Information and Communication Technology (ICT) and the Historian's Workshop: Reflecting upon Yesterday in Relation with the World Today

Sabien Colpaert – Werner Goegebeur
Centre for Western Hellenism
Free University of Brussels (VUB)[1]

Lies Klerkx – Raf De Keyser
Maerlant Centre
Catholic University of Louvain/Leuven

1. The STIHE-Project 'Historical Skills'

1.1. The Whats

STIHE-projects (Fund for Stimulation of Innovation in Higher Education)[2] are aimed towards developing digital and interactive learning environments by using ICT. The implication is that these projects are based on ICT, and that these technologies constitute the point of departure for the developer. Yet, in the aforesaid projects, ICT is not a goal in itself. The first and foremost concern of the STIHE-project which will be briefly discussed in this paper, is the creation of a workable and well-structured learning environment for the purpose of historical education.
As far as the 'Historical Skills'-project is concerned, a workshop will be set up and presented to the students in the form of a website on the internet.

Four institutes for higher education participate in this project and will each develop one module which stimulates students to develop fundamental historical skills: the Catholic University of Louvain (Belgium), the Fontys College Tilburg (The Netherlands), the College of Science and Art St. Lucas Ghent and Brussels (Belgium), and the Free University of Brussels (Belgium). Each module is designed for a specific target group. What these target groups have in common is that they all to some extent need historical skills within their discipline, and thus have to acquire these skills. The target groups consist in students of the history department, the humanities, architecture and the secondary teacher training course.

Each module is engrafted onto a certain theme and period, and is conceived as a problem-oriented workshop:
- Ancient history and its influence on Western history: formation of city, state and empire, citizenship; conceptualization.[3] *(reality and perception)*
- The medieval city and the urbanization of Western Europe: exercise of power and

---

perception of power in the medieval urban society.[4]
- Modern history: shared past: unity and division in the Low Countries: reality and conceptualization.[5] *(reality and perception)*
- Architecture: use and interpretation of space: Gothic architecture.[6]

1.2. The Whys of ICT in the Project

Useful and workable learning environments can likewise be developed without using ICT, so why make an appeal to this relatively new technology?
Research of the Maerlant Centre (CULouvain)[7] has shown that ICT can be used in an innovative and useful manner so as to assist senior school pupils with the development of basic skills. The Digi-Historia CD-ROM designed for pupils in the first four forms of senior school, combines the information structure and thought strategies of history as a discipline, with didactically justified learning processes.

New views on history education, such as 'learning to learn' instead of transfer of knowledge, and the use of information technology have but recently been introduced into Flemish senior schools[8], and are thus not yet widespread. Obviously, this situation is mirrored in first-year students (freshmen) who make the transition from senior school to university. The following basic skills are usually insufficiently developed:
- the ability to situate events and facts in time (sense of time)
- mastering a strategy to identify and recognize connections (widthways and in depth)
- problem-oriented analysis of situations and activities
- strategies for in-depth reading and analysis
- recognizing the characteristics of new concepts and using known concepts in new situations
- being able to spontaneously assemble more information

The principal aim of this project is to smoothe away these deficits of beginning students. In order to obtain this goal the Maerlant-screen, as applied in senior schools, will have to be differentiated and elaborated on.[9]

1.3. Target Groups and Objectives

The project is aimed at various target groups which each determine the execution of the module

---

[4] Supervisor: Prof. Dr. R. De Keyser, Catholic University of Louvain, raf.dekeyser@arts.kuleuven.ac.be

[5] Supervisor: Dr. Cees Witteveen, Fontys College Tilburg, R.Kaper@fontys.nl

[6] Supervisor: Prof. Dr. R. Bauer, College of Science and Art St. Lucas, Ghent-Brussels, Raoul.bauer@archg.sintlucaswenk.be

[7] R. De Keyser, K. Rogiers & F. Truyen, Historical skills and ICT, Informations, International society for history didactics, vol. 18, no. 2, September 1998, p. 107-120.

[8] Two years ago national standards have been introduced for the first two forms of senior schools (for pupils between 12 and 13 years old) in Flanders. The national standards for the last four forms of senior schools are scheduled for 1 September 2001. There has been a shift of emphasis in the curriculum from pure content-oriented history education to a stronger input of the development of historical skills.

[9] J. Van Leeuwen, Analyseraster op vier niveaus: aanzet tot theoretische fundering van het Maerlant-project, Hermes, Tijdschrift voor Geschiedenis, vol. 2, no. 6, June 1998, p. 41-46.

at hand. History students are expected to carry out research in a scientifically justified manner; on the other hand their skills have to meet the methodological requirements.

Students of humanities, non-historians that is, have to master a number of historical skills as part of their general education.

Students of architecture have to be able to rely on historical insight and critical reflection in order to recognize historical processes and situations during the designing process.

And finally, student teachers have to learn how these new technologies can be put to use within their field of study, with a view to integrating them later on in the classroom.

Thus, three additional objectives of the STIHE-project are:
- designing and developing a flexible, high-quality and effective learning environment
- developing and producing generic electronic study material and tests
- instructing and training future teachers in using new educational technology

The reason for using ICT in this learning process of the student is that it allows one to link a digital search strategy to an electronic processing strategy, thus stimulating the students to acquire deeper insight into the structure of the historical information network and into historical research.

2. Practical Development of the Modules

2.1. The Module 'Ancient History'

2.1.1. Philosophy of Development

When selecting a learning model for the workshop/website 'Ancient History', the position of the beginning students, as was broadly outlined above, was the point of departure.

The module 'Ancient History' is intended for the group of first-year students (freshmen) of history who attend a seminar on ancient history. The users of the website have no experience in using historical skills when carrying out scientific research and their knowledge of the basic principles of such research is rather limited.[10] The application of these principles by the students consists in an autonomous search for information (sources and works), the application of the principles to these sources, and the production of a historical synthesis. Furthermore, within the framework of a broader education, the students also have to be able to transfer their new knowledge to other situations and behaviour.

The website as part of this seminar will replace a large number of the traditional seminar sessions in which the lecturer explains what the students are expected to do and in which the students are usually given some feedback. Nevertheless, a number of contact sessions will still be provided.[11] The historical skills which have to be applied are: working out a problem formulation in the form of research questions, assembling and organizing material, analysis, argumentation, structuring, transferring, and reflecting upon the method of working and the result. The skills listed above are

---

[10] This theoretical knowledge is transferred through the 'Historical Criticism' course and the 'Reference Works and Sources' course. Background knowledge of ancient history can be acquired through the course on 'Society and Institutions of Ancient History'. For more information: http://www.vub.ac.be.

[11] Experience with beginning students of mathematics who are being coached through a website has shown that, notwithstanding the availability of the course material on the web, students still find it very important and desirable to maintain contact with the lecturer.

not inaccessible or unattainable; yet, the terms in which these are described are so abstract in nature that they mean little or nothing to the students. Therefore, it is necessary to develop a phased plan which leads the students past each one of these skills, which also clearly explains what they are to do – without doing it for them however –, and which allows them to practise the various skills. As usual the final result of this process is a tangible paper which is submitted for evaluation.

From the didactical point of view, the goal of using ICT is both to supply the students with more intensive coaching in the course of their scientific research, and to allow them to think about what needs to be done, how this is to be done, and why. The foregoing will also enable the students to develop a 'historical attitude' in view of their future scientific trajectory and day-to-day life[12].
The question which lies at the basis of this set-up, is how to avoid an overload of theoretical basic principles about historical research, while at the same time teaching the students to put these basic principles to practice. The module which is being discussed here, starts from the idea that students should be prompted to consider these basic principles as tools for their work, and not as the theme of a course. In other words, the theoretical material should not bewilder the students, but should rather come across as a well-considered way of approaching historical information material.
It thus appears that converting abstract concepts into practicable strategies and the necessary steps involved, and gaining insight into the subject matter, is a fundamental problem which both the lecturer and the student are faced with.

2.1.2. Practical Approach of the Module : The Example of Source Criticism

The confrontation with the principles of historical criticism[13] usually involves laborious attempts to translate the theory into plain language and into an intelligible processing structure. The difference between the various basic principles may be confusing and artificial, not in the least because of the very similar terminology in Dutch.[14]

Our point of departure is that the schematic difference between the basic principles is not necessarily distinguished during the thought process of a student or researcher when studying a source. Such a thought process after all works by association. The question 'Who was the author of the source?' is thus first of all part of origin criticism. Meanwhile, the student may rather be concerned with questions as: 'I want to know who the author is in order to obtain more information about his personality, his background, his sympathies, his reliability, …and how all these elements have influenced him.' These questions belong to competence and authority criticism, which are normally only considered in a later stage of the scheme of historical criticism.
Thus, one may argue that the thought process of the student is curbed and delayed by a systematic follow-up of the scheme. From the didactical point of view a solution has to be found for this problem of restriction. It appears as though the use of ICT allows one to get round this traditional and artificial linearity. The interactive exercises pertaining to the module 'Ancient History' are therefore aimed at giving free rein to this 'intuitive' thought process, before introducing the

---

[12] cf. W. Goegebeur (ed.), F. Simon, R. De Keyser, J. van Dooren, P. Van Landeghem, Historisch besef: hoe waarden-vol?, Brussel, VUBpress, 1999 (Onderwijs en samenleving 2).
[13] The principles referred to are those of Ch.-V. Langlois & Ch. Seignobos, Introduction aux études historiques, Paris, 1898. These have become canonical/standard principles.
[14] External criticism: text reconstruction criticism, origin criticism and derivation criticism. Internal criticism: authority criticism, credibility criticism, competence criticism and interpretation criticism.

systematized scheme, while nevertheless simultaneously providing the necessary feedback.

An intelligible processing structure means that students are still given the chance to make up for the deficits which were recorded in senior school. For that purpose a differentiated and extended version of the historical frame of reference as used in the Maerlant-screen, will be applied. By taking an entry test students learn about their concept of time, ideas of historical geography, definition of concepts, in-depth reading method and problem formulating approaches. Their ability to empathize will also be evaluated at this stage. The students' first assignments are meant to test this initial situation with regard to their declarative as well as their procedural historical knowledge. This series of tests will be round up by feedback, in order to make up for possible gaps as soon as possible.

A second assignment consists in in-depth reading of excerpts from an ancient source (without revealing the nature of this source). The students will be asked to direct their attention towards definitions and concepts which characterize the fragments.

In a third stage students are asked the following:
- what they would like to know about these excerpts, in case they would want to use them as a source for historical research
- about which subjects these excerpts may supply information
- to formulate three problems for which these excerpts may be used as sources

Through these questions the students' ability to situate and interrogate information spontaneously is assessed. In fact, this process can be seen as an assessment of (part of) the historical attitude which should have been acquired in senior school.[15] The answers to these questions are to be written down in a portfolio.

Only when this assignment is completed, the students are asked to go over the theory of historical criticism, that is, extracts from the historical criticism course.[16] The set-up thus consists in interrelating various education units of the history curriculum. In a more traditional approach of the curriculum this is hardly ever done by students, and if so, never spontaneously.

The next assignment is directed towards the translation of the abstract theory into a concrete presentation of problems. 'Formulate in your own words questions that according to you reflect the way in which a historical principle questions the source'.[17]
After having completed this series of assignments, the students are asked to return to their first assignment (without theoretical framework) and to compare the original questions with the questions which they have now asked. The feedback button subsequently allows them to consult the questions which the lecturer formulated for each basic principle. Also possible and perhaps more appropriate at this stage, is to schedule a contact seminar. In so doing, students can make out for themselves (and so can the lecturer) the similarities, differences and gaps.

This method of working should enable the students to bridge the gap between their spontaneous view on the source, the theory, and the concrete translation of this theory into a research strategy.

---

[15] The basic aim of Flemish history education is no less than to build up historical awareness and a historical attitude. Through the series of questions an attempt is made to assess the 'procedural knowledge', which is part of this attitude.

[16] Links with the complete theory will be provided, in case the information in the summary would appear to be insufficient.

[17] In other words, which questions need to be asked within the framework of for instance origin criticism.

At the same time, they can evaluate their progress – it is hoped for that their questions become more goal-oriented and that the students fit in their questions in the scheme of historical criticism.

In a subsequent stage, the actual application of the principles of historical criticism and strategies for the application of skills are added. Skills such as translating problem formulations into research questions, heuristic skills, analysing, structuring, and argumentation are under discussion depending on the basic principle of historical criticism at hand. The theoretical summary clearly explains what each basic principle and each skill consists in, and which steps the student has to take.

It goes without saying that in their search for information the students are encouraged to use electronic sources and links. The results of this search, together with the references which were obtained through traditional channels, constitute the bibliography of the paper.

By working out the case at hand, students thus learn to use a number of essential skills when applying historical criticism to the source. Up till now they have mainly been working within the theoretical framework: in fact they have been given an introductory guided tour round the workshop of a professional historian. Yet, afterwards they are expected to apply these basic principles to another source, and draw up a report on this in their paper. The paper is only compulsory for history students; for the other students the introduction into the workshop of the historian ends here.

In the next major phase - which could be described as working within the historian's workshop - students are expected to operate independently along these principles within the frame of a general problem formulation. The students are asked to work out the problem formulation at hand by drawing up different research questions; the sources will also be differentiated. A report on the subject has to be written and the students will have to transfer their findings to other periods in history.
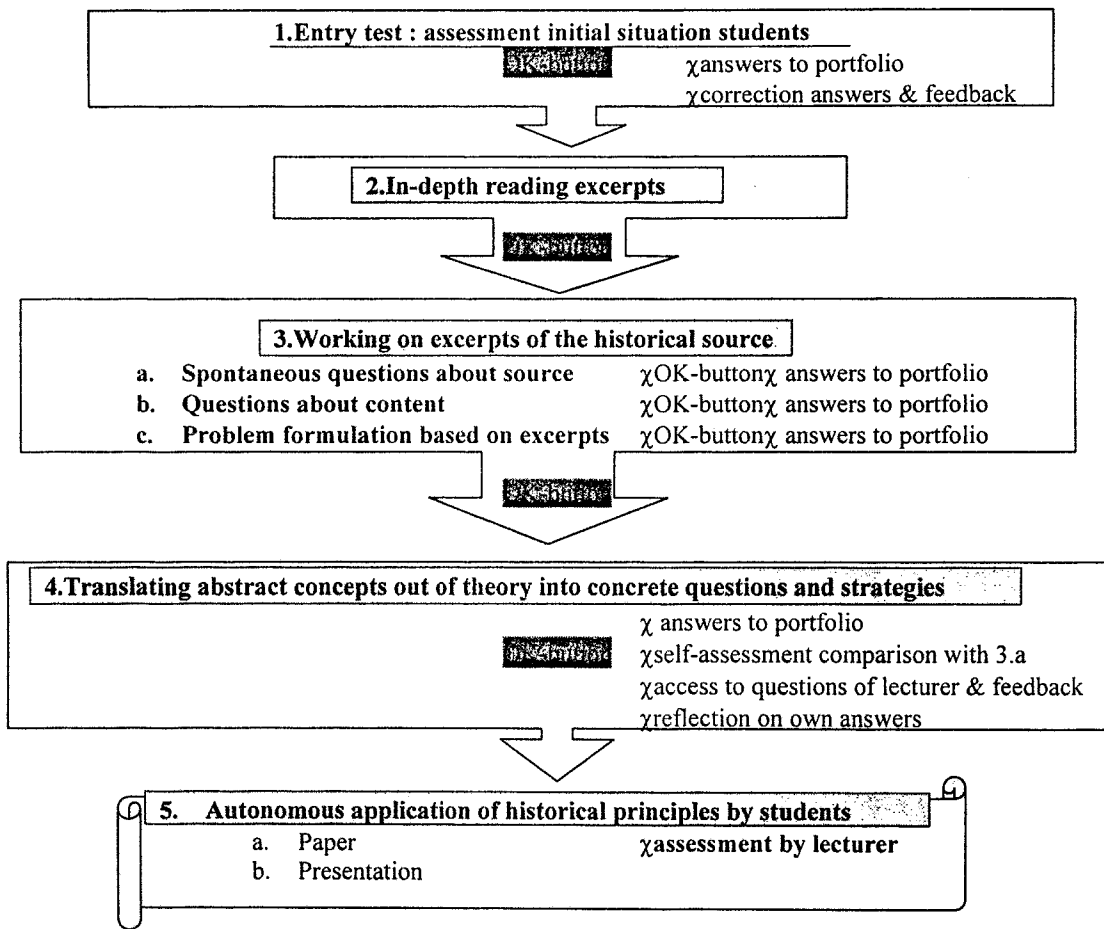
In this way, the students have taken an important step in the historian's workshop (non-historians) or have learned to work with the historian's tools:
  - they have learned that (and how) historical research is carried out starting from the formulation of a problem
  - they have learned to integrate all subdivisions of this research (heuristics, historical criticism, synthesis and reporting)
by reflecting upon each of the steps they have taken.

What remains is the transfer to other periods in history, for which the extensive historical overview courses may supply comparative material. The historical dimensions and categories, as represented in the Maerlant-screen, offer the necessary leads to this end, precisely because these dimensions and categories structure the historical information network, and supply the leads for association of new information or extension of existing information.[18]

---

[18] M. Boekaerts & P. Robert-Jan Simons, Leren en instructie, Assen, Dekker & van de Vegt, 1993; this approach leans towards constructivism.

1.Entry test : assessment initial situation students

χanswers to portfolio
χcorrection answers & feedback

2.In-depth reading excerpts

3.Working on excerpts of the historical source

a.   Spontaneous questions about source   χOK-buttonχ answers to portfolio
b.   Questions about content   χOK-buttonχ answers to portfolio
c.   Problem formulation based on excerpts   χOK-buttonχ answers to portfolio

4.Translating abstract concepts out of theory into concrete questions and strategies

χ answers to portfolio
χself-assessment comparison with 3.a
χaccess to questions of lecturer & feedback
χreflection on own answers

5.   Autonomous application of historical principles by students

a.   Paper   **χassessment by lecturer**
b.   Presentation

2.2. Second module: The medieval city in Western Europe

The goal of the STIHE-project is to introduce first year students of higher education into the basic principles of the historical research. The target group of the second module will be mainly students of the humanities, such as future art historians, linguists, sociologists, geographers, etc. Within their curriculum, the students will be confronted with the theory of the historical research. The STIHE-project will offer them an opportunity to put their rather theoretical knowledge into practice in what we will call 'the studio of the historian'.

The second module of the STIHE-project covers the period of the Middle Ages. The sources examined within this module concern the urban society in late medieval Flanders. One of the key-sources is the textual document called *Excellente chronike van Vlaenderen*. Four fragments of this source, all related to the triumphant entry of the Burgundian duke Philip the Good in Bruges in 1440, will be the object of the historical research by the students.

Within the second module, we distinguish successively three parts. The first part consists of a boarding section and can be considered as a kind of entry test, a test to measure the prior knowledge of the students about the historical research method. The second part of the module will be devoted to the actual implementation of the historical research to the key source. This forms the main part of the module. The third part will include a synthesis exercise.[19] We will amplify now on these three sections.

2.2.1. Boarding section

In a first step, the students will be confronted with the key source, the so-called *Excellente chronike van Vlaenderen*. They suppose to read the four given extracts. The fragments contain links to documents with further information about certain concepts, items and issues. This information is situated on the level of the content and can be of textual, visual or auditive nature. The goal is to explore the content of the key source, to situate the source in time and space by the means of a time line and maps in order to stimulate the fascination for or the emphasis into the historical event spinned out in the source. After this phase of exploration, the practice of the historical skills starts. The students will be confronted with a range of questions of different nature. The assignment will be to order the questions into two categories, namely a category of questions related to the content and a category related to the historical research methodology. The later ones will subsequently be used in the second part of the module and will form as such the red line through the module.

---

[19] Some general ideas have been popped up already. The actual elaboration of the conclusion will follow at a later stage.

2.2.2. Main section: historical criticism

The second part of the module is devoted to the actual elaboration and application of the historical research method.[20] Generally, we distinguish six units. Each unit covers one of the different criticisms of the historical method, successively concerning the restoration, the origin, the quotation/plagiary, the interpretation, the authority and the valuation of the source. The heuristical section of the historical research will be omitted in this module because of lack of time of the students. Because we are dealing with a public of non-historians, the goal is not to do a fully and exhaustive research but to introduce the students into the 'studio of the historian'. Through the answering of questions, the comparison of the key source with other sources (medieval and contemporary) and confrontation with citations and opinions of writers, historiographers and theoreticians of history, the students should gain insight into the practice of the historical research. Due to an (exclusively) interactive approach, the students should come themselves to a conclusion about a certain criticism, initially without consulting the theory.

At the end of each unit, the student has to fulfil a well-defined assignment. He/she gets confronted with a rather blank scheme, which contains only the following concepts: historical criticism, external and internal criticism. These concepts will be explained to the student. Successively, we distinguish four steps. In a first step, the student will be confronted again with the questions offered in the boarding section, which are related to the methodology. He/she is supposed to select the question related to the problematic elaborated within the specific unit and to place it into the scheme. In a second step, the student chooses one of the six key concepts offered in a list next to the scheme, all indicating one of the six criticisms. By selecting at the end of each unit one particular question and the corresponding key concept, the students progressively build up the scheme themselves. Only in a third phase, the student will be confronted with the theory. The scheme contains links towards the theoretical explanation of the different criticisms. We offer the theory in confirmation (or not) of the own findings and results of the students. The questions, selected in the first step, are considered as a vital link between the practice of the historical research and the rather abstract theory. In the fourth phase, the students get the opportunity to broaden their perspective by reading some articles out of journals or magazines about current issues related to a specific criticism.

The principal ingredient of the module is formed by the exercises. The aim of the exercises is to develop historical skills, which are indispensable to do historical research, but which are also transferable towards other disciplines. We are focusing on the following skills: exhaustively reading and analysing of a document, handling and ordering of data, comparison of different documents, empathising, argumentation, value judgement, synthesis, reflection, etc.
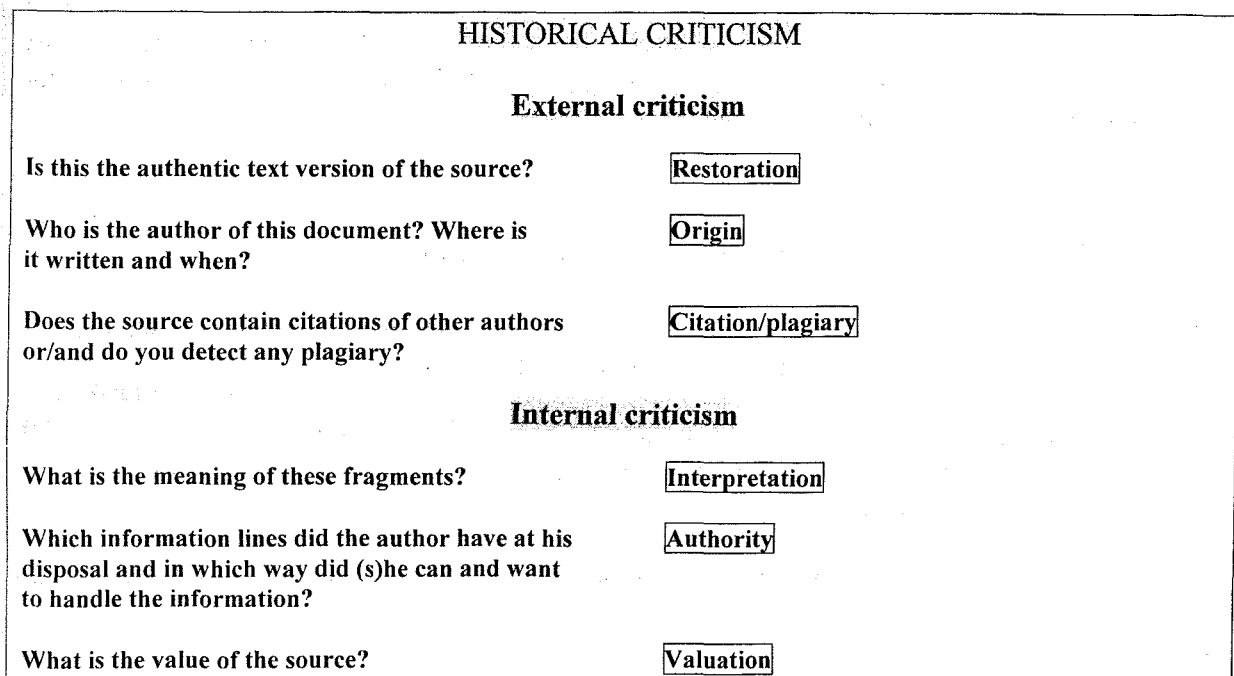
The module of the Middle Ages will not be followed up by any assistant or lecturer, which includes that we have to rely on computer-based corrections of exercises. This has some major

---

[20] The basic principles of the historical research methodology elaborated within this part are mainly based on the following textual or digital learning environments:

- J. Goossens & E. Van Mingroot, Inleiding tot de historische kritiek, Katholieke Universiteit Leuven, 1999-2000.
- Heurodot. (Heuristiek en oefeningen in een digitale omgeving toegepast)
  It concerns a digital learning environment to practice heuristical and historical skills on an indepent-conducted base for first year history students.
  http://fuzzy.arts.kuleuven.ac.be/heurodot/
- C. Lis, Inleiding tot de historische kritiek, Vrije Universiteit Brussel, 1998-1999.
- W. Prevenier, Uit goede bron. Introductie tot de historische kritiek, Leuven-Apeldoorn, 1999.

implications for the sort of questions, which can be used in the module. The so-called 'open answer' for instance, cannot be used because of lack of human tutorship. The challenge here is to compose didactic justified exercises within the scope of the practical restrictions of the online assessment.

Figure: Scheme[21], containing respectively questions related to the methodology and key concepts

---

HISTORICAL CRITICISM

External criticism

Is this the authentic text version of the source?	Restoration
Who is the author of this document? Where is it written and when?	Origin
Does the source contain citations of other authors or/and do you detect any plagiary?	Citation/plagiary

Internal criticism

What is the meaning of these fragments?	Interpretation
Which information lines did the author have at his disposal and in which way did (s)he can and want to handle the information?	Authority
What is the value of the source?	Valuation

2.3. Module 3: Shared past. Unity and separation of the Low Countries: reality and perception

The module developed by the department of teacher training of the Fontys college of higher education in Tilburg (the Netherlands) is focusing on the issue of the Revolt in the Low Countries and is dealing with mainly cartographic sources next to textual, iconographic and graphical ones. The target group of this module is mainly the group of students of the teacher training in the subject of history at the college of higher education.

Starting-point of the module is the question how the northern and the southern part of the Low Countries perceived the separation and to what extent they stayed involved to each other. Within this larger scope, the module will stress the perception of both contemporary and later generations concerning one specific aspect of the Revolt, which was closely tied to the North-South problematic, namely the southern emigration/immigration from 1568 until 1621.

The student will enter the module by focusing on one specific iconographic source, being a map from the Low Countries in the shape of a lion, the so-called *Leo Belgicus*, made in the seventeenth century by a cartographer from the southern part of the Low Countries. The

---

[21] The graphical outlook of the scheme is only provisional. A more sophisticated one is under construction.

systematic study of this document has to allow the student to obtain a clear insight into the social-economic context (motives of the emigrants, contribution of the immigrants in the Dutch cities), the social-political context (influence of the immigrants on the policy of the city/province, conflicts, tendency towards a reunification of South and North) and the social-cultural context (cultural differences and conflicts, the importance of the immigrants on the level of religion, education, language and literature, cartography and printing, the manners) of the period concerned.

The students are expected to indicate the track they followed to obtain insight. The database approach will allow the teacher to follow accurately the individual learning route thanks to the registration of the reading report of the student.

2.4. Module 4: Architecture: the use of and the meaning of space

The central item of the module, developed by the College of Higher Education for Science and Art, Saint-Lucas in Brussels and Ghent, is the Gothic architecture.

The students use the following existing material: two dossiers about gothic art (the St Baafs cathedral in Ghent and the St John hospital in Bruges) and the catalogue of the exposition *The neo-Gothic* (1998).

The students choose a Gothic and a neo-Gothic building and make the comparison between both on the level of
- design (style, ground plan, ...);
- location (interaction with the environment);
- material disposition (interior, components);
- diversity of functions (liturgical, devotional, spiritual care, preaching, socialisation);
- the meanings of the society of that time (religious, ethical, esthetical, ...).

Abstract

The Historian's Workshop is one of the so-called STIHE-projects (Fund for Stimulation of Innovation in Higher Education), financed by the Ministry of the Flemish Community. The project concerns the design and the development of a digital and interactive learning environment for the indepent–conducted practicing of historical skills and the basic principles of historical critical reflection. Target group of the project forms the first year students of higher education.

One of the particularities of the project lies in the cooperation between four institutions, (the Free University of Brussels, the Fontys College Tilburg, the College of Science, Art St. Lucas Ghent and Brussels and the Catholic University of Louvain). Each of these institutions will develop one module, related to a well-defined theme and period. The four modules respectively concern the ancient history and its influence on Western history, the medieval city and the urbanization in Western Europe, the unity and division in the Low Countries and the use and the meaning of space within Gothic architecture.