/~m242/historypgce/hol.

- The Scientific Origins of Eugenics: http://vector.cshl.org/eugenics.
- Revealed: why evil lurks in us all ("Study shows that crude loyalty to our social group and blind obedience make tyranny possible anywhere"). An Observer article by Martin Bright: http://www.guardian.co.uk/Archive/Article/0,4273,4106805,00.html.
- We all have blood on our hands ("The Holocaust Memorial day should remind us not only of German depravity, but of all genocidal campaigns everywhere"), Will Hutton, Observer, 21 January 2001: http://www.guardian.co.uk/Archive/Article/0,4273,4120705,00.html.
- No way back ("Europe is anxious about the rise of neo–nazism, but, argues Ian Kershaw, Hitler's biographer, history will not repeat itself, particularly in today's Germany"), Guardian, 30 September 2000.
- Elderly neglected by NHS ("Ministers told to act on health discrimination"), David Brindle, Guardian, 8 November 1999.

- Lipstick in Belsen (Lieutenant Colonel Mervin Willett Gonin), Guardian, 13 June 1998.
- In the Stasi archives (Matthew Reisz, review of Timothy Garton Ash, The File: A Personal History), Guardian, 3 July 1997.
- Why history matters (Reflections on the Irving Trial, D.D. Guttenplan), Guardian, 15 April 2000.
- Survivor brings Holocaust home to roost (Alex Duval Smith, French complicity in the Holocaust).
- Two tribes go to war (Peter Beaumont, review of "We wish to inform you that tomorrow we will be killed with our families", Gourevitvch, P.), Observer, 14 March 1999.
- Let's pretend that life is beautiful ("Why do we use the story of Anne Frank to tell a story about the essential decency of human beings?" Karpf, A., review of 3 Anne Frank biographies), Guardian, 3 April 1999.
- Master race of the left ("Forced sterilisations in Scandinavia have shocked the world…", Freedland, J.), Guardian, 30 August 1997.
- The everyday face of evil ("It may be comforting to think that the Gestapo were hated and feared by most Germans, or that the Nazis were a short–lived phenomenon, but it is not the truth", Brown, M.), Guardian, 9 September 1997.
- Apocalypse then (Lezard, N. review of "Exterminate all the brutes", Lindqvist, S.), Guardian, 23 January 1999.
- Myth and memory ("Britain's first Holocaust Memorial Day – but why has such a laudable event stirred up anger and protest", Cesarani, D.), Guardian, 24 January 2001.
- The most dangerous man in the world (Report on the controversial views of Australian philosopher Peter Singer), Guardian, 6 November 1999: a long article which might be appropriate for particularly able or well motivated students.
- Couple jailed for neglect of 5 children (The right to found a family is one of the articles of the UN charter of human rights, but should all adults have the right to have children, and in what circumstances might they forfeit the right to have children?), Guardian, 21 March 2000.
- Humanity among the horrors (An interview with Tzvetan Todorov, author of Facing the Extreme, 2000, London, Phoenix, a book about the moral dilemmas of prisoners in the camps), Guardian, 26 February 2000.
- Germany fears Superman's return ("Philosopher unnerves nation with call to weed out the weakest"), Observer, 10 October 1999.
- Poland's willing executioners (Account of anti–Semitic atrocities in Poland), Observer, 8 April 2001.
- A chance dialogue with a contemporary Nazi (Account of a 7 hour train conversation which a traveller had with a Neo–Nazi on a train journey from Berlin to Katowice in 1995), from the Cybrary of the Holocaust web site, http://remember.org/educate/munn.html.
- "Nobody was gassed at Auschwitz": 60 Rightist lies and how to counter them; another source from the Cybrary of the Holocaust web site, http://remember.org/ideas/kz.html.

The articles noted above are merely suggestions, and possible starting points. Another way of using The Paperboy site is to explore different newspapers' reactions to the same event – the decision to have a Holocaust Memorial Day, the events and reaction to the events of September 11th, the debate about whether there is such a thing as "The British Race."

The hope is that at the very least, the exposure to very different perspectives on the Holocaust will lead them to reappraise their ideas on what the Holocaust was about, its relation to the present, and to the lives they will lead.

From Haydn, T. and Counsell, C. (2002). History, ICT and Learning, London, RoutledgeFalmer

Appendix 4. The use of PowerPoint and the Internet to get pupils to problematise historical events and personalities with regard to issues of interpretation, significance, and controversial issues

In the UK, there has recently been a national vote as to who have been the 100 greatest Britons of all time (figures in the top 10 include people as disparate as Oliver Cromwell, Charles Darwin, Isambard Kingdom Brunel, Princess Diana, William Shakespeare and Queen Elizabeth the First).

Pupils are given time to search for materials from books, newspapers, magazines, textbooks, and the Internet and asked to "present a case" for either one of the 10, or their own choice, and make a PowerPoint presentation of it.

Either before or after pupils have presented their choice, they can be given Geoffrey Partington's criteria for "significance" (see below) in order to argue for their choice.

Alternatively, pupils can be given a list of events in World War Two (the dropping of the bomb on Hiroshima, the Battle of Britain, El Alamein, Stalingrad, the battle of the Atlantic, etc.) and asked to decide which of them was most significant, and why, using PowerPoint to frame their response.

Criteria for determining historical significance, Partington, G. (1980); the idea of an historical education, Slough, NFER: 112-116:

1. Importance – to the people in the past.
2. Profundity – how deeply were people's lives affected?
3. Quantity – how many lives were affected?
4. Duration – for how long were people's lives affected?
5. Relevance – contribution to increased understanding of present life.

Alternatively, pupils focus on controversies of interpretations or produce "polemics" to argue points of view from controversial issues and the help that historical procedures can play in resolving them.

Appendix 5. The use of datafiles to search for patterns in the past

In 1998, the National Council for Educational Technology, working with the Historical Association, put together a package of historical datafiles on topics which were part of the National Curriculum for History in the UK.

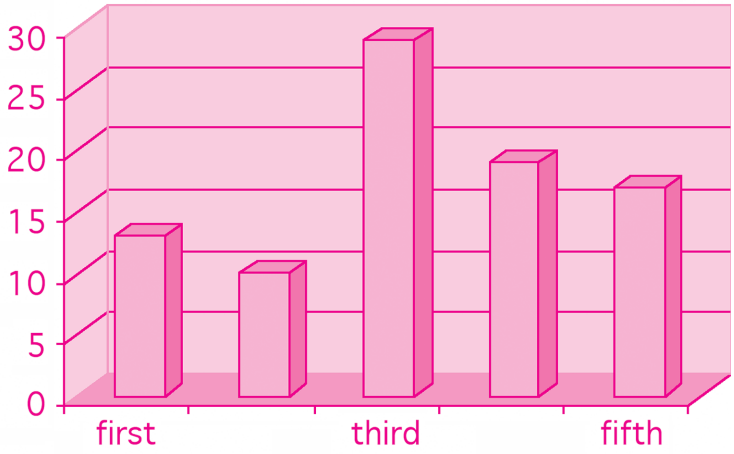
The package was subsidised by funds from the Department for Education and Employment, as part of an effort to get History teachers to make more use of computers in their teaching. (History Using IT: Searching for patterns in the past using databases and spreadsheets. It is available from BECTa, Milburn Hill Road, Science Park, Coventry, CV4 7JJ, price £15.) The package contained a teachers' booklet with supporting materials on how to use the datafiles and disks with the datafiles, in a variety of software formats commonly used in UK schools (including the Microsoft package, Excel).

One of the datafiles provides a list of Roman emperors, with the duration of their rule, where they came from, and how they died. By interrogating the datafile, pupils can see that at certain points, the Roman Empire was much stronger and stable than at others and more or less prone to internal/external threat. The use of the datafile makes it much quicker and easier to discern such patterns than simply looking through the long list of emperors, and pupils can construct and present graphs and charts to present their findings (See Figures 1 and 2).

Figure 1. The fate of Roman Emperors

Century	Cause of death			
	Natural causes	Murdered	Suicide	Killed in battle
First	5	6	2	0
Second	5	4	1	0
Third	5	18	2	4
Fourth	9	7	1	2
Fifth	9	7	0	1

Figure 2. Number of Roman Emperors per century



Appendix 6. Using the Internet to develop pupils' information and media literacy

A recent (small scale) survey found that not all young people in the UK had a clear awareness of the reliability of the Internet as a source of information. Many of them saw "electronic" resources, such as CD-ROMs and the Internet, as more trustworthy than such sources as teachers (!), newspapers, television, and radio.

The realization that many young people do not have a sophisticated understanding of the status of information on the Internet has led to the development of a number of sites which can be used to develop pupils' "Internet literacy". One example of this is a 'spoof' site, about Oliver Cromwell, which at first glance, appears to be a bone fide educational site on Cromwell (http://freespace.virgin.net/ susan.inwards/index.htm). The site was designed to make a point about the integrity of information on the Internet, and about the practice of uncritical downloading of information. The author was deluged with e-mail requests from students asking him to write their assignments for them.

Several sites have moved beyond simply teaching learners how to search for information on the Internet and into educating them in evaluating the reliability of information on the Internet. See, for example:

- http://www.2learn.ca/mapset/tutorials/tutorial.html#evaluate
- http://www.ariadne.ac.uk/issue16/digital
- http://www.trinity.manchstr.sch.uk/curric/history/relnet/relianet.htm

There is also a site which explores the ethics of using resources on the Internet: "Some advice and a lecture for those of you doing research, homework, or whatever" – http://www.geocities.com/SoHo/Studios/1344/advice.html.

Appendix 7. The development of "depth" sites with improved instructional design

There has been a move towards devoting more time and thought to the instructional design of history Internet sites – thinking about what the learners can usefully do with the historical information once they have accessed it.

Whereas the History teacher or department typically has a very limited budget and limited time to plan how to resource and teach particular topics, many history Internet sites are able to spend thousands of pounds and hundreds of hours thinking about how to approach teaching a particular historical topic in depth and about how to enable effective learning to take place. The key thing which these sites have in common is that at least some aspects of the design requires learners to think and make decisions or "intelligent choices" in relation to the historical information presented.

The Public Record Office Learning Curve site on The Cold War: http://www.learningcurve. pro.gov.uk/coldwar is a good example of the lessons that have been learned in the field of web design and learning over the past few years. It makes the point that the quality of the History is at least in part related to the questions posed of the content and the instructional design of the site. Much of the content could be printed off and used in class, or for homeworks, but the multimedia components are well chosen, for where facilities permit "hands on" use, or whole class demonstration using a data projector.

Appendix 8. Digital video editing of historical newsreel materials

Still in its infancy in the UK, but possibly an area for substantial development. Several news organizations in the UK now make collections of old history footage available to schools "online" as a subscription service. Pupils can therefore watch archive footage of major events in the twentieth century and then use digital video editing software to choose which parts of the footage to keep in their own version, add their own commentary, captions and soundtrack, and experiment with changing the "bias" or "position" of the constructed digitally edited film which they have made from the original sources.

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Valentin Băluțoiu
Carol the First
National College
Craiova
Romania

Means of Using Presentation Programmes and Computers in Teaching and Studying of History

The development of technological means in the past century has reached amazingly high standards; devices, which not long ago seemed to have been taken out of a science-fiction film, have become usual. Hence, video recorders are now regarded as trivial products; so are the CDs containing varied information (music, images, texts, and even films). The most important utensil, which is now used in all fields of activity, is a personal computer. We see it everywhere, in the fields of finance, communication, transport, cinematography, television, population records, and so on.

The computer has also proved useful in the field of education. The generally used term is ICT, referring to a chain of communication and information technologies, which includes computers and means to visualize information, software, hardware; technologies to record and process sound, dynamic and static images, a chain of communication means, and so on. "Nowadays, a most debated subject is a new generation of educational means – the fifth generation – which comes to be represented by electronic computers..." (1).

In *The Painting Treaty*, Leonardo da Vinci's demonstration regarding the superiority of the art of painting is set in motion by the following observations: "The eye, regarding distances and measures, is much less deceiving than any other sense", and "The eye, which is said to mirror one's soul, is the most remarkable thing for someone to look through, plainly and fully, toward Nature's endless creation" (2). Therefore, by means of an image most information is transmitted, and this stands at the basis of computer's usage at History lessons.

Essentially, in order to be properly used at History lessons, the computer should be endowed with a sound blaster and a CD-ROM. Moreover, the device on which the information is stockpiled should be a HDD, i.e. the hard disk must have sufficient space for stockpiling (approximately 10 GB).

A lesson in the multimedia office

As a result of the signed agreement between Ministry of Education and Research and the World Bank, *Carol the First* National College in Craiova has been endowed with an ultra-modern multimedia office (other schools in the Citadel of Bans, such as "The Buzesti Brothers" National College, have also benefited from the above-mentioned agreement). The office locates a server, with the help of which the teacher may direct the lesson; there are also 25 Compaq computers, each with a Pentium IV 1.5 GHz microprocessor, a 128 MHz RAM memory, a hard disk of 20 GB, a video blaster of 32 MB, a CD-ROM, and so on. The computers perform magnificently, as the latest programming technique is used. The computers and server are connected in a network. The office has got a scanner facilitating such images as art reproductions, documentary photographs, and maps taken from diverse History atlases, with the Internet access. 25 computers in the office are sufficient – each student can use one of them: the classes are of 25 students at most.

Together with the programming technique Compaq has delivered the required software; this includes one of the best operating systems as far as the network operation is concerned, Windows 2000, as well as the Office XP package of programmes, including a text programme (Word), a table calculus programme (Excel), and a programme which implements multimedia presentation (PowerPoint), all are Microsoft-produced and bestowed to our school under license.

From his desk, the teacher uses the CD-ROM endowed server. Thus, he has a chance to introduce information which may be immediately used by every student sitting in front of his/her computer. In such circumstances, any teacher can do lessons similar to the described in the 2001 edition of the magazine *History Articles and Studies* (3).

Presentation programmes

There are many ways in which computers may be used at History lessons with Internet sites for such applications. Romanian teachers find the presentation programmes extremely attractive.

Countless times a History teacher walks between the rows of desks in order to show a map or a photograph to the students. It isn't the most efficient method to get students to memorize the message you convey. Many a time we complain of the lacking teaching aids or poor conditions in which the latter can be found. But why couldn't we create our own quality, practically indestructible teaching aids? This can be done with presentation programmes. They are numerous (4) and may be used by anyone, irrespective of the user's previous computer skills. Of all presentation programmes, the one that appears to be the most accessible is Microsoft's PowerPoint belonging to the MS Office package. The advantages of this programme as compared with similar ones proceed from the facilities the programme offers and especially from the fact that it can be used by licensed teachers at schools who have benefited from the new

programming technique as a result of the signed agreement with the International Bank, the computers were delivered with MS Office package. Free programmes, such as Star Office Presentation 5.0, are also available. Internet Explorer can be used, as Microsoft offers it, together with the Windows operating system, yet in order to use it properly you must know the HTML language.

Using the HTML language to present educational materials

HTML language is used within the Internet infrastructure to transfer the information concerning web pages. Despite the fact that the HTML has for a long period of time remained inaccessible to an ordinary user because of its complexity and difficult syntax, the past few years have witnessed the appearance of numerous programmes which facilitate the implementation of web pages without the slightest need to know HTML language. Hence, there has been a true boost of HTML usage in all fields of multimedia.

HTML language offers more advantages than the 'classical' methods of implementing a paper, e.g.:

– It is a very complex language: the dimensions of a HTML file are more reduced than an Office document.
– It offers the possibility of navigating from page to sub-page with the help of the so-called 'links'. Therefore, a teacher can easily display a table of contents or directly access any chapter or sub-chapter, from anywhere in the paper.
– The language allows to introduce pictures, animations, sounds, or any other interactive materials that may intensify the presentation.
– The language is more compatible with any computer benefiting from Microsoft Windows to open HTML pages without the need to pre-install programmes.

Hence, this language represents a perfect method to be applied in any presentation.

How does a presentation programme work?

A presentation programme works with the help of the so-called 'slides'. These are being unfurled with a computer pre-connected to a video projector (which is a very expensive item) via a network of computers, or with a computer pre-connected to a television set coupled with the video plate of a computer.

Information inserted on the slides includes:

– static images (photographs) representing documents, historic characters, art reproductions, documentary photographs, models,
– texts,
– graphs,
– diagrams,
– tables,
– maps,
– sounds,
– films, and so on.

How are films inserted in slides?

Undoubtedly, the most spectacular part of a presentation is a film. The moving images are recommended to last 2–3 minutes at most. The filmed images may be found in a number of sources:

a) Films taken from other electronic sources, such as encyclopaedias ("Webster", "Encarta", "Britannica", "Larousse", and so on). A source of films that may reveal the history of Romania is the paper entitled *History of Romania* published by The Centre of Romanian Studies in Iasi with the help of Kurt Treptow.

b) Films recorded with a TV-tuner, a computer item to watch and record television programmes. Nowadays, there exist television programmes that have become specialized in broadcasting of documentaries: Discovery Channel, Discovery Civilizations, and National Geographic. Such documentaries made artistically and professionally are a real gold mine for a teacher who is preoccupied with gathering diverse teaching aids for his teaching activity and professional upgrade. TV-tuner captures the images of the documentary. However, these images are yet unready to

be inserted into the presentation. At first, they must be compressed, i.e. the space where they are 'deposited' on the hard disk must be reduced. The compression is compulsory because an uncompressed image can't be inserted in the slide. The compressing process is done with the help of several programmes, some of them being very expensive (e.g. Adobe Premiere used by professionals only). Free programmes, such as Virtual Dub 1.4, come in handy, because they can compress a film (5) in the best possible way. The Movie Maker programme delivered by Microsoft together with the operating system can interrupt the film in order to insert a 2–3 minute short sequence in the presentation.

c) TV-tuner inserts a film recorded from a video-tape. After the film has been recorded, it is processed as described in point b). For instance, a teacher can insert the memorable image of Michael the Brave on his entering Alba Iulia, as it is presented in Sergiu Nicolaescu's remarkable movie dedicated to the personality of the great ruler. The above-mentioned scene achieves its stateliness due to the soundtrack Tiberiu Olah. Thanks to art you feel proud to be a Romanian.

Because of its capacity to insert and present films, the computer can be employed as ... a video recorder. More than that, with the help of presentation programmes (such as PowerPoint) a teacher can produce his own lessons without maps, images, or... chalk and the blackboard.

Advantages of presentation programmes

1. A teacher creates educational aids. The presentations are a quality teaching aid through which the teacher's personality traces its pattern.

2. The teacher is perfectly prepared for the lesson, assuming he has gathered and assembled certain teaching aids in a well-articulated presentation. It goes without saying that a teacher experienced in such presentations is a good teacher, as his considerable effort of collection and systematization of the teaching aids leads to his professional perfection.

3. The usage of well-chosen images (static and dynamic) provides the teacher with the possibility of inoculating certain attitudes toward diverse historical events and phenomena in the minds of his students. For instance, during the lesson on World War 1 a slide is presented from which the students extract the information on 'the usage of battle gases'. This is a trivial piece of information to the student. Nevertheless, if a teacher has inserted the image taken from a documentary film as well as the recital of a classical poem (e.g., Wilfred Owen's *Dulce et Decorum Est*) written during the war, the students' attitudes may take an unexpected turn. So impressive are the images and so great is the effect of the English version of the poem on a human soul that there is a chance that the students will grow to condemn the war as a means of settling strives that may exist among people. Here is the text of the poem:

   "Gas, gas! Quick, boys!
   An ecstasy of fumbling,
   Fitting the clumsy helmets just in time,
   But someone still was yelling out,
   And stumbling,
   And floundering like a man in fire or lion.
   Dim,
   Through the misty panes and thick green light,
   As under a green sea,
   I saw him drowning.
   In all my dreams,
   Before my helpless sight,
   He plunges at me,
   Guttering, choking, drowning.
   If, in some smothering dreams,
   You, too, could pace behind the wagon that we flung him in,
   And watch the white eyes writhing in his face,
   His hanging face,
   Like a devil's sick of sin,
   If you could hear

At every jolt
The blood comes gargling from
The froth corrupted lungs,
Obscene as cancer,
Bitter as the cud of viol,
Incurable sores on innocent tongues,
My friend,
You would not tell with such high zest
To children ardent for some desperate glory
The old lie: Dulce et decorum est pro patria mori!"

The author of this material made an experiment: he recited the poem in front of the students; however they were hardly impressed (perhaps due to the lack of artistic talent). But when the film (6) was presented, the students got overwhelmed.

4. Stimulation of the students' interest in History or certain fields of activity colligated to History. Hence, Wilfred Owen's *Dulce et Decorum Est* being eloquently presented with the quoted documentary, it is likely that at least one student in the class will, no doubt, get interested not only in its author, but in other artists that have revealed the horrors of the war to the world, such as Erich Maria Remarque, Liviu Rebreanu, Charlie Chaplin, Iaroslav Hasek, Otto Dix, etc.

5. Doing of exercises that have become exciting because of the students' computer skills. For instance, during the lesson on the Cold War, a teacher may ask to do the following exercise:

   Use COPY, CUT, and PASTE to arrange the following events in their chronological order (7):

   1. The Cuban's crisis;
   2. The Berlin blockade;
   3. The initiation of the "Star War";
   4. Churchill's speech in Fulton;
   5. The Truman Doctrine;
   6. The formation of NATO;
   7. Nuclear weapons' treaty on non-proliferation;
   8. The unification of Germany;
   9. The building of the Wall of Berlin;
   10. The Marshall Plan.

6. A teacher manages to get hold of students' attention much easier using eloquent static and dynamic images. A good example of a dynamic image which helps to catch students' attention is given in point 7.

7. Documentary fragments taken from some specialized television programmes (such as Discovery Channel and Discovery Civilizations) make it possible to bring fresh information into discussion usually within university groups. Here is such new, shocking piece of information as presented in the documentary on Discovery Channel:

   > Svetlana Balabanova, one of the world's most respected toxicologists, tested one of the Egyptian mummies at the Munich Museum, for traces of drugs. This was the 3000-year-old mummy of Henut Taui, *The Lady of the Two Lands*. Balabanova examined hair and tissue using the methods of criminal investigation. When the test results came back, doctor Balabanova was so astonished she was sure they must be an error. Lady Hanut Taui had tested positive for nicotine and cocaine. Under current thinking, this result was simply impossible. Tobacco and cocaine are new world drugs. History insists that Sir Walter Raleigh introduced smoking tobacco into Europe in the 16th century. Cocaine isn't thought to have crossed the Atlantic Ocean until the Victorian period. Certainly, any such cargo to Europe would be unimaginable to historians before Columbus and the discovery of the Americas. The doctor understandably thought her results incorrect. She sent samples from the mummy to three independent labs to do their own objective tests. She was sure they would fail to corroborate her findings. No doubt, some fault in her method would be detected. The independent laboratories confirmed her original findings. Cocaine and nicotine were present in the tissue of the mummy. The mystery had suddenly deepened dramatically. Doctor Balabanova set about testing other mummies from the Egyptian Empire. She found that nearly a third tested positive for nicotine and cocaine. She was stunned. She wrote the paper on her findings.

> Its publication proved so controversial that she received scare letters from other practitioners in the field. They feared she would bring their branch of science into disrepute. More research has been accomplished since her earth-shattering findings were made public. Few scientists are willing to risk their reputations by tackling head-on the astonishing implications of her discovery. Did the ancient world partake in a transatlantic drug trade? It's not surprising that few are willing to conceive the possibility. And yet, the tests done on the Munich mummies are generally considered water-tight. The questions raised by the doctor's work hang, tantalizingly, in the air (8).

8. The teacher gets more respected by the students (whose number is continuously growing) daily working in front of their computers. As far as the latter is concerned, these students may be considered experts. As they belong to the generation within which the computer has come to play a most important part, they have grown to use the Internet, make-up and presentation programmes with great deftness, therefore the teacher can address them for a help with the teaching aids. Consequently, a new method of communication develops between the teacher and the students who are ardent users of the computer.

9. The teacher experiences a deep feeling of professional satisfaction on having carried out a lesson with the help of the computer.

Disadvantages and obstacles

1. Technique may play tricks on you. For instance, a trivial power cut may turn everything upside down. However, as we have previously pointed out, the teacher is always ready for various situations, so there is always a backup plan to do the lesson efficiently.

2. There are certain authors belonging to the Waldorf pedagogy, who demonstrate that the usage of the computer is unbeneficial to the students who haven't graduated from gymnasium. "Due to the fact that they (computers) are mathematical machines, forcing out both a purely abstract and mathematical reasoning and a usage of formal languages, we may conclude ... that they must not be used by students before the latter have graduated from gymnasium" (9). To this we may oppose the idea that a presentation programme is merely a means of providing a teacher with a great number of teaching aids to conduct a quality lesson. Only a teacher makes use of the presentation programmes.

3. The technical endowment of schools and teachers remains the most important problem. It goes without saying that few Romanian teachers can afford a computer. Despite this fact, so great the technological progress is in this field of activity, that the price of certain programming techniques has dropped rapidly. A second-hand computer is not necessarily an old computer.

   The fact must be considered that as a result of the agreement signed with the World Bank, all high schools in the country will be equipped with the network of computers as *Carol the First* and *The Buzesti Brothers* National Colleges in Craiova have been.

4. Another problem is directly connected to the teacher's excessive use of the computer. When you are working in front of this magnificent utensil, you will most certainly notice that it never bores, that it is never hungry or upset, and that it does everything you want it to do. The main danger lies in the fact that the passion for your work may steal away the notion of time, and without realizing it, you might find to have spent too much time in front of the computer. This may have serious consequences for the user's health. Common symptoms are smarting pain and reddened eyes, together with headaches occurring after a prolonged, uninterrupted work with the computer.

5. One of the obstacles to overcome is people's conservatism, especially typical of the older generations. Such people are afraid of a utensil which they haven't been taught to use. "Man easily assimilates the idea which does not run counter to his interests, that does not come in contradiction with his own aspirations and that does not require an increased effort of him" (10). Many a time we hear the following remark: "The classical **methods** remain the best!" I underline the word 'methods' as the difference in the meanings of 'methods' and 'means' is unclear. Indeed, the methods have remained the same: discovery, colloquia, problem solution, and so on. Yet, the means the teacher can make use of are practically unlimited.

6. Another important problem is conservatism and the haphazardly encountered ill-will that certain leading officers in the Romanian educational system tend to display. These people not only fail to support those who are willing to

do something regarding schools' endowment with computerized teaching aids, moreover they try to prevent such people from doing it.

7. The methodology courses at the universities don't rank computer applications at the History lessons as high as they should.

The part a History teacher has to play remains fundamentally important. One should not fancy that using the computer we somehow manage to remain hidden behind a server and do nothing but handle the mouse. First and foremost remain teacher's warmth and honesty, his respectful attitude toward his disciples with a view of conveying information to them. The same important is a part played by the teacher's capacity and talent of narrating certain events. This capacity grants deep humane air at the lesson and in teacher-student relationships. The computer is nothing but an instrument you may sometimes use; despite its complexity, the computer remains a tool that must obey the orders of a man, its creator and master.

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Translated by Anca Stoiculescu

CASE STUDIES

CASE STUDY/BULGARIA

Section 1: Data of the respondent

Institution: St. Kliment Ohridski General School with Foreign Language Teaching
Acronym: St. Kliment Ohridski GSFLT
Address: 2 Tzanko Tzerkovski Str., 2700 Blagoevgrad
Country: Bulgaria
Telephone: +35973 341476
E-mail: flls@avala.bg, tseym_bg@yahoo.fr, k_marcheva@hotmail.com
Author of case study: Mrs. Antoaneta Seimenska, History teacher, and Mrs. Katerina Marcheva, school headmaster
Date: 22 November 2004

Section 2: Biography details

St. Kliment Ohridski General School with Foreign Language Teaching was founded in 1991. Currently, 953 pupils are trained, divided into 38 classes ranging from 1st to 12th grades. A specific feature of the school is the early teaching of foreign languages. English, French, and Russian are taught. Each pupil studies at least two foreign languages and after the completion of the secondary education a "Foreign Language" profile is included in the diploma.

Mrs. Antoaneta Seimenska has been teaching for 18 years. She has worked History and Geography teacher since the school was founded. Her pupils represent a wide age range, from 5th to 12th grades (11–19 year-old pupils). She teaches History in French in some classes (9B, 10B, and 11B, approximately 75–80 pupils).

Mrs. Katerina Marcheva has been teaching for 26 years. She teaches Information Technologies and now is the headmaster of the school.

Section 3: ICT facilities in my institution

Our school has two computer labs with ten multimedia computers each, connected in a network; we also have a scanner, two printers (a black-and-white laser printer and a color jet printer). The computer labs are equipped with big screens; two computers have cameras. A bigger group of students can work in the study room, so two or three pupils share a computer. There are also three computers in the library, where the pupils can search information or use multimedia products. There is a permanent Internet connection in the school that gives relatively good conditions to search and collect information.

About 50% pupils have computers with Internet access at home, and this facilitates our work to a great extent, especially when special tasks for independent search of information are assigned.

Approximately 40% teachers have computers with Internet access at home. Besides the computers in the computer labs and library, there are two computers in the teachers' room to be used by the teachers only. At present, another room for the teachers is being equipped. It is designed for teachers to prepare and copy study materials.

There is a laptop and a multimedia device in the school. They can be used in the classrooms. Classrooms aren't connected in a network, and a wireless Internet connection is something that we can't afford yet.

There are over 50 multimedia products in the school library.

These technological resources, though insufficient, are used rationally and contribute to the improved teaching quality and diverse information and study material presented at the lessons.

When teachers need the computer lab, they contact the headmaster and their colleagues teaching Computer Studies, whose schedule must be taken into consideration as well.

Section 4: Generally, in what ways do you use ICTs?

1. ICTs used at History lessons include:

- Presentation of documents downloaded from the Internet;
- PowerPoint presentations prepared in advance, mostly by the teachers, but in some cases by the students. Younger pupils (11–16 years old) can prepare presentations only if they wish to and with the help of the teacher. Students at the age of 17 and above study MS PowerPoint at the Information Technologies lessons. Once a year the students in working groups of three or four choose and present a certain topic from the curricula. The presentations last for five minutes on the average;
- We use different kinds of multimedia products in order to visualize the study material. They vary for the specific age groups and depend on time and the CDs available.

In some cases we use CD-ROMs with tests to get a feedback or evaluate students' knowledge.

As part of the educational projects implemented within the framework of the Socrates/Komensky 1 Programme, in which our school participates, we exchange information on History of the partner countries via e-mails.

Preparing posters by the students is another form of applying ICTs at school, which is used during the compulsory-chosen-training in History and project activities.

The Internet is seldom used, three lessons per year. It is, however, a way to diversify History teaching methods, e.g. making links and getting acquainted with different kinds of information and documents.

The use of the Internet to prepare lessons is a daily process, because this is the way we find the best information to visualize, widen and enhance the school material. For example, it would be very difficult to get ready properly for the History lessons in French, if ICTs were not used.

In future, we would like to establish an online real-time connection with another school from Bulgaria or abroad, so that we can work together in a History class on one topic. We hope that joint activity will provoke students' interest and encourage them to work more diligently on History and the foreign language they study.

Section 5: Particular examples of ICT application

At my History lessons I use ICTs very often in many different ways. The most common practice is to present documents downloaded from the Internet concerning, for example, the Protestantism or a specific historical event. I also use videotapes, CD-ROMs, etc.

Example 1

The theme is *The Century of Louis XIV* designed for 17-year-old students studying History in French.

The goals of the lesson are the following:

- Introduction of the ideas concerning the changes in France during the time of Louis XIV;
- Presentation of the essence of the Absolutism, Mercantilism, and Jansenism;
- Presentation of the richness of French culture and its influence on the development of Europe.

The lesson aims at acquiring new knowledge and is conducted in a computer lab. It lasts two school lessons (90 minutes).

The lesson begins with a review of the already passed material on the France of the religious fights and the beginning of Bourbons' reign. The form is a discussion. After the introduction of the new theme, the class is divided into six groups. Each group is assigned a specific task in writing. The goal is to find information on the Internet.

The tasks of the groups are as follows:

Group 1:
1. Find a portrait of Louis XIV on the Internet;
2. Find a portrait of the Bulgarian king Ivan Alexander;
3. Indicate the symbols of the monarch power and make a comparision.

Group 2:
1. Find information and compose a table of the French society in the 18th century.

Group 3:
1. Find the Internet information about the financial policy of the minister Colbert;
2. Give a definition of the concept of Mercantilism.

Group 4:
1. Find the Internet information about the religious policy of Louis XIV;
2. Present the ideas of Jansen.

Group 5:
1. Find the Internet maps about the wars led by Louis XIV;
2. Describe his foreign policy.

Group 6
1. Find the Internet information about the culture in the times of Louis XIV (painting, music, architecture, literature, and fashion).

The groups have 30 minutes for work. The goal: students learn how to search information in the Internet by keywords using well-known searching machines, such as www.google.com, www.altavista.com, etc. In this case the pupils search documents in French, thus simultaneously practicing the foreign language they learn. Of course, they need less time if the searching was in Bulgarian.

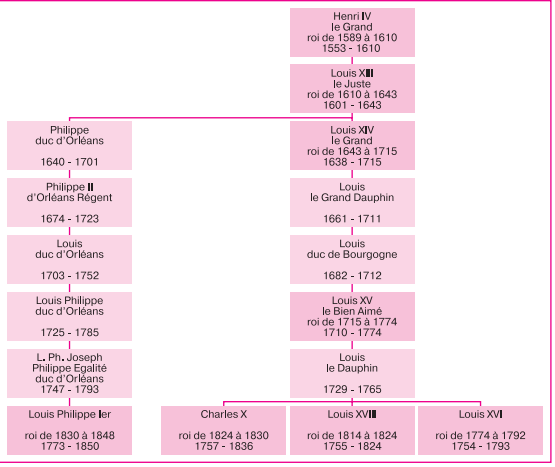
When we set a certain task for the students, teachers have to direct them how to reach the desired results. The use of ICTs at school is one of the challenges that the contemporary society has to meet, where it is very important to build up skills necessary for good orientation among the huge quantity of information.

A representative of each group reports before the class on the documents found. Each group has up to five minutes to present the information and to draw conclusions.

We enclose part of the documents found by the students and some of the orientation questions and tasks posed by the teacher during the work.

www.unl.edu/LouisXIV/

Which are the symbols of the medieval Bulgarian ruler?



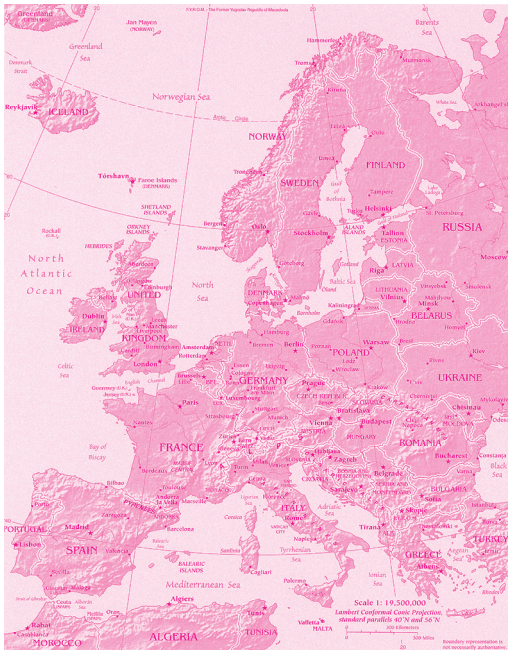
Document 1

Document 2

Indicate the symbols of power.
Compare the symbols of monarchic power in Bulgaria and France during the indicated periods.
Follow Louis XIV family tree (Document 1).
What is the reason for the self-confidence of his reign?
http://www.bzh.com/keltia/galleg/histoire/bretagnepap-timb/kolbert.htm
What guidelines of development of the French economy did he give?
Try to point out the specific features of the Mercantilism.
What are the sources for the amassment of capitals in the country?
Which medieval social groups underwent transformation in the 18th century?
http://gallica.bng.fr/themes/PhiXVII5.htm

Presentation of Louis XIV religious policy:

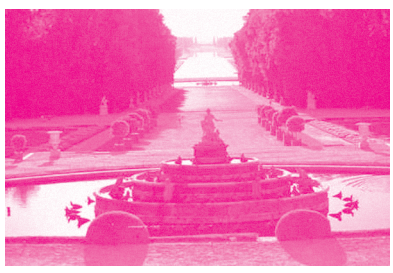
How does Louis XIV define the role of the Church in the process of confirmation of the absolute power?
What was his attitude toward the Huguenots?
What is the essence of the Jansenism?
What are the consequences of the conflict between Louis XIV and the Huguenots?
Outline the frontiers of France in the 18th century:



Document 3

What purposes served the wars that Louis XIV led? In what way the main stream of the foreign policy was realized?

Cultural development of France at the beginning of the 18th century:



Document 4

Document 5

Using photo documents, reproductions, and fragments from musical and literary works, students go deeper in the time of Louis XIV.

Based on the information collected and presented the students characterize the period of the Absolutism, the internal and foreign policy of France, its power, and influence of the French culture.

The role of the teacher is to encourage students to look for information from different sources and to assist students in synthesizing it. In this way it is easier to grasp the historical material, because students are involved in many activities.

Example 2

Theme *North Empire* is presented for 16-year-old students. Petergof, CD-ROM from KOMINFO *Interactive World* series, Russia, Moscow, 1996.

The main goal of the lesson is to demonstrate Peter the Great reign, his foreign and internal policy.

The lesson is designed to acquire new knowledge; it is done in a classroom with a laptop and a multimedia device.

Petergof, multimedia CD, is to be used twice during the lesson, each time for five minutes: first, to introduce the cultural achievements, and then to show Peter's palace – an extremely fascinating trip through many cultural and historical monuments.

Example 3

Multimedia CD *Europe 2002* is used at the compulsory-chosen-training History lessons in the 12th grade (students of 18–19) while presenting the themes on the European Union history. The group consists of 15 students with a marked interest in historical science. Lessons are in a computer lab. The CD is installed on the server; the students have an access to the information through the network. The teacher assigns certain tasks, then the students work independently using the information from the CD. They report in an oral form and write down the lesson's plan. At the end they use the tests from the CD: each student makes one test individually for self-assessment; then the group makes one test together on the big screen in the classroom. Each student answers one question, and it is seen immediately whether the answer is right or wrong.

Section 6: Internet sites used at History lessons

At History lessons the most common situation is when an Internet site is downloaded on the laptops' hard disc in advance or, sometimes, when short articles to be used are printed out before the lesson for each student. Here is a list of the topics and Internet sites used:

- About Protestantism: http://www.protestants.org/faq/histoire/liens/histoire.htm
- About Peter the Great: http://www.memo.fr/article.asp?Id=per-mod_094-
- About knights: http://gueriers-avalon.org/armeIII-
- About janissaries: http://patric.villa.fr-jani.html

When lessons are held in a computer lab, students enter Internet directly via link connections.

Section 7: CD–ROMs or other software support

Multimedia CDs frequently used at History lessons and appropriate for all ages are the following:

- Electronic Encyclopedia *History of Bulgaria*, Sirma, 2003.
- Icons from Bulgaria, Likon Ltd., 1999.
- Rila Monastery, Multimedia Application Group, 1998.

Section 8: Barriers to the ICT use

Some major problems are the following:

a) The equipment is insufficient:

- More computer labs with more new computers are needed;
- More laptops with good Internet access in each classroom;
- More multimedia devices.

b) Teacher training is at the deficient level; the schools are left alone to cope with the problem of teachers' qualification.

c) Textbooks lack recommendations of appropriate web sites.

d) Multimedia CDs with additional materials are missing as part of the textbooks. Students today rather look at pictures, graphics, schemes, interactive maps, and video materials than read texts.

e) Real-time work with the Internet requires more time, and the curricula are overloaded.

Section 9: Best investments/ways forward to develop the use of ICTs in History teaching

Notwithstanding the difficulties, teachers are trained continuously in this field. This breaks the conservatism in teaching, and each teacher is given an opportunity to choose his/her own strategy.

This kind of skills brings us closer to students' interests and demands. They are stimulated and encouraged to look for information, an important strategic goal of the modern education. This goal, however, sets a number of challenges, such as orientation in the information 'ocean' and the incapability of students to filter out the necessary data. Here comes the teacher and his/her important role to direct and assist students in information selection.

Harmonization between teachers and students gives equal and real opportunities for the young. In this context the school acts as a guardian of traditions for people to get acquainted with historical heritage and contemporary achievements and a stimulus to realize the innovations in the society.

Section 10: Other comments

Working methods are continuously improving. Many teachers are interested in the innovations, but they sometimes fail to meet the challenges.

It isn't only the lack of teachers' interest and will that constrain the use of ICTs.

CASE STUDY/CROATIA

Section 1: Data of the respondent

Institution: Institute of Education of the Republic of Croatia, Affiliation Rijeka
Address: Trpimirova 6. 51000 Rijeka
Country: Croatia
Telephone: +385 051 213 644
Fax: +385 051 335 182
E-mail: marijana.marinovic@mips.hr
Author of case study: Marijana Marinovic
Date: 24 December 2004

Section 2: Biography details

At the Institute I work as a senior educational adviser for History teachers. I am responsible for the quality of History teaching in 116 elementary schools and 59 secondary schools in three counties, comprising 220 teachers of History altogether. My job includes visiting schools and teachers of History, inspecting their classes, writing reports about their work, advising teachers, giving proposals on their promotion and organizing their on-job seminars and workshops. My special attention is to young teachers and their introduction in teaching practice. So, I am a member of the Examination Board for State Examinations the teachers are to pass.

Section 3: ICT facilities in my institution

At this moment the Institute lacks a special programme of History teacher training to apply ICTs in History teaching. However, the Ministry of Education of Croatia runs a general programme of teacher training on ICT application in their work. The programme is realized for the second year. The questionnaire tells that about 60% teachers have been already qualified for this task. Thanks to the endeavours of the Institute (which has been reorganized recently and seperated from the Ministry of Education) all Croatian teachers now have a chance to learn about ICTs through free Internet e-courses. The courses include MS Word, MS Excel, MS Outlook, MS Access, MS PowerPoint, the Internet, and MS Project. As a part of the governmental mechanism the Institute keeps records of the achieved results and checks initial practical applications of the new skills in History teaching. The following report is the result of the insight survey of History teaching.

Section 4: School system in Croatia

Elementary school in Croatia is compulsory and lasts for eight years (age 7–15). Internally the school is divided into two stages: 'lower forms' (1–4), and 'higher forms' (5–8). The lower forms have an integrated syllabus with one teacher, while the higher forms have more subjects with a separate teacher for each. That syllabus consists of 14 compulsory subjects, and History is one of them with two lessons per week. Besides the compulsry programme the pupils can choose one elective subject which can be History as well, with one or two lessons per week.

Secondary school lasts for four years. There are several types of secondary schools. Gymnasiums are considered to have the highest quality, and their students are carefully selected. Then we have Technical schools which also accept only successful students and last for four years. The third group are Vocational schools, which accept average and under-average students and last for three years. In Gymnasiums History is a compulsory subject during four years, two lessons per week, with a possibility of additional choice of two elective lessons per week. In Technical schools, History is a compulsory subject only during the first two years, while in Vocational schools it is taught during the first year only.

Section 5: Statistical data about the sample of schools

The territory of Croatia is divided into 21 counties (in Croatian 'zupanija').The chosen sample encompasses two westernmost counties of Croatia, 90% situated along the north Adriatic coast and on the nearby islands.They belong

to well-developed counties and can be considered reliable samples of Croatia (Primorsko-goranska zupanija with Rijeka as its capital and Istarska zupanija with Pazin as its capital). On this territory we have 105 elementary schools with 2,072 classes and 38,635 pupils altogether, 107 History teachers working in them. There are 57 secondary schools with 903 classes and 21,781 students altogether, 69 History teachers working in them.

Section 6: Questionnaire

The following data have been obtained with the following questionnaire which was disseminated to all elementary and secondary schools in two counties. 90% schools answered the questionnaire, so the obtained results are reliable. The questionnaire has the following questions:

1. How many pupils/students are there in your school?
2. How many classes are there in your school?
3. How many computers are there in your school?
4. How many laptops and LCD projectors are there in your school?
5. Is there a computer classroom in your school?
6. Who uses the computer classroom?
7. Besides the computer classroom where are the other computers placed?
8. How many computers in your school are connected to the Internet?
9. Has your school organized a computer course for teachers?
10. Have the History teachers been qualified to use computers and the Internet?
11. Have the History teachers free access to the computers and the Internet to prepare their lessons?
12. Is there a specialised History classroom in your school?
13. If yes, is there a computer in it?
14. If yes, who uses the computers – the teacher, or students, or both the teacher and the students?
15. In which way do the History teachers use the computer and the Internet in their everyday work?
16. According to the History teachers' opinion what percentage of students have a computer at home?
17. Do the History teachers require the students to do homework for which they need a computer and the Internet?
18. Do the History teachers use CD-ROMs produced by professional publishers?
19. Have the History teachers produced a CD-ROM of their own, or in cooperation with their students?
20. If yes, quote the titles and describe the contents.
21. If you have some objections or suggestions, write them here.

Section 7: Situation in elementary and secondary schools

a) Elementary schools

There are 105 elementary schools in the Primorsko-goranska and Istarska counties, containing 2,072 classes and 38,635 pupils. The collected questionnaires have given the following statistical results:

Questions	Answers
0. Number of schools	105
1. Number of pupils	38,635
2. Number of classes	2,072 i.e. 18.6 pupils per class
3. Number of computers	2,152 i.e. 1 computer for 18 pupils
4. Number of laptops and LCDs	74+70
5. Number of computer classrooms and number of computers in them	95/1,638 i.e. 90% of schools and 17 computers per classroom
6. Number of computer classrooms accessible to History teachers	58 i.e. 55% (mostly because of the overloaded timetable)
7. Deployment of computers at school	specialized classrooms for various subjects, a teacher's study room, secretary, accountancy, principal, educationalist, library, staff–room and pupils' home–room

Questions	Answers
8. Number of computers connected to the Internet	1,253 i.e. 58%
9. Computer courses organized for teachers	in 73 schools i.e. in 70% of schools
10. Number of History teachers qualified for ICTs	in 68 schools i.e. in 65% of schools
11. Number of History teachers who have an easy access to the Internet	89 teachers i.e. 85% of teachers
12. Number of schools with a specialized History classroom	68 schools i.e. 65% of schools
13. Number of schools with a specialized History classroom equipped with a computer and/or Internet connection	20 schools i.e. 20% of schools
14. Is the computer used by the History teacher only, or by the students as well?	only teachers 9, with pupils 7 i.e. 8.6% + 6.6%
15. How do the History teachers use the computer in their everyday work:	
– for planning and programming	73%
– for preparing lessons	22%
– for realizing elective lessons	15%
– for making History projects	8%
– for writing reports	5%
– for work with talented pupils	10%
16. According to the teachers' assessment how many students have their own computers and the Internet at home	56%
17. Do the History teachers give homework which requires the Internet?	Yes, in 43 schools (41%)
18. Do the History teachers use CD–ROMs produced by publishers?	Yes, in 23 schools (22%) Examples: Methodical History workbooks correlated with students' books, historical journals, British Encyclopedia, History of the World, Encarta 2003
19. Has the History teacher produced his own CD–ROM – alone or together with pupils?	See Section 8
20. If yes, describe their contents	See Section 8
21. If you have objections or suggestions, please write them here	See Section 9

b) Secondary schools

There are 57 secondary schools of all types in the Primorsko-goranska and Istarska counties, distributed into 903 classes containing 21,781 students. The collected questionnaires have given the following statistical results:

Questions	Answers
0. Number of schools	57
1. Number of students	21,781
2. Number of classes	903 i.e. 24 students per class
3. Number of computers	1,299 i.e. 1 computer for 16.8 students
4. Number of laptops and LCDs	58+ 65 i.e. 1 laptop and 1.14 LCD projectors per school
5. Number of computer classrooms and number of computers in them	50/804 i.e. 88% of schools and 16 computers per computer classroom
6. Number of computer classrooms accessible to History teachers	25 i.e. 44% (mostly because of the overloaded timetable)

Questions	Answers
7. Deployment of the computers at the school	specialized classrooms for various subjects, a teacher's study room, secretary, accountancy, principal, educationalist, library, staff–room
8. Number of computers connected to the Internet	839 i.e. 65%
9. Computer courses organized for teachers	32 schools i.e. in 56% of schools
10. Number of History teachers qualified for ICTs	in 32 schools i.e. in 56% of schools
11. Number of History teachers who have an easy access to the Internet	40 teachers i.e. 70% of teachers
12. Number of schools with a specialized History classroom	14 schools i.e. 25% of schools
13. Number of schools with a specialized History classroom equipped with a computer and/or Internet connection	none
14. Is the computer used by the History teacher only, or by the students as well?	See Section 13
15. How does the History teacher use the computer in his everyday work:	
– for planning and programming	75%
– for preparing lessons	30%
– for realizing elective lessons	30%
– for making History projects	5%
– for work with talented students	20%
16. According to the teacher's assessment how many students have their own computers and the Internet at home	65%
17. Do the History teachers give homework which requires the Internet? Give examples	Yes, 80% teachers, see Section 8
18. Do the History teachers use CD–ROMs produced by publishers? If yes, give their titles	6 teachers i.e. 10% (on their own initiative) Examples: historical journals, British Encyclopedia, Encarta 2003
19. Has the History teacher produced his own CD–ROM – alone or together with students	See Section 8
20. If yes, describe their contents	See Section 8
21. If you have objections or suggestions, please write them here	See Section 9

Section 8: Comments

We miss a kind of equipment standard to evaluate the level of a satisfactory situation at school ("How much is enough?"). In another county (Licko-senjska zupanija) we have found a secondary school with only 167 students, who enjoy 12 laptops and 2 LCD projectors, plus a computer classroom with 18 computers and other 8 computers on other places. Is that enough?

Most History teachers use a computer as a typewriter (Word Processor). However, they have not been educated to use ICTs in the History classroom. We are of opinion that a precise definition should be given as to what an ordinary use of a computer is, and what its educational application is. Fortunately, we have found several outstanding and enthusiastic teachers who can be models to follow in application of the ICTs in teaching History. The secondary school in the town of Pazin has its own web site (www.gssjd.hr), where the History teacher has his own page which contains presentations and lesson prepared in PowerPoint. We have collected a few CD-ROMs produced by teachers and their students, with specific historical issues (e.g. Ancient Egypt) or one-year projects (e.g. research of local history and culture from different standpoints).

As to question 17: This practice can have two blades, especially when students are asked to write an essay on some topic. Usually they can find the appropriate essay on the Internet, and then translate it into Croatian – which is not the purpose of the homework. In such cases the teacher is helpless.

As to question18: On the Internet we can find many web portals with History issues in many languages. Unfortunately there are almost no portals of similar contents in Croatian. We are sure that there is a considerable interest, but insufficient financial means and lack of experts interested in the work prevent dissemination of ICTs in History teaching. Most examples that we can find on the Internet are from the English speaking territory. There is a strong language barrier, more for teachers than for students that nobody speaks about, even the teachers who must be ashamed of their language ignorance, so it is easier and safer to remain silent and passive. History teachers complain that there are too few CD-ROMs in Croatian to be used in the classroom, although there are excellent CD-ROMs in English. The teachers suggest that certain CD-ROMs should be translated into Croatian.

Section 9: Best investments/ways forward to develop the use of ICTs in History teaching. Suggestions

It seems that the bottleneck is more about teacher training and software, than hardware. We miss theory of ICT use in education compared with classical and traditional teaching methods. ICTs are not a panacea but it should find the adequate place in the didactics and methodology of teaching strategies. It should not be a political campaign, but a well-measured means to improve teaching. History teachers' reactions range from full support to indifference – there was no negative response wherever.

CASE STUDY/FYRO MACEDONIA

Section 1: Data of the respondent

Institution: Faculty of Natural Sciences and Mathematics, Institute of Informatics
Acronym: II
Address: Arhimedova bb, 1000 Skopje
Country: The Former Yugoslav Republic of (FYRO) Macedonia
Telephone: +389 2 31 17 055 ext. 205
Fax: +389 2 31 62 078
E-mail: keti@ii.edu.mk
Author of case study: Katerina Zdravkova
Date: 19 November 2004

Section 2: Biography details

I teach different courses of computing and computer science, including Educational Software, Design of Educational Software and Philosophy of Computing. The last course covers ACM/IEEE recommended Social and Professional Issues of Computer Science, including History of Computing. As a member of IEEE Computer Society, I am mainly interested in History of Computing

Section 3: ICT facilities in my institution

Institute of Informatics is currently the best equipped educational institution in Macedonia. Our 5 teaching laboratories work 12 hours a day, 6–7 days a week. Apart from training computing courses for all non-Informatics students from the Faculty of Sciences (in average 300 students each year), we also provide introductory computing courses for students from Faculty of Agriculture (300 students), Faculty of Dentistry (200 students), Faculty of Philology (120 students), and Faculty of Philosophy (550 students). At least 100 students from Faculty of Philosophy study History and Archives.

Institute of Informatics is National Contact Point for Open and Distance Education (http://odoserver.pmf.ukim.edu.mk), and most of our courses are web-based (www.ii.edu.mk).

Furthermore, we have several research laboratories, such as Wireless Application Laboratory sponsored by Ericsson, Multimedia Laboratory, Laboratory for Virtual Digital Laboratories, and two labs for Parallel Processing and Parallel and Distributed Systems. Unfortunately, most of these facilities are not used to their maximum capacity, mainly because in the last 10 years, in order to reduce the number of state employees, the Government has restricted the employment of new staff. Meanwhile, many professors have retired and many younger colleagues have left the country (brain drain from Macedonia is a severe problem).

Section 4: Generally, in what ways do you use ICTs?

As a teacher, I use ICTs for lecturing. All my lectures are prepared in PowerPoint, and most of them are web-based. For non-Informatics students I use an educative CD made by Semos Multimedia, one of the best software developing companies in the country. Furthermore, my ICT skill courses (for students of Biology, Chemistry, and Dentistry) have self-testing and e-testing web-based module (http://twins.pmf.ukim.edu.mk/etest).

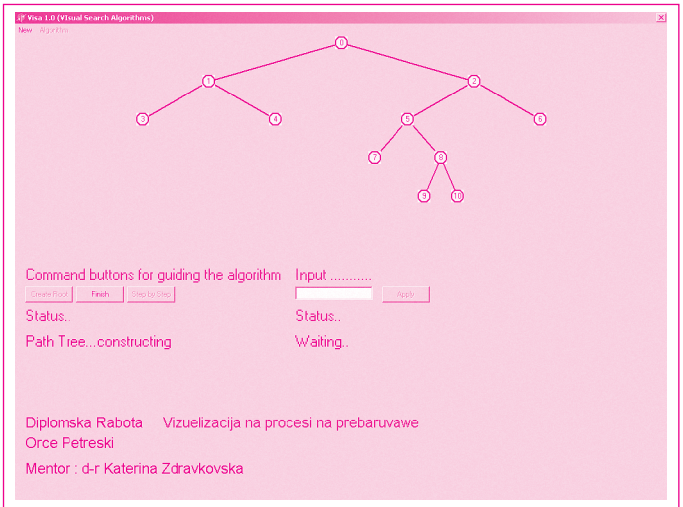


Figure 1. One of several projects that visualise AI techniques

My major areas of interest are Artificial Intelligence and Educational Software. As a result, I have initiated and successfully realized several projects dealing with educational software for AI lectures. For example, when I teach Search Techniques, in parallel with the lecture, I use our system Visa (Fig. 1) that visualises the search process. Parsing of sentences in Macedonian, determination of the word roots from a sentence, and the generation of word derivations in Macedonian are visualised too. These projects were BSc thesis done under my supervision.

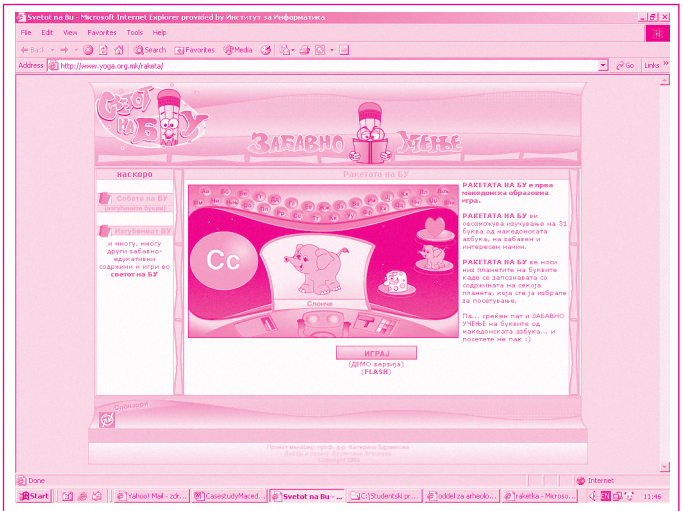


Figure 2. One of multimedia interactive projects for children

In the area of Educational Software, we have produced at least 20 multimedia interactive projects for children. Some of them are Internet-based. The only project currently available on the Internet can be seen at www.yoga.org.mk/raketa (Fig. 2). It is to be a part of the children Web portal of the National Internet provider MtNet. The status of MtNet is currently under question (Macedonian Telecom is a property of Hungarian company Matav, which makes 10% staff redundant), so the future of the portal is far from optimistic.

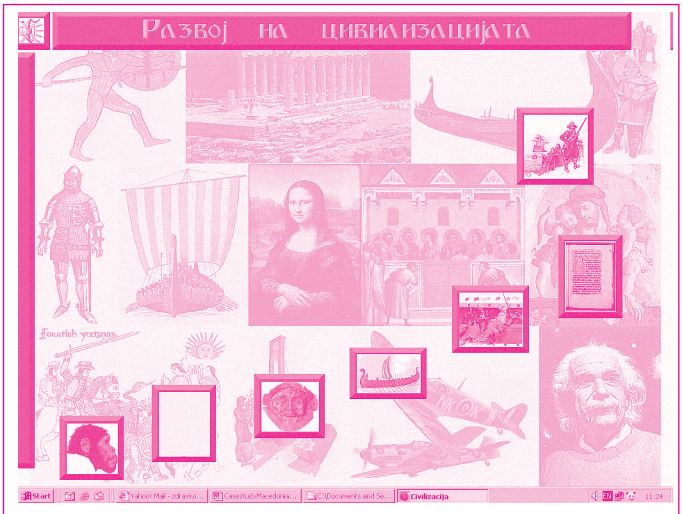


Figure 3. Development of civilizations

Section 5: Particular examples of ICT use

a) One of my former students from Strumica, a small city on Bulgarian/Greek border, made a very nice multimedia project for History teaching (Fig. 3). It has been presented in two primary schools. Although the presenters of the project were ICT teachers, children displayed much interest in it. Let's hope that this example won't be the last in the union of ICTs and History.

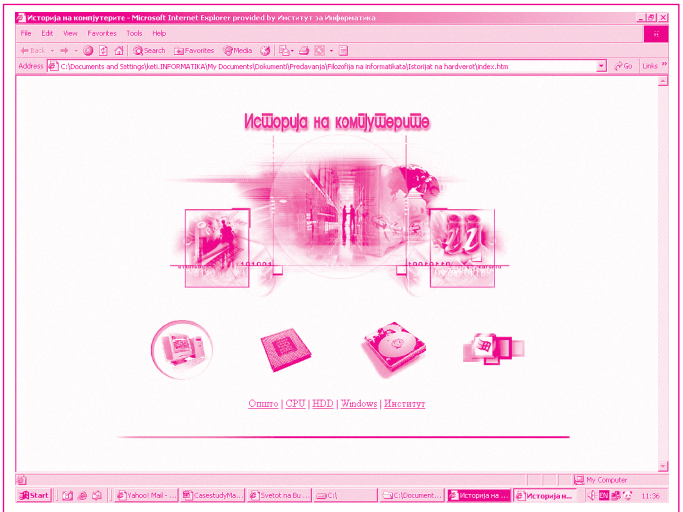


Figure 4. My Web-based history of computers

b) For my lectures on History of Computing I made a brief compilation of Origins of Computer Science that is web-based (http://twins.pmf.ukim.edu.mk/filozofija). Both, the document and the presentation, are in pdf. For the purposes of this course, I have also prepared a Web site that covers the history of computers. This site is still under construction, but we expect to finish it soon.

Figure 5. The pilot version of the web site for the Museum of Macedonia

c) Macedonia is one of the most important territories in the world history. Wherever you dig deeper, you can find valuable archaeological artefacts from different periods. World knows nothing about it, mainly because we can't explore more than 1% our historical wealth. In spring 2004, I started a project with the Museum of Macedonia (Fig. 5). The Museum is currently the greatest catalyst for changes in History teaching, and the number of students has increased from 5,000 in 2002 to 20,000 in 2004. This site is also under construction, but highly probable that it will be finished by March 2005. It will also include the educational part for young children.

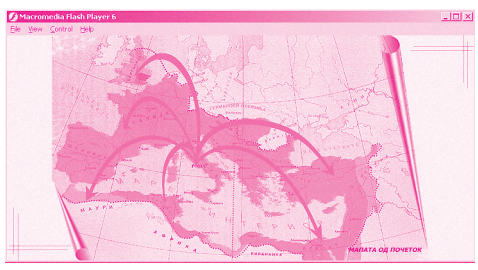


Figure 6. Our dream is to show Roman routes

d) Together with the colleagues in the region, we intend to make the international project *Along Roman Routes*, that will go from sandy Africa to Northern England (Fig. 6). It is a very ambitious plan. The first part of the project is Roman routes in South-Eastern Europe.

Section 6: Some web sites helpful for teaching History

There are thousands different sites for Computing History. If you contact me, I can send them to you.

Section 7: Non–Internet ICT resources for school History

I am afraid that no ICT resources apart from the project of Strumica are or will be used in the near future for History teaching in Macedonia.

Section 8: Barriers to ICT use

Macedonia is one of the countries that haven't entered Information Society yet. ICTs are declaratively elective in all primary schools, but it is usually replaced by other courses. However, History is a compulsory subject in the first two years of secondary education, exactly when introductory ICT courses are compulsory. The connection between them has never been made. The reason might be the fact that older History teachers have no ICT skills, while younger (those who get ICT skills at my Institute) are on the waiting list to be employed. I doubt that they will use ICTs in their teaching, because the professor that teaches them is the oldest and, unfortunately, the most conservative at my Institute and he doesn't use ICTs as an education tool.

Several projects for modernization of education have been initiated (www.mon.gov.mk), but NONE of them deals with ICTs. Last week the Prime Minister resigned, and the Government is under reconstruction. If we are optimists, our Minister of Education and Director of the Office for Development of Education will be replaced by people who use computers and who are unafraid of them.

Section 10: Any other comments about History and ICTs

From early childhood I have been impressed by History. It is still my obsession. I also see that the children I meet adore TV channels like Discovery.

Probably that is the main reason why I think that History should not be taught only with books. TV programmes together with appropriate educational software could be the best way to teach History. The only problem is how to convince History teachers and officials in the Ministry that TV and ICTs are the educational tools children like the most: mobile phones are used at most to10% of their capacities.

Section 11: Any reports/information about the use of ICTs in school History in your country which might be useful

I am sorry, but such report doesn't exist.