Themata 3 E-learning Archaeology, Theory and Practice

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E-learning Archaeology, Theory and Practice

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Introduction

In this overview we will carry out a brief comparison of two different distance learning courses that we have arranged at the Department of Historical Studies at the University of Gothenburg, Sweden. The first course to be presented below is the course *Archaeology – Introductory course* (given at the department on eight occasions since the Autumn of 2001). The second course is *Archaeological Heritage in Contemporary Europe* (given on one occasion during the Spring of 2009). Below we will present these courses from a number of themes and briefly discuss their pros and cons. As we will see below: these two courses differ from each other in a number of ways, for instance, they are different in length, focus and depth, and they differ when it comes to their pedagogical approaches. They do also differ concerning the demands of the previous knowledge required of the students that are accepted to follow them.

Despite these differences we mean that the comparison of these two courses, and the result of this comparison, can constitute a background to interesting and important discussions concerning the future of e-learning based education within the cultural heritage sector as well as to reflections concerning the e-learning concept's wider influences in society.

Archaeology – Introductory course General background

The background to the course could be found in a pedagogical strive to find flexible solutions for people that by various reasons could not follow ordinary campus based education in archaeology. Thus, the course can also be seen as a democratic project. The course was developed as co-operation between the department in Gothenburg and the Learn-Centre of Falbygden (a state financed educational service available in the countryside) during 2000 - 2001. The personnel at the Learn-Centre handled all technicalities concerning the production of the course as well as the technical recourses for handling and running the course at the same time as the department in Gothenburg was responsible for the content of the course. The main characteristics of this course is that the lectures were filmed and that these films were combined with connected to, voice-text, as well as text-illustrations etc. At the same time the students interacted with each other and the teacher via the conference platform First Class. The first time the course was given was during the period of Autumn 2001 – Spring 2002 and since then, the course has been given on eight occasions.

Description and curriculum, aims and scope

The course is a distance learning course on 30 ECTS credits running at half speed, i.e. over one year instead of one semester. The course starts with an introductory weekend in Gothenburg were the course is presented. It also includes a full day excursion to the nearby island of Hisingen. In the middle of the course, in January, there is another meeting in Gothenburg, with museum visits and practical exercises to classify the archaeological material. The aim of the course is to give students a general orientation of the main outlines of world prehistory as well as brief knowledge of archaeological material (mostly Scandinavian), theory and methods. The course is directed towards students at the university.

The course is divided into four sub-courses: Autumn semester: (1) Introduction to archaeology (3 ECTS credits), (2) Cultural landscape and materiality-field course (6 ECTS), (3) Global archaeology (7 ECTS), (4) The pre-and early history of Northern Europe (8 ECTS), (5) Artifacts as an archaeological record (6 ECTS).

Pedagogy, methodology and learning techniques

The course is entirely based in PBL (Problem Based Learning) pedagogy and research based problems that the students have to solve in collaborative groups of 4 – 6 persons. The technical platform used is First Class, a commonly used conference platform in Sweden, which enables the students and teachers to meet in group conferences, to chat and create links. It is not, however, wiki technology. The lectures are filmed and are connected to, voice-text, as well as text-illustrations, etc. The lectures are presented on cd's, were the students can see the lecture giving the lecture in a square-inch window. The lecture is linked both to illustrations (for instance, maps, artifacts etc.) that are presented in another window as well as to the subtiles of the lecture.

The point is that the students can go back and forth in the lecture via the headlines. The main advantage with the cd's is that the student can follow the lectures at any time and/or place and move back and forth in the lectures over and over again. The drawback is of course that the students cannot interact directly with the teacher. Another interesting observation is that the filmed lectures become much more concentrated than the ordinary 'live' ones. In some cases up to 50% shorter, and this is not solely depending on the lack of interactions with the students.

Assignments and feedback

For every sub-course there are 1 - 4 assignments. In all there are 12 items of coursework to finish during the year, 3 of them individually (2 evaluations and 1 reflection as a part of the introduction). Typically, a group answer on a single assignment will consist of 10 - 20 pages of written text (during the course the demands on the texts academic craftsmanship will increase). The bases of the assignments are generally broad research based problems without any demands on final solutions, and the students will have them all in their first day in class (in the study guidance). As seen, this is far from 'testing' the student's capabilities of memorizing text.

One assignment is, for example:

In this assignment the collaborative group shall present and discuss the most prominent theories around the transition from the Mesolithic to the Neolithic – from a hunter gatherer society to farming – and make your own reflections and commentaries. The question is a classic one in

archaeology – there is no final solution for you to detect. On the other hand, it is important that the work group really discusses the problem from their own point of view. Remember: Facts are sacral – but comments are free (nr 3).

Another example:

In this assignment the collaborative group shall discuss and reflect upon the burial traditions of the Scandinavian Bronze Age, with special attention to the regional, interregional and chronological differences. Other points to highlight are also the problems of the burial as a reflection of the surrounding society and as an indicator of interregional contacts (nr 8).

Within this context, the students receive constant feedback from each other (from individuals and groups) as well as from the teachers at the same time as they interacted, collaborated and co-produced the solutions to the research based problems that the groups had to discuss and solve.

The students

During the occasions that the course has been given both the number and origin of the students has varied. On a general level, however, some observations can be made. One of these is that: despite the fact that the course is a distance-course the majority of the students live in the Gothenburg area. Over the years a number of Swedes living in different parts of the world have followed the course. Concerning gender and age there is a slight overrepresentation of females and when it comes to age most of the students are in the age-span of 22 - 30, a slightly higher average age than at the campus-based course which is on the same level. Concerning the students previous knowledge all of the students have high-school education (Swedish Secondary School Education) and due to their age most of them have also experiences from work in different areas of society.

Evaluations – questions and student responses

In Gothenburg we have, so far, only worked with qualitative evaluations in the form of short essays from students. No questionnaires have been used. In fact these evaluations are a part of the curriculum of the course (obligatory assignment 6 and 12, which makes their answers good from a representative point of view). The evaluations from the students is structured in a very free way, broadly aiming at their general expectations, comments on the literature, and, of course, how they feel how the technical solutions have functioned. In general, the students wrote ca 1 - 2 pages on each evaluation. Some 'big pictures' can be drawn, for example:

- Many students express scepticism at first when they realize that they will work in collaborative groups and, not at least, for the technical solutions. But it is also very striking that these worries seems to vanish after 1 – 2 months (at least for most of the students). Many of them seem to have bad experiences from their high-school years, especially when it comes to working in collaborative groups.
- > The initial scepticism is also very often focused on the more general, reflexive character of the assignments. 'How can we have opinions on these complicated matters when we have just started to learn about them?' is quite a common comment. But also these doubts usually disappear during the course, but not as fast as the ones stated above. This is a crucial point, and as a teacher one has to spend a lot of effort to explain and argue for the pedagogical advantages of the chosen approach. One conclusion to be drawn from this is that the next time the course is given; one should put in a reflexive moment, focusing on different learning techniques.
- > The single most apparent positive judgment in the evaluations is the statements of the portable digital media used: the cd's with lectures is generally a real hit. In fact, some of the students prefer these kinds of lectures instead of conventional ones! One remark: 'The lecturers on the screen (maybe a square inch, *our comment*) seemed to be more alive than the ones I have encountered in my ordinary classroom (a science student). The reasons for the positive experiences of portable media hasn't been analyzed in depth yet, but in some statements from the students they point at the positive aspects of the ability to freely navigate the materials, go back and forth, stop the lecture for a moment etc, as well as the advantages of that you can watch it anywhere. Hence, learning at ones own pace, own conditions and possibilities is in focus. Learning is never linear, so why should a lecture be? Another aspect of this is that you can escape what maybe called 'the risks of cognitive overloads' i.e. that many

students – especially from milieus with lacking experience of higher education – in an ordinary classroom tend to lose focus on learning. Fellow students, the teacher's behaviour, and the milieu in general etc. can in this sense be quite disturbing.

Evaluations – the teacher's view

- > The students seems to present more sophisticated results compared with the results from the students in more traditional classrooms; they show an enhanced range of expression and critical understanding. This is the direct result of working in groups in order to solve problems.
- > Students are more eager to work in an interdisciplinary way, to collect and examine critically information from other subjects and sources. It seems as if they develop much faster into critically minded individuals capable of better self-expression than students involved in more traditional learning environments.
- > And, quite surprising, it seems as if the students have more social contacts with fellow students and their teacher/s; they feel obligated to fulfil particular roles within their workgroups.
- > A number of students who have difficulties with or in traditional learning environments (due to e.g. geographical distance, disabilities etc.) have performed in these experimental courses in a very positive way.

Archaeological heritage in contemporary Europe General background

The background of the course was the development of a distance-course within the framework of the Leonardo da Vinci II project, *E-learning as a tool of knowledge transfer in the field of protection and management of archaeological heritage*. This project was a co-operation between numbers of archaeological academic departments throughout Europe during 2008 – 2009 (see introduction in this volume). The departments involved produced the content of the course in co-operation; the department in Poznan, Poland handled the technical dimensions of the course, while the other partners involved did run the course at various occasions during the Autumn of 2008 and Spring of 2009. The main characteristic of this course is that it consists of a number

of modules (15) based on interactive texts and illustrations. The first time the course was given was during the period of Spring 2009.

Description and curriculum, aims and scope

The course is a distance learning course on 7,5 ECTS credits running at the University of Gothenburg at half speed during the period of 25th March 2009 until 8th May 2009. Since the course starts out with an introductory evening it can be characterized as blended learning. The distance learning training Archaeological heritage in contemporary Europe is aimed at delivering a coherent body of knowledge to a group of trainees of the most vital aspects of European solutions in archaeological protection and management, means of their implementation into their own practice as well as knowledge of European regulations and legal solutions in the field of protection and management of archaeological heritage.

The training is directed to professionals in the sector of archaeological heritage protection and management as well as graduate and extramural students interested in this field of expertise. The training process is composed of lectures and practices in accordance with the schedule below.

Part 1 Theory of archaeological heritage

- 1 Theorizing cultural heritage
- 2 Mentalities and perspectives in archaeological heritage management Discussion Forum 1: What is heritage?

Part 2 Mapping of archaeological heritage resources

- 3 Concepts of understanding spatial valorization of archaeological heritage resources
- 4 Geographic Information System as a method of management of spatial data
- Aerial survey in archaeological protection and management systemsGeophysicial prospection in archaeological protection and
- management systems

Essay (collaborative): Mapping of archaeological resources in a specific area.

Part 3 Valorization of archaeological heritage

- 7 Images of the past
- 8 Cultural biography of landscape

Discussion Forum 2: Archaeological heritage – fact or construction?

Part 4 Protection and management of archaeological heritage

- 9 International conventions and legal frameworks
- 10 Sustainable development in the archaeological heritage sector
- 11 Management cycle and information systems in the archaeological
- heritage sector
- 12 Commercial archaeology

Essay (individual): How would you change / apply (inter)national legislation and policy to meet the requirements of local heritage?

Part 5 Politicizing archaeological heritage

- 13 A single voice? Archaeological heritage, information boards and the public dialogue
- 14 Methods of engagement, publicity and media relationships
- 15 Public outreach museums, schools, services
- Discussion Forum 3: Presenting the past and setting the agenda

Pedagogy, methodology and learning techniques

The course is conducted in an assisted distance training pedagogical mode. This means that all of the training materials are provided online and the training process is supervised by a teacher. The student works alone with the modules (15) based on interactive texts and illustrations. This at the same time as the students interact with each other and the teacher via the platform Edumatic. This platform enables the students and teachers to meet in different discussion forums set up before the start of the course, so they can chat and create links.

The point is that the students can go back and forth in the modules. The main advantage with the modules and their interactive mode is that the students are forced to slow down their reading which creates opportunities for reflection and contemplation. They do also have the possibility to go through the module on many occasions which strengthens their possibilities for critical reflections. This at the same time as the Edumatic tool contains functions that provide the teacher with the opportunity to follow the students progress (how much of the modules that they have gone through and how much time they have used on their work).

Concerning the learning techniques the course was carried out by the authors who also arranged the introductory evening. Our primary task was of course to create questions in the different discussion forums, comment

upon the student's contributions in the forums, and to read and access the student's individual essays that the students wrote in part 4 – *Protection and management of archaeological heritage.* Besides these obvious tasks we encouraged the students in different ways via emails and messages in Edumatic.

Assignments and feedback

A short example of a discussion in forum 1 - What is heritage? The fifteen modules of the course are divided into five major themes. Every theme was followed by an assignment: three forum discussions, one collaborative essay, and one individual essay. Below we will present a brief example of what the parts of the discussion in forum one What is heritage? looked like.

Our starting point in the discussions forum was:

We will start with some basic points of departure: What is cultural heritage? How can we look upon the different chronological values of cultural heritage? Is there any? Is there cultural heritage that is best to forget? Where is the border between immaterial and material cultural heritage? Is there any? Many questions, no obviously given answers. Your task will be to discuss and/or reflect upon these questions in the forum. To pass the moment you have to have at least two entries per person and one of them must address the questions above; the other(s) can comment upon the other participant(s) contributions in the forum. The discussion must be finished by 24.00 hrs, on the 6th April. We will continuously visit the forum and make comments on the held discussions. Good Luck! Anders G/Håkan K.

Student 3:

In a way you have to remember what you are about to forget... Cultural heritage is in fact in many ways a strategic place for different kinds of memory processes. Cultural heritage is created in a process where people and society as a whole materializes memories through different kinds of metaphors. At the same time one cannot deny the fact that collective memory shaping in many ways is a deeply political question. What is to be remembered and respectively forgotten?, is a very important question about power in society. Another important question here will be how different states around the world give priority to culture and culture

heritage in themselves, and therefore, this often turns out to be a question about economy...

Student 4:

I want to agree with an earlier statement in the forum that cultural heritage must be seen as an ongoing and never ending process. I mean that cultural heritage is not necessarily a must, but must be associated with different kinds of memories, just look at famous archaeological sites/ places as rock carving sites, the Kivikscairn and other prehistoric sites that I mean are cultural heritage – here there are no memories, just research and speculations. Moreover, one can ask oneself: Can we base our cultural heritage on something that isn't based on scientific facts?

Student 5:

The cultural heritage sector in Sweden today seems to automatically value older heritage higher than heritage from historical/modern times. At least this is the impression I've got when talking to people in the heritage sector, archaeologists and students of archaeology. It is also obvious, when reading the Swedish Heritage Conservation Act (The act protects place names, ancient remains, archaeological finds, historic buildings, ecclesiastical monuments and the export of specified older artifacts, authors comment). At the moment, I am working with an archaeological survey in an area planned for a wind turbine park. In the area we have found everything from Stone Age sites to many traces from crofter's holdings from the eighteenth century. For me it is obvious that the crofter's holdings are the most prominent cultural heritage in the area, in many ways cultural heritage that defines the area. I've spoken to many people in the neighbourhood that are worried that 'their' crofter's holding milieus will be destroyed, but I have not met one single person that expressed any concern when it comes to the Stone Age sites. But from the official cultural heritage management the Stone Age sites are pointed out as the most important for further investigations, while traces from more historical activities are reduced in value.

One feedback (of 6) from the teachers looked as follows:

Hello! A very good discussion! When discussing the relationship between material cultural heritage and intangible cultural heritage it is important

to remember that they are not fully separable categories. Different kinds of materiality are containers of an endless amount of stories of various kinds, and in many cases the materiality themselves are carriers of stories. In some cases, for example, the demolishing of old industrial structures has led to stories that existed around the industries to disappear in a very short period. The materiality reminds us. Another question has been how to preserve immaterial/intangible cultural heritage. In different forms this naturally happens all the time (all spoken statements, pictures and written sources that are stored in different ways). But a vast majority of immaterial cultural heritage will never find its way into museums and/or databases. But is that a problem? Have we not too long been captured in a seventeenth century discourse where the world continuously must bee classified and preserved in pieces? Isn't it enough that we have a respectful attitude towards different statements in a wide sense (cultural heritage) in our contemporary society? And that we try to preserve the cultural heritage that we (or others) find important for more specific use? Isn't in fact everyone's right to tell stories that it's the most important thing ...? Good work! Anders G/Håkan K.

The students

So far, the course has solely been arranged on one occasion – the Spring Semester of 2009 – and on this occasion 6 students followed, and finished the course. Despite this meagre statistical material some general observations can be made. Also, in this course the majority of the students were living in the Gothenburg area, and were unfortunately from a gender perspective – all male. When it comes to age the students were in the age-span of 24 – 66. Concerning the students previous knowledge, all of the students had highschool education (Swedish Secondary School Education) as well as an Introductory course on 30 ECTS credits either in archaeology, ancient history or history. Since the course was directed to professionals in the sector of archaeological heritage protection and management, as well as graduate and extramural students interested in this field of expertise, the course attracted both of these categories.

Evaluations – student responses

In Gothenburg we worked with a qualitative and quantitative evaluation in the form of a questionnaire consisting of 61 questions. This was the same

questionnaire used by the other institutions giving the course (the general conclusions from the questionnaires are discussed by Šne and Marciniak & Chwieduk in this volume). The questions range from personal information of the student to questions concerning how and why they wanted to follow the course, as well as to various judgments of the qualities of different modules.

- > On a general level it can be concluded that all the students pointed out the course as very valuable in their own education as well as an important contribution to every archaeologist's life-long learning. This point is all the more interesting in those cases where the student already works as a professional archaeologist in the cultural heritage management sector. All students emphasized that the knowledge acquired in the course will be important in their professional careers in the cultural heritage management sector.
- > All students pointed out that the forum discussions were very valuable and important for their critical reflections of the themes discussed in the modules. A number of students also stressed that the possibility to test their arguments towards the teachers in these discussions was a clear strength of the course.
- > The students were positive to how the interactive material in the modules, as well as the modules themselves, functioned on the pedagogical level. This is also shown in the fact that a majority of the students pointed out e-learning as the best way to read and follow this course as well as archaeological teaching in general.
- > They also stress that the international character of the course was an important factor when valuing the qualities of the course. Not at least since the course did improve their knowledge and their awareness of heritage management and its different traditions and legal framework in different parts of Europe.

Evaluations – the teacher's view

> As teachers we would like to stress that the work in Edumatic and the course's themes and interactive modules was easily to handle and it had great pedagogical advantages. The interactive moments in the text and the illustrations in the modules obviously forces the student to slow down their reading and therefore gives them time for reflection and contemplation.

- > From the discussions in the forums it is obvious that the students present more reflexive results and thoughts in comparison with the results from students in campus education. The discussion forums function as a kind of working groups where the students as well as the teachers interact in a very productive manner. The forums are also interesting communicative arenas since they seem to hold a middle level between oral discussions and written statements (as for example in an essay).
- > The fact that the course and its content was created as co-operation together with colleagues of departments in different parts of Europe, representing different cultural heritage management traditions, was important. This was because from a pedagogical point of view the different traditions is a very good illustration of the socio-political, and contextual dependence of the meaning and content of cultural heritage

Concluding remarks

Above we have briefly presented two archaeological distance-learning courses. In many ways these two courses are very different in their character when it comes to their length, focus and depth, as well as their pedagogical approaches. However, despite these differences it can be concluded that a scientific discipline like archaeology that: contains a broad spectra of discussions (from philosophical to natural scientifically ones), is dependent on illustrations and maps, is anchored in a highly international research community and is very well suited for the construction, and use of e-learning courses.

In archaeology the e-learning concept can be of importance also outside scientific, and university based teaching and training, since at least in Sweden, Swedish people have a profound interest in prehistory and in the archaeological discipline. This means that archaeological e-learning courses can be used as an asset that can strengthen democratic development in society if ordinary citizens can take an active part in discussions of the past and their cultural heritage via e-learning courses and their discussion forums.

Hopefully, the future will lead to even more developed democratic dialogues in cyberspace.