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WP2 User Requirements & Benchmarking of Key Competencies Deliverable 7: Report on user Requirements: Reference Curricula to be Developed and Benchmarking Key Criteria

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**WP2 User Requirements & Benchmarking of Key Competencies
Final Report 27 November 2015**

**Deliverable 7: Report on user Requirements: Reference Curricula to be Developed and
Benchmarking Key Criteria**

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Revision History

Revision	Date	Author	Organisation	Description
1	May 2015	Agiatis Benardou, Eliza Papaki	Athena RC	Initial draft
2	June 2015	Toma Tasovac	Belgrade Center for Digital Humanities	Comments
3	September 2015	Agiatis Benardou, Panos Constantopoulos, Costis Dallas, Eliza Papaki, Christos Papatheodorou	Athena RC	Editing
4	October 2015	Claire Clivaz, Marianne Ping Huang, Stef Scagliola	University of Lausanne, University of Aarhus, Erasmus University Rotterdam	Comments, Additions
5	13.01.16	Susan Schreibman	NUI Maynooth	Comments, Editing
FINAL	15.01.16	Agiatis Benardou, Eliza Papaki	Athena RC	Processed, Editing

Introduction

The design and implementation of a platform-based training course requires an understanding of basic concepts from psychology, education, and human-computer interaction which are all essential to the development of successful learning environments.

It may not be immediately evident, but a carefully designed learning environment benefits more than one stakeholder, including instructors, students, the general public, and other external parties. On the other hand, poor interface design can become a serious obstacle to learning outcomes, as it may impose cognitive obstacles. Indeed, the more of the brain the user has to allocate to the interface, the less is available for learning (see Fig. 1), which is the contrary to what one wants their users to do; ie to devote their concentration and attention to the learning process.[1]

[1] Peters, Dorian. *Interface Design for Learning: Design Strategies for Learning Experiences*. San Francisco: New Riders, 2014, p.66

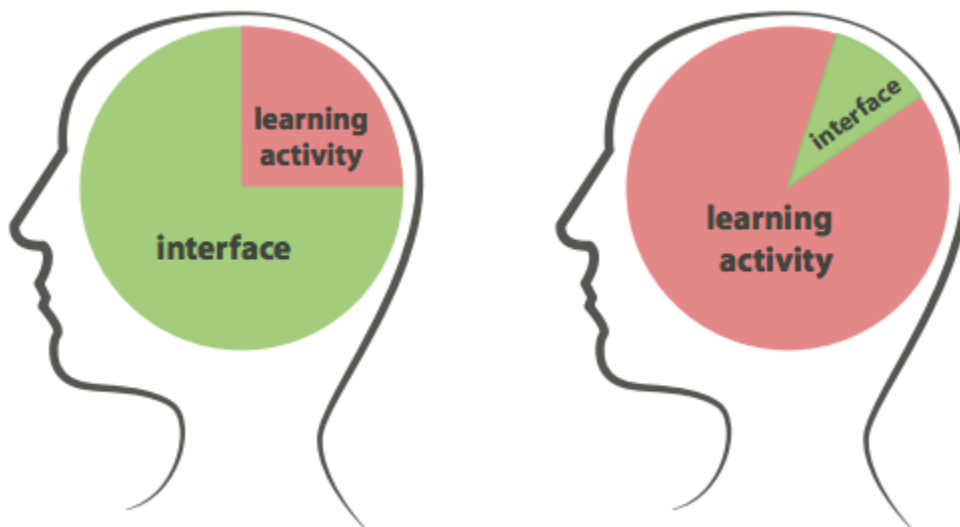


Figure 1.

Learnability—that is the capability of a software product to enable the user to learn how to use it—is also, along with usability, absolutely essential when it comes to software and learning

environments. Learnability is all about easily mastering the software without instruction, not about learning the content presented, which, in turn is essential in controlling or reducing the learning curve a user must face and overcome before they can focus their attention to the learning process. In contrast to learnability, interface design for e-learning examines how interfaces can support learning in general, whether it's learning about how to build and expand ontologies or use software-enabled textual analysis.

The Empirical Research

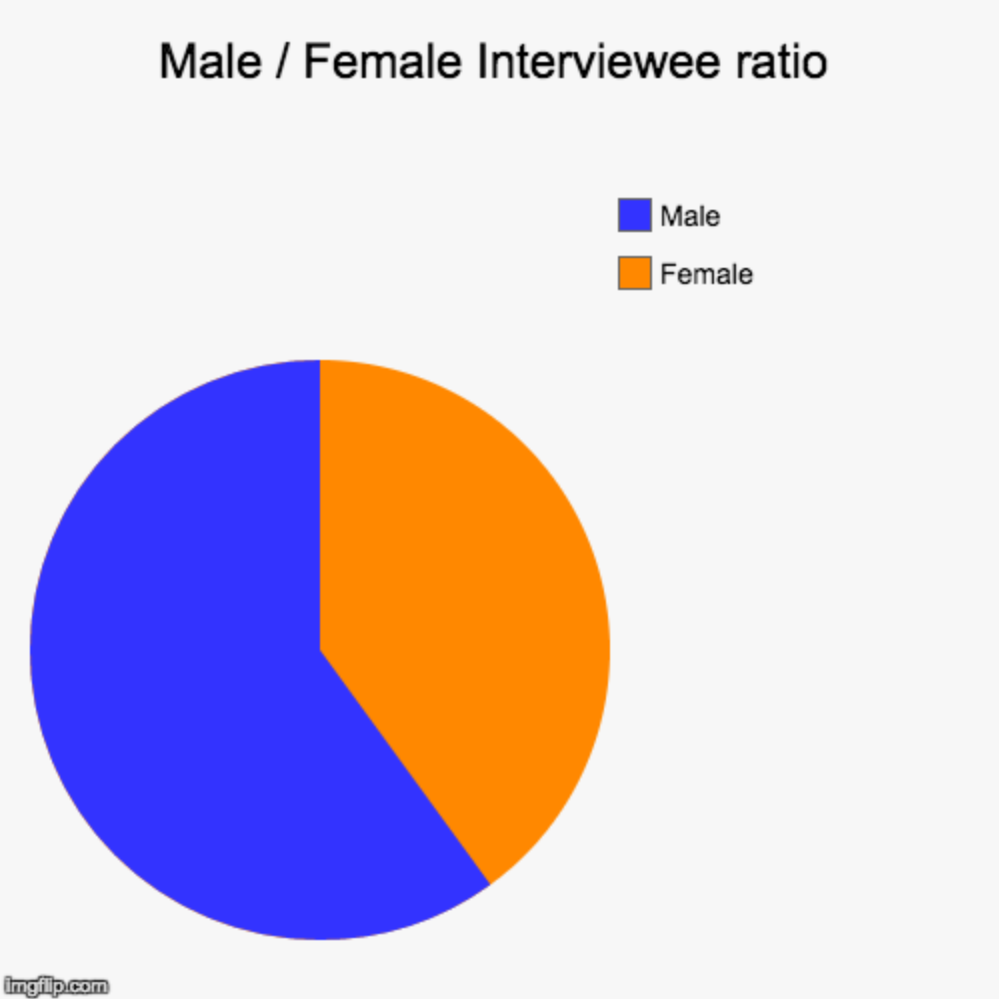
A qualitative analysis and interpretation of online teaching practices and recommendations in the domain of the Digital Humanities and the elicitation of corresponding user requirements for this report was based on a series of semi-structured interviews with experienced instructors of online courses in the broader Digital Humanities field from Europe. Fifteen interviews were conducted between May 2015 and October 2015, either face-to-face or via Skype. Interviews were carried out mainly in English, however two of them were conducted in Greek and were later translated in English. Interviewees were instructors carrying out syllabus design and teaching, preferably online, in the Digital Humanities and related areas. Among the reasons for the selection of these particular interviewees was their expertise and affiliation with research institutes or academic departments. All interviews were recorded with the consent of the interviewees.

The duration of the interviews ranged from forty minutes to one and a half hours, depending on the interviewees' personal interests, area of research, as well as their familiarity with online training courses, which is an area of particular importance for #dariahTeach. The semi-structured design of the interviews encouraged a conversational tone, as well as facilitated raising a variety of topics which the participant considered important to his or her teaching activity.

Interviewees were at different career stages, ranging from doctoral candidates / early career instructors to full professors, while all of them held academic-related positions. They displayed varying familiarity with and experience of online teaching. Nine of the interviewees were male, the rest female. Geographically, the interviews covered participants from the U.K., Ireland, Greece, Portugal, Spain and France.

List of interviewees

Name	Country
Male	Portugal
Male	United Kingdom
Male	United Kingdom
Male	United Kingdom
Female	Greece
Female	Spain
Male	United Kingdom
Male	Greece
Male	United Kingdom
Male	Greece
Female	France
Female	United Kingdom
Female	United Kingdom
Male	Ireland
Female	Greece



Interview Codebook

The typical interview scenario consisted of a short introduction about #dariahTeach and its goals followed by a set of open questions regarding both conventional and online training courses, teaching syllabi, technical expectations, narratives and expected outcomes. Questions were organised as indicated by the themes presented in the following tables:

Table 1	
Theme	Details

<p>Characteristics of an ideal platform for training materials</p>	<p>This question concerns the way in which a platform is perceived and described. Key issues regarding ideal development, interface, usability, as well as design are raised here.</p>
<p>Example(s)</p>	<p>“When transferring materials from print form into an online form, it is not just a question of making a PDF! You should think harder and more creatively.”</p> <p>“There should be the possibility of looking at readings that allow people to associate the challenges and possibilities of digital technology with important underlying questions.”</p> <p>“Moodle is not friendly when working in groups, it is complicated, one always needs to ask for help with administration.”</p> <p>“It should be open and transparent so that people can see the provenance of the teaching material.”</p> <p>“Ideally, I would like to see the ability for students to develop interactive projects within a course framework - an integrated workspace where people could do work interactively, annotate documents or data, have this work peer-reviewed or critiqued.”</p>

<p>Table 2</p>	
<p>Theme</p>	<p>Details</p>

<p>Experience with online training material</p>	<p>This theme encourages interviewees to share their personal experiences with online training material, the problems they encountered, what aspects of their experiences they consider to be positive and they would like to see repeated in our outcome.</p>
<p>Example</p>	<p>“When you do a distant course you spend a lot of time alone, it is difficult to meet and get to know people, but when you have to work together or communicate everything becomes easier, it is a less anonymous.”</p> <p>“What I found absolutely annoying is 95 pages of pdf for a class. We did not even have access to .pdf so we had to copy/paste and I had to quit. I never finished it. And it was the only resource. I went through it with keywords. And then on the Facebook page of the class I told them, don’t read from page so-so to page so-so, there is nothing important. So don’t start with a difficult thing from the beginning. Start with tasks that help people to get to know the platform and each other and then little by little complicate things.”</p> <p>“For TEI online training material, what I found good about it was that it was fairly generic, it was quite well-written and it could be applied to multiple situations. What I found it did not work for digital humanities training materials is any attempt to personalize them. I think there should be a methodological focus, things need to be quite basic, quite generic.”</p>

Table 3

Theme	Details
The Modules	<p>This key theme pertains to the structure of the modules and each unit within them. Issues of module and unit independence and length are also raised. Interviewees were asked about the importance of stating the learning outcomes of each module, and each unit within the module, as well as of indications of different levels of complexity within the module or the units.</p>
Example	<p>“Not all modules should be of the same complexity. Depends on the audiences you want to attract. You want to motivate students, you don’t want them to quit. Building confidence is very important, you want students to go through all the course.”</p> <p>“Learning outcome is very important to be stated. Especially if you teach adults, you have to state learning outcomes even at unit level. Students must understand the purpose and the mechanics of each module. It helps them to reason why they do it. And it looks more professional.”</p> <p>“A module should last between 8 and 10 weeks, depending on tasks set after each week. People need time to understand how everything works. And it should not be too short. MOOCS were 8 weeks long and it was ok.”</p> <p>“There should be a kind of openness, some learning outcomes should be defined but they should be open as more may be achieved in the course of the module according to the student’s interest or background knowledge.”</p>

Theme	Details
Social networking	This topic explores and assesses the importance of the social networking aspect of this kind of an initiative. Interviewees were asked for suggestions on the best ways to facilitate social networking and community engagement and means of connecting them with each module and/or unit.
Example	<p>“It would be good to have a Twitter stream associated to each module so that people taking the module remotely could perhaps interact with one another, Twitter links or even Facebook links could be quite helpful. What I found to be more helpful though is maybe have a blog associated with each module where you can go and find more details or answer questions more interactively.”</p> <p>“Social media connected to the platform should be more about encouraging collaboration based on certain tasks that people should be work on interactively rather than encouraging networking in general.”</p> <p>“Don’t waste time on designing the platform, just build an audience.”</p>

Theme	Details
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Learning object metadata	This question assesses the usefulness of learning object metadata and the optimum ways of making it useful for our work.
Example	<p>“Learning object metadata are important for cross-connections, and you should definitely go for it. They also ensure more cross-use and thus sustainability.”</p> <p>“They are absolutely important to be included in a module, also in terms of analytics and search capacities.”</p> <p>“I think the facility for metadata should be there for people to use it. If you insist for all instructors to build metadata you would get people like me that won’t like it so much. If all people created and used them then it would be useful, but the current situation where the quality of metadata is so variable is of limited use because they are not used consistently.”</p>

Table 6

Theme	Details
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Collaboration and contribution to the platform	This question explores the most important criteria that would make interviewees choose to create and adapt their training materials for publication on our platform
Example	<p>“I would do it because I am sensible to open access and collaboration and sharing but it is not what people normally do. I was thinking about uploading all my stuff on a blog, but then I thought that there may not be a point. People believe it is their baby and they are not giving their stuff away. Perhaps if people gave their material mutually as in you give a resource, you take a resource...”</p> <p>“Open, easily accessible, perhaps materials should be added to by others over time, improved or enhanced over time, make such content a living document of teaching material.”</p> <p>“Easy to use, the possibility of making available some parts and not others if I wanted to, possibility of updating it, having control over it myself, integration with other resources based on editorial support provided, possibility of including multimedia/multimodal data, Wikipedia kind of thing - where you don't have to spend much time to figure it out.”</p>

Table 7	
Theme	Details

Other	<p>This final question pertains to any issues which the interviewee would like to add, ask or comment on, such as which tools should be developed on top of the platform.</p>
Example	<p>“There could be editorial support regarding resources, for example having a bibliography updated based on certain resources.”</p> <p>“Allowing the creation of groups on the platform so that users could work collaboratively. Tools that could allow collaborative writing. You could have comment facilities in text annotation for example. If students see that their material becomes part of the course material then this has a different level of engagement.”</p> <p>“The platform should have tools that would allow the users to do exercises online and have some kind of feedback. Other general tools could be on bibliography, be able to download references connected to a unit in whatever format based on the user’s repository of references (e.g. Endnote). Modules designed to be developed in #dariahTeach should point to relevant tools that already exist as much as possible.”</p>

The Findings

In the following section, requirements are broken down into three main categories: The Platform, The Modules and Other, although these categories often overlap. The list of User Requirements that emerged from the interviews were enhanced and refined by a series of focus group held in Amsterdam, Copenhagen and London in 2015. These meetings explored the issue of online teaching and training of Audio Visual material and were organized by project partners from Aarhus, Lausanne, and Rotterdam. The questions used in these focus groups can be found in Appendix I.

Each User Requirements category has a number of specific requirements. These requirements emerged multiple times during different interviews and correspond to the most popular suggestions of the interviewees. While there has not been any attempt to rank the popularity or value of each requirement, the requirements presented here are considered significant for multiple DH instructors. This document was not designed to be the basis for the development of functional specifications. The Project should analyze and evaluate both the individual features outlined below and the overall environment in terms of a coherent service, taking into consideration future growth and sustainability, as well as systemic weaknesses or limits.

I. The Platform

Design and features of the platform

- The Platform should be adaptable to different learning methodologies.
- The Platform should enable rich assessment.
- The Platform should be accessible, in the broadest sense of the word.
- The Platform should not be isolated.
- The Platform should not be complex and it should be transparent.
- The Platform should be user friendly to the maximum
- The Platform should not necessarily be aesthetically appealing.
- The Platform should be more focused on building a community rather than on design.
- The Platform should not have static information, not a repository-like platform.
- The Platform should be a free-structure environment (“Like a blog with semantic capabilities”).
- The Platform should have clear statement of what users can but mainly what they cannot do in the platform/with tools.
- The Platform should be solid and robust.

- The Platform should be user-tested during its development.
- The Platform should include alternative ways to FAQs e.g. little bubble that says “you should click here” etc.

Collaboration

- The Platform should enable synchronous collaboration and communication: users must be able to work together over distance. Specifics could include one or more of the following: document sharing, desktop and application sharing, voice over Internet, instant messaging, video over Internet, web conferencing that integrates some or all of the above.
- The Platform should enable asynchronous collaboration and communication. Specifics could include one or more of the following: outgoing email to entire class or specific individuals or groups, threaded web-based discussion boards, workgroup work spaces, or subsites, wikis, blogs, document repositories, workflow (task management), group calendaring.

User interaction

- The Platform should allow for persistent roles (set the role, such as instructor, student, observer, etc. in the authentication/authorization and it is respected in the environment and plugged-in applications).
- The Platform should function as a sandbox in which students can experiment with the material presented.
- The Platform should be flexible and have features such as Amazon-type “you may like this” element.
- The Platform should host user profiles to encourage visibility of users’ work.

Content Features

- The Platform should include PDFs to download.
- The Platform should be editable having open document format.
- The Platform should support ad hoc groupings.
- The Platform should support grouping of materials across modules and units.

Implementation

- The Platform should be flexible, allowing users or different groups to plug in or link to tools that fulfill particular needs, if built-in tools do not provide the desired functionality.

- The Platform should provide an API or advanced forms of web services so that new/unforeseen components can be added to the environment.
- Specifics could include one or more of the following: plug-in architecture for third-party assessment modules, integration with assignments, assessment tools.
- The Platform should support user customization. Specifics could include personalized portal page and/or integration with appropriate other tools, such as Facebook (if vetted).

II. The Modules

Content and Features

- The Modules should provide foundation, theoretical courses on Digital Humanities as well as, where appropriate, should offer block courses on basic Computer Science skills.
- Some units within modules should be on background theory, while the rest should be more hands-on / practical. Both theoretical and more practical units should be included.
- Assignments should be developed to teach students how to understand online archives and collections as well as how to explore them and develop a research question in relation to exploring content. Students often start with a research question and then try and find material - and fail. Developing research 'in dialogue' with (re)searching content is a foreign trajectory for many.
- For modules and teaching material to be incorporated in other people's classes, they should be exportable to learning platforms such as Blackboard and/or written in XML or HTML.
- The Modules should make material openly and freely available allowing students to have access to it after they have left. Copyright should be clear and shareable. Provenance of the material should be also clearly stated.
- The Modules and teaching material should be exportable to other learning platforms to allow interoperability.
- If modules and units are to be adapted/copied by other universities rights issues should be clear.

Search features

- Modules should allow for serendipitous search allowing users to find something they had not thought of.

- Modules should provide the ability to search in different ways, not just keywords for topics but also for formats.

Structure

- Module units should not be absolutely standalone: They should follow a mixed approach, in which the first one to three units should be required. Furthermore, suggested pathways across units should be provided.
- Module units should be created as separate entities, providing the ability to be integrated separately into a learning environment where users would be able to follow their own learning pathways.

Length

- Modules should ideally last from ten to fourteen teaching weeks.
- Modules should follow format of semesters and thus be clear and familiar.

Learning outcomes

- Learning outcomes should be explicitly stated at on course level, not necessarily on unit level: students should be made aware of what they are expected to perform with goals clearly stated.

Levels of complexity

- Complexity should be more intense as the module progresses but all modules should begin at the beginners' level: there should be evaluation based on the different level of difficulty of solutions users apply in their assignments.

Learning object metadata

- Modules should cater for dynamic curation of learning object metadata.

III. Other

- The community element of developing a shared resource should be highlighted and addressed as an issue of great significance, as it is generally missed from open education resources.

- The sustainability of the platform should be ensured through DARIAH.
- In order for users to be encouraged to publish training material in such a platform they should have sense of the platform's sustainability, a sense of curation and of feedback in response to the developed material.

Appendix I

#dariahTeach - DH curriculum - Module on Audiovisual Media and Multimodal Literacies

Partners involved:

Copenhagen University: Marianne Ping Huang

Erasmus University Rotterdam: Stef Scagliola

Lausanne University: Claire Clivaz

Questions Asked at Interviews about AV teaching experiences
What kind of courses do you teach that are related to audiovisual data, theory and methodology of research?
What is your audience? bachelor/master/ separate subjects
Do you use online resources in your courses? Which ones?
If you could choose the ideal tutorial for a bachelor course on AV what would it be about? Same question with regard to master students
Same questions with regard to tools with which students perform assignments, what do you use and what are your experiences?
Can you say something about the degree of digital literacy of your students?
What are the most frequent obstacles and problems when teaching about AV at your university?