AUP LIBRARY WEBSITE
USABILITY STUDY
CM/CS 348    FALL 2010

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CS/CM348 – FALL 2010
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Introduction

In the Human Computer Interaction CS/ CM 348 Fall 2010 class held by professor Roda, the students have been asked to conduct a full evaluation of the AUP library Website. The research questions have addressed several aspects of the use of the library resources through different research methods:

II. 1- On site observation
II. 2- Questionnaire for a usability evaluation
II. 3- Focus Group for a usability Evaluation
II. 4- Usability Test, structured tasks and techniques
II. 5- Expert Review
II. 6- Comparative Study

Research Questions

- What library services are most used by students/ faculty/ other stakeholders?
- Are there services particularly useful for specific user groups, for example students/ faculty in a given discipline, students coming from a specific school system, students/ faculty of a given gender, students/ faculty living in a particular area…
- What potential services would be used if available?
- What is the satisfaction level of users with library services and the library website in particular?

The goal of this research is to gather data that will show patterns that will help improve the AUP library website and possibly identify the issues that may discourage some AUP students from using the library resource regularly.
METODHES

The **On-Site Observation** carefully observed subjects at the library site, collecting data from an insider and outsider perspective. The researchers have observed the activity around the entire library to analyze how students use the different resources. The researchers also used ‘Expert Interviews’ on librarians, faculty and students to question them on the subject. The results were used to study the gap between what the library offers and what students expect. One aspect of the On Site Observation was to find out about the relationship between the physical (II-4) and digital content of the Library (II-5).

The ‘**Questionnaire**’ helped gather general information on the overall design, usability, resources and functionality of the AUP library website. The questionnaire was designed using different types of tactics such as checklists, scaled items and open-ended questions to help gather data participants on their perception and attitudes towards the website.

The ‘**Focus Group**’ researchers prepared a plan and script, aimed at examining the usability of the AUP library website in a small group discussion. The script started with questions exploring the use of the library resources for our research and then moved to more specific questions about the library Web Site. The Focus Group allowed us to collect qualitative and quantitative data on the design functionality, usability and resource of the library Web Site.

The AUP library website ‘**Usability test**’ was created to identify and locate several usability problems. In this test we focused on the connection between the library system and the student users. Our participants were asked to complete a list of scripted tasks to provide our research groups with data to demonstrate how functional the website it; It includes a complete plan to monitor users in real life scenarios and analyze how they behave. (II- 6)

Two separate library ‘**Comparative Studies**’ were preformed including a comparison between the AUP, Cambridge and Princeton university and a second with the Gleeson Library of The San Francisco University. They discuss the esthetic, structure, organization and design of the website and aim at comparing/ contrasting the websites in order to ameliorate the AUP site.

RESULTS

**Design:**
It's been mentioned numerous times that the design of the website is confusing, time consuming and not user-friendly; this could easily be fixed by a simple redesign of the WebPages appearance. The research teams from the Focus Group, Comparative Study and the On-site Observation emphasize a need for a darker background and more colors to make the site easier to navigate. Different colors might also help highlight the most important applications and distinguish different sources.
The Focus group and Usability Group study also highlight that some of the students prefer to have drop down menus rather than having an abundant amount of information on the homepage which might be confusing. In the expert review, students suggest using a consistent style, links, images, sidebar and header navigation which coordinates with the AUP.fr site. The Focus Group and On-Site Observation Groups suggest creating a customized own virtual space which enables users to organize themselves as they please. They also discuss re-organizing the site to look more professional, official and presentable by creating menus and making it easier for students to find what they are looking for. The Comparative study group suggests changing the fonts and layout of the site to make it stand out and be visually appealing.

**Functionality:**
In terms of functionality, the Focus Group was able to identify a few issues. The homepage should have two view types, one for logged-in users and one for non-authenticated users; these two view types could have unique page elements based on the current profile. They also propose a rating system so that users could see others' ratings. Like with iGoogle, students would like to have the ability to turn on-off a set of available functions on a customized profile. The On-Site Observation groups suggests having profiles that are both major and subject specific, they also propose that users should be able to save favorite databases and make notes to themselves. An "Ask a librarian" service has been suggested by most of the study groups (II-1), (II-3), (II-6), to help users reach a librarian directly from their computers anytime with questions. The Focus Group and Comparative Study also indicate that organizing the information by functionality such as context, help, tutorials, and how-to links could be useful. Finally, the On-Site Observation and Focus group found out that students would like more classes dedicated to search and use of the digital information.

**Search:**
A main flaw found by almost each research group was the difficulty in finding resources through the database. The Usability Group found that when one is conducting a search, the types of searches should be made clear through author, title, etc. The focus group also believes there is a need for an advanced search on the main homepage and that databases should be organized by majors and subjects to facilitate and fasten the time.
Usability:
In this section, our group analyzed to which degree the AUP library is easy to learn how to, or use. The Focus and On-site Observation show that the students are not provided with a sufficient amount of training. For the ones entering AUP as freshmen it’s easier because first-bridge classes teach them; however transfer or visiting students rarely have access to a training session. The Focus Group, Questionnaire Group and Usability Group believe there is a need to improve search facilities and presentation of search results. In our Expert Review, it suggests that book search results should include an excerpt of the books displayed and a Map that will take the student directly to the source. The Comparative Study Group highlights the need for distinction between the physical and digital catalogue and a need to simplify the vocabulary; for example do not use jargon; and implement a federated search Engine (II- 6). As a result the On-Site Observation, Focus Group concluded that the website takes too much time to find sources; and that students rather use different, quicker search engines.

Resources:
One of the most dependable resources at the library is the Library staff, which are well trained and always capable of helping students, however the Focus Group identified a need for students to contact more databases and external source links. The Comparative Group suggests an access to partner libraries that may discourage users from looking to external sources. In conclusion, many of the results throughout the research show that our digital resources should make up for our small AUP library. The Focus Group implies that ample resources are available but that they don’t know how to access them.
On Site Observation for the AUP Library and Website

Date of Report: [December 4, 2010,]
Location of Test: [Paris, France]

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Abstract

A university library provides information and ideas that are fundamental to functioning successfully in today’s information and knowledge-based society. A library typically boasts a large number of reference books that provide information about wide ranging subjects that are a must for university students to understand the concepts in their curriculum. The current AUP library though lacks the ideal size to hold that massive bulk of research material such as books, journals and articles. The Library compensates with this however through the use of an enormous and useful compilation of online resources that are accessible through its website. The website nevertheless still seems to lack the important features that make a university Library thrive. The purpose of this research is then to figure out the gap that exists between what the library offers and the students’ needs through an on-site observation and interviews with both Library staff and students. An observation of three days for students and four days for the library staff desk at the Library site, led to our deduction that the students of AUP only see the Library as a place to study and work excluding possibilities of making it a niche for students to ‘hang out’. The library staff is also not an issue regarding the Library problem as we found out that they are all well trained and helpful whenever students ask for their assistance. The main problem seems to lie on the presentation and design of the Library website. Though most students admit that the website is confusing and takes time to get used to, they also like the fact that the AUP library website is linked to other online databases that enlarge the scope of research materials they can use. Lastly, this research paper pinpoints the present problems of the library and offers possible solutions to solve them.

Introduction

One of the key steps to improve the library was to have an on-site observation, backed with a few interviews with students and staff members, in order to see if the university’s library matches the students’ needs and expectations. Our primary goal was to get a good insight on how well are students informed about the library, what do they like about it, and if there are things they don’t, then try to find out what could be changed to address any potential issue. We also conducted similar interviews with a few library staff member. We think it is very important to know about this if we want to improve the library in a way that it will satisfy everyone that uses it.
Methodology – Library Staff

To observe the Library Staff we decided to passively observe them from the outside, meaning without any interference or contact. It was conducted by taking notes and observing the activity around the Library desk. We limited it under an hour starting from Monday to Wednesday. Most of the observations of the Library desk were in the afternoon and night time because that is when most students go to the Library.

To observe the Front desk of the Library under one hour:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>25/10/10</td>
<td>16:03-</td>
</tr>
<tr>
<td></td>
<td>17:03</td>
</tr>
<tr>
<td>26/10/10</td>
<td>15:09-</td>
</tr>
<tr>
<td></td>
<td>16:09</td>
</tr>
<tr>
<td>27/10/10</td>
<td>17:11-</td>
</tr>
<tr>
<td></td>
<td>18:11</td>
</tr>
</tbody>
</table>

What we were looking for - Observation

During the observation, we focused on what the students and professors approach the Library desk for, what the staff does to help them and the number of people who actually approach the library staff. This would help analyze how useful the Library staff is to the students and professors, how many people on average approach the staff desk under an hour and see the usual queries about the Library itself.

Methodology – Library Staff interviews

For the interviews, we decided on talking to two professionals or people who are full-time workers of the Library and one student worker as a part time worker. To begin conducting our interviews, we first asked the library staff the time they are available to be interviewed. Michael was willing to be one of our interviewees and was genial enough to also ask another student worker to participate on the interview. We had to contact Sally ourselves and ask for her availability. Once we have talked to all three Library Staff, we scheduled the time and place to conduct the interviews. Each interview was scheduled not to surpass a time limit of 30 minutes and before each start, the staff has to sign an Inform Consent allowing us to use the data they share. We conducted them using a voice recorder in which all interviews were transcribed afterwards.

What we were looking for - interviews

Prior to each interview, it was important to know the interviewees’ basic information. We gave them a small sheet of paper containing the information we needed to know and for them to fill out (This is available as part of the appendices labeled “small questionnaire for staff”). The questions we selected were aimed to be fair and unbiased where we ask their opinions regarding the good and the bad side of the library. They are separated into two parts; one is based on the Library itself and two, the Library website. We based it on to find out the usability of the Library’s physical resources against its online resources.
Methodology – Students

In order to observe the student body that goes and uses the Library space, we decided to passively observe the students by moving around the different parts of the library (Study group areas (upstairs and downstairs), General study area, Side computer table, Computer room, and the Reading area) under an hour in a scope of four days. Again, most of the observations took place in the afternoon when most students are present.

To observe the students that went to the Library under one hour:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/10/10 (Sunday)</td>
<td>14:35-15:35</td>
</tr>
<tr>
<td>25/10/10 (Monday)</td>
<td>17:10-18:10</td>
</tr>
<tr>
<td>26/10/10 (Tuesday)</td>
<td>17:05-18:05</td>
</tr>
<tr>
<td>27/10/10 (Wednesday)</td>
<td>18:30-19:30</td>
</tr>
</tbody>
</table>

What we were looking for - Observation

The observation focused on what the students do in the library, what they work on, what they use to work with and other comments we perceive. This is to help analyze how students use the library resources. For example, do students use the computers or bring their own, or if they use the library books to study or use the library website to find out information.

Methodology – Student interviews

For the interviews, we decided to work with five AUP students who are in different grade levels. Though we only managed to interview four, since we discussed that freshmen normally are not as aware of the Library or Library website as the others, we were able to at least interview three undergraduates: a sophomore, a junior, a senior and one graduate. Same as the procedure we used for the Library staff, we interviewed the four students using a voice recorder and transcribed them afterwards.

What we were looking for - interviews

Prior to each interview, it was important to know the interviewees’ basic information. We gave them a small sheet of paper containing the information we needed to know and for them to fill out (This is available as part of the appendices labeled “small questionnaire for students”). The questions we chose were also based on how students perceive both the Library website and the Library itself. We selected the questions as unbiased as possible and aimed to find out their usability and functionality from the students’ point of view. We also wanted to find out if students can easily use the website and if it offers the information they want. At the end of the interviews, we found out that interviewing students and staff is the most helpful way to analyze results.

The results are available on the spreadsheet accompanying by this as well as the main points listed on the Results page. A complete interview sheet that has all of the students and staff interviewed can be viewed as part of our appendix.
Results

Our results come from two different sources: the interviews, and the on-site observation. For the interviews, we were most of the time 2 students, one conducting the interview, and the other one taking a few notes, on top of the audio recording. After the interview, we would meet up with the group and listen to the audio files, sentence by sentence, and complete the notes taken by hand, so as to produce a comprehensive transcription of the interview. Then, in order to analyze all the interviews, we re-read them, and this time were more attentive to the topics that occurred more often, the interesting points, etc.... On the other hand, for the on-site observation, we started by dividing it into the most important points we needed to note. The first thing was what the library space is used for. In order to answer that question, we had to observe what students were working on, which library resources and tools were they using, and then if they were using the library for other things than studying, and observing if the library was also used as socializing area, as mentioned by one of the staff members. Finally, we needed to comment on how well the students knew the library services, so we added a category for the number of times a staff member or student worker was asked a question by a student, and what kind of help did they need. Ultimately, both interviews questions, and on-site observation categories were split in two different sheets: one for students, and the other for staff members.

Based on reading the transcribed interviews and the comments from the on-site observation, we came up with a summary of the arguments and comments from the students and library staff. We separated the points in four categories that best describe what needs to be implemented in order to make the library and library website better.

Summary of the data we collected

Library

Design:
The staff emphasized on their inclination to make the library the “Heart of AUP.”

When interviewed, staff members suggested of improving the design of the library to two major concepts.

First, is for a place where students can socialize and interact. They suggested that the library requires to be closer to the other AUP buildings and to have more open areas with suitable decorations (more sofas, tables, chairs etc.) to make the students comfortable enough to want to “hang out” there.

Second is the main purpose of the library - a space where students can work and study. This could be further improved by having better quiet rooms, and by adding personal study areas.

Other comments regarding the Library’s Design:
Both student and staff commented that there is a lack of decoration in the library.
One of the staff said that a “bigger exposition area” would be good.
Another staff also commented that the “general size is small but it is still a good place to study”.

Resources:
We found out from our observation that most students make use of the physical resources other than the digital resources. This came from the number of students that were observed using the
library just to have a place to work on compared to those that actually go there and use the library resources. This includes the space to study in and the available computers of the library. Students are also more likely to prefer to bring their own laptops if they are planning on staying at the Library for a while. Additionally, students would also bring their own study material (own textbooks) to do their homeworks other than use the Library books, except for a few. These data were taken from the on-site observation sheet where one can see that most students are under the category that uses their own laptops instead of the library computers.

**Usability:**
During our observation period, we found out that the Library staff is well trained and capable of helping students’ queries and questions in the Library based on how readily they can execute a task asked by anyone who needs their help. The interviews also back this up as interviewed students do not have any comments or problems regarding the staff. One student says that it is not really an issue at all.
However, during the interviews, students have mentioned that the Library should be open for longer periods in order for them to stay there to study. In response to this, the staff says that they would need more hired help in order to perform this request.

**Functionalities:**
We found out that students come to the Library mainly to study and not to socialize. Other than the entrance where students/staff smoke, the Library does not have any room or space for them to do so. One of the staff expresses a belief that the library should be more open for students to interact and socialize in. But due to its current size and location, it is hardly ever possible.
On observing the Front desk, we observed that not many people really ask for help other than to borrow/return books or to ask them about the photocopy machines, printers and scanners etc.
Library Website

Design:
Most of the student interviewed commented that the Library website is not “well presented” and “is confusing to use” until a certain period where the student has gotten used to it. A graduate student commented that after a certain time period however, “you get used to it.” When asked, some students said that the jargons that the Library website uses are also hard to understand and most of the links confuses the user.

Resources:
The students we interviewed commented that they generally know where to go in the website to search for the articles they want but the problem lies on how the results are presented. Additionally, students do not really use the Library website whenever they go to the Library and rather use the external databases instead. They find that other search engines such as Google Scholar are more helpful than the Library website’s search engine.

Some interviewees asked that the library should have staff capable of teaching students on how to use the AUP library site and make use of other scholarly digital resources. The sessions on First Bridge seems to be not enough.

Usability:
Students think that it is not user friendly and it takes time to efficiently use the website especially when you are in a rush. They would rather use popular search engines like Google or scholarly websites like Wikipedia to find out the information they are looking for.

Functionalities:
The Library has sessions with the First Bridge class in which new students are taught how to use the online resources the Library has. Most of the students though, do not think it is helpful or sufficient enough to familiarize themselves with the website.

They suggested that the university should offer more than just one class (preferably in different levels) dedicated to familiarize students with the AUP library and how to evaluate, search and use digital information in general.
Findings & Recommendations

After doing the observation we would like to propose and discuss our ideas of how to solve the problems that our interviewees and observation have pointed out.

A lot of interviewees have pointed out that they are not satisfied with the physical library, due to a few issues. Those issues are listed in the results above. We think they could be addressed by renting/buying a new more suitable building for the library, which is bigger, closer to the other buildings, appropriately decorated and ventilated. The new building should, if possible, also have an open area suitable for studying, reading, relaxing and socializing. This would make the library a preferable place for students to hang out as well as study and work.

Another approach is to have two levels, which will separate a quieter area to study, and a much more open and relaxed area where groups of students are allowed to discussed and talk about their work. The quieter level can host individual study spaces where a student can study in peace. The other more open level can let students socialize and interact such as hosted group meetings and project discussions.

The current library hosts an abundant collection of books, but sadly most of them are not easily used or even seen by students. Most books are stacked on the basement level where some students may not even be aware. We suggest that the basement reconstructed and used more efficiently such as adding more tables for students to study and moving most of the books upstairs. On the other hand, if the library is chosen to be moved somewhere else, a larger space would solve these problems away.

Our interviewees have also pointed out a number of different opinions about the library website. While most of the students we interviewed and the staff members feel comfortable using the website, some of them have suggested that the site could be modernized, making it feel more attractive. All of the staff members also pointed out that students are not taking full advantage of what the website has to offer. This leads us to think that the site might be somewhat confusing for the “casual” user, and we think that a remake of the interface would be sufficient enough to significantly increase the usefulness of the site by making the huge amount of data sieved more easily for students. We propose the development of student library profiles, which will hold information about the major and current courses taken (which could probably be accessed through my.aup automatically). The major databases then can be divided between the majors and a student with a specific major would be directed to the databases that are useful for that major instead of giving people all the information available. If needed people should also have the option to search databases linked to other majors. An option to save favorite databases/searches and pages with the option to put a little comment would be useful for students to organize the data to match their needs as well, finding information even easier every time they return to the library website instead of having to go through the avalanche of links once more.

Another important aspect is the presentation of the searched data. Though the AUP website has a large collection of databases, it is very hard for an average user to get the exact information they need. It’s true that the AUP website has an advanced search link, but it does not even show up on the main page. Making the information-searched page more presentable is key for students to get the information (books, journals, etc.) they want as soon as they can. We suggest that the website separate the categories for first, the available catalog, and second, the Online resources. Each needs to also be further categorized to pinpoint what the student’s searching for exactly. The library website for Stanford can be use as reference on how to implement this suggestion.
CONSENT TO PARTICIPATE IN ON-SITE OBSERVATION

Evaluation of the American University of Paris Library Resources: On-site Observation Group

You are asked to participate in a research study conducted by Christine Basilio, Said Ali and Anas Bouzoubaa from CM/CS 348 Human-Computer Interaction at the American University of Paris.

PURPOSE OF THE STUDY
Find out if the current library service matches the students’ expectation and needs by doing an on-site research using insider perspective with a planned and timed procedure. To observe the library’s environment in terms of what the students do and how they use the library. Then we will gather data by observing the interactions between the staff and the students at the service desk. We will observe what they do and what their view on the library itself is. Lastly, interviews will be held to both groups focusing on their familiarity with the library website (its usefulness, clarity, navigation ease etc.) using a recorder.

PROCEDURES
1. Ask the library staff the time they are available to be observed.
2. Schedule our observation dates and times.
   In order to be accurate with our observation, we will observe in different times and days.

Since the library hours are basically 10:00 am - 20:00 pm (Mon-Fri) and 13:00 pm – 18:00 pm (Sat & Sun), our schedule would be the ff:

   · Morning: (10:00-11:00 am / 11:00-12:00 am)
   · Afternoon: (14:00-15:00 pm / 16:00–17:00 pm)

Observations will be limited to 1 hour each for Library staff and students.

3. Observation procedure for Library service desk.
4. Observation procedure for students.
5. Personal opinion and/or Conclusion

POTENTIAL RISKS AND DISCOMFORTS
This study should pose no physical or psychological risks, and you should experience no discomfort resulting from the research procedures.

POTENTIAL BENEFITS
You will not receive direct benefits for your participation in this study, but this research is expected to yield feedback that will be used to improve AUP’s library resources.

PAYMENT FOR PARTICIPATION
There will be no costs or monetary compensation for participating in the research. However, complimentary refreshments will be available to you during the focus group.

CONFIDENTIALITY
Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study. Your identity as a participant will not be disclosed to any unauthorized persons. The only people who will know your identity are the participants in the focus group and the students and professor of the Human Computer Interaction course. Any references to your identity that would compromise your anonymity will be removed or disguised prior to any presentation of the research results. Audiotapes will be erased, and notes will be discarded at the completion of this
study.

PARTICIPATION AND WITHDRAWAL
Participation in this study is voluntary; refusal to participate will involve no penalty. If you volunteer to be in this study, you may withdraw and discontinue participation at any time without consequences or prejudice from this institution.

QUESTIONS
If you have any questions or concerns about the research, you can contact the observers at a77201@aup.fr (Christine), a79172@aup.fr (Saïd) and a79310@aup.fr (Anas).

AGREEMENT
Your signature below indicates that you agree to participate in this study and for the data collected to be used in aggregate format preserving your anonymity as described above.

_______________________________________________
Name of Participant (Please Print)

_______________________________________________
Signature of Participant                          Date
ON–SITE OBSERVATION

Observation sheet (students)

Library Date:  
Time:  

Tick if students are working on the following:

1. What they are working on?
   - Reading
   - Writing
   - Typing
   - Other

2. What do they work with?
   - Laptop
   - Library Computer
   - N/A

3. What else do they use the library for other than working on school work?
   - Leisure (Facebook, YouTube...)
   - News (Journals, magazines...)
   - N/A
   - With food or drinks

4. How often do they ask for help?

Additional Comments:

Observation sheet (Library front desk)

Library Date:  
Time:  

1. Students/Professors Queries (what they ask for):

2. Staff working procedures (what do they work on):

3. Number of people who approached the front desk for help (tick):

Additional Comments:
ON–SITE OBSERVATION

Small Questionnaire for Library Staff:

Name
Age
Nationality
Working hours
How long have you been working at the library
At what time is the library most crowded?
At what time is it least crowded?

Interview questions used for Library Staff on:

Library

What do you like about our library, what do you think is the best feature it offers to students?
Do you think the current library is fine as it is, or there should be changes?
Would you like to add/change something about the library?
Do you think we have enough computers in the library and do you think that their current software is sufficient enough for the students?
How often do you have students asking for help concerning the use of a machine (computer, scanner, printer, etc..) ?
If you were a student of AUP, would you be happy using the library? Please comment.
Do you think there are enough staff members compared to the number of students?
What questions do you get the most from students?

Library Website:

Do you use the library website?
If you do, can you easily navigate through it?
Are you familiar with the jargon the website uses?
Do you know how to retrieve data easily?

Do you think the website is useful to students?
Do you think students take full advantage of the website?
Do you think there is a reason why students would use other search engines instead of the library website?
What are the strengths of the library website, weaknesses?
Small Questionnaire for Students:

- Age
- Sex
- Nationality
- Major
- How long have you been at AUP?
- Average hours you spend every week at the library
- How often do you use the library website
- Time spent on computers or smart phones (less than 1h a day, between 1h and 3h a day, more than 3h a day)

Interview questions used for students on:

**Library**
- How often do you ask for help and what kind of help do they usually ask for?
- What do you like about the library?
- Would you like to add or change something?
- Do you think there is enough library staff for the students?
- Do you often borrow books or use the online resources?
- Do you take advantage of the Library Study Hours (during exam times)?
- What do you mostly use the library computers for?
- Do you always have a place to work whenever you come to the library?
- Do you have any more comments regarding the library?

**Library Website:**
- What do you usually use the website for?
- Why did you come here instead of using the website?
- What do you like about the library website?
- What do you dislike about it?
- What might you want to add/change/not change to the website?
- Can you easily navigate your way through the website?
- Is it fairly easy to get used to?
- Do you know where to search for online resources, books, DVDs, journals etc.?
- Do you understand the jargon that the website uses?
- Have you used Google Scholar before? If so, how does it compare to Library website?
Transcribed Interviews:

Michael Stopel – Library Staff

1. What do you like about the library, and what do you think is the best feature it offers to students?
I like the personal contact with students. I like that we have a small student body; we get to know students very easily. When you have a message to come across with its better to know the people, and that's an advantage every library should have. I also like the online resources you can use 24/7, and I think it's the best service we currently offer. You can't beat that. (Description of what the site offers) It's in excellent condition for undergraduate students to find good sources. Another good thing is the First bridge program that every entering student has to take the reflective seminar, where students learn how to do research and use the library. Teaching with the student body should be more enforced in the future, the better it is having common projects, the better for the students, for their papers and assignments.

2. Do you think the library is fine as it is, or would you like to add/change some things?
I like the library setup, but I would love to have another place which is bigger and closer to the other buildings. The current building is a bit far away, in order for the library to really be the heart of the university and a place where people don’t just study but also meet and socialize; it should be in the center. It should also have more places for conferencing and exhibitions; it should be a cultural center where you also have a working atmosphere and the cultural aspect. The building itself is hidden.

3. Do you think there are enough computers in the library?
Yes I think there are enough computers. A lot of students come with their laptops. I think that the number of computers should be kept flexible, because of the many students who actually prefer to use their own computers.

4. What about the software available on the library computers?
We don’t have all the software.

5. How often do you have students asking for help about a machine (computer, scanner, printer…)?
It depends when you come. In the beginning students come for help less often. During the midterms week(s) there's a lot of problems with the printers, photocopying machines and scanners. The further you go into the semester, the more we are asked for help. Other questions include: “Where's the printer”, “Where's the scanner and how to use it”, “Where can I get printing paper”.

6. What's the question you get the most?
I would use it only in the morning, because that’s my personal study time, it's also very quiet and empty in the morning, i also prefer using natural light.

7. Do you think there are enough staff members compared to the number of students?
I think the library staff should teach more library instruction classes. I believe that the better you teach students to do research and everything else connected to information literacy, the better the outcome will be in the end- the students’ papers, assignments, success in studies. At the moment we do not have enough librarians to teach that. I think there should be more classes to deal with that. We should also address the needs of students in graduate level.

Website:

1. As a staff member do you regularly use the library website?
Absolutely.

2. Can you easily navigate through it?
Yes.
Are you familiar with the jargon used?

Yes

3. Do you think its useful for students?

I think yes. If there is a lot of data you can search through, then it definitely has to be useful. You can have the ugliest web page ever, but if you teach people how to find it, they will get used to it. Students and professors have to actively use, and know how to use the website. Professors should guide students to use more online library resources.

4. What do you think the reason is that some students go to other search engines instead of the library website?

Some students like to go the easy way, and as long as this yields them a good grade they are ok with it. Others on the other hand start their papers earlier, and take more time to search for information.

Randall Maag – Library Staff

1. What do you like about the library, and what do you think is the best feature it offers to students?
There are books that and resources you don’t have to pay for
2. Do you think the library is fine as it is, or would you like to add/change some things?
I would like to make the space more pleasing and add more decorations.
3. Do you think there are enough computers in the library?
For most of the year, yes, not around the exam times though
4. What about the software available on the library computers?
I don’t know
5. How often do you have students asking for help about a machine (computer, scanner, printer…)?
Yes.
6. What’s the question you get the most?
Where’s the bathroom

Website

1. Do you use the library website regularly?
Yes I can, I had a specific training for that though
2. Are you familiar with jargon used?
Yes I am, I’m not sure if it was a part of my training
3. Do you think the website is useful to students, in general?
It should be, but it doesn’t seem to always be
4. Do you think they take full advantage of the resources available?
No I don’t think so, there are people that come and ask questions. People rarely ask about the website though
5. What do you think the reason is that some students go to other search engines instead of the library website?
If you can’t find the information you look for on the aup resources, you might go and look into other databases etc.
6. Are there things you would like to change on the website?
I think that our online resources are good.

SALLY – Library Staff

1. What do you like about the library, and what do you think is the best feature it offers to students?
What I like is that it’s smaller, and that it is a smaller group of students we get to know better. I also like that there is a manageable collection of electronic resources, which I think is the most helpful feature. Even inside the library, you don’t need to fight for books.
2. Do you think the library is fine as it is, or would you like to add/change some things?
I would love to see lots of changes. More air in some places, better light. More Group Study Rooms and open study areas as well. Also, more office space for the staff. The building should be designed
better, for example we have a lot of problems with the Wi-Fi (metal). I would like to have individual study rooms.

3. Do you think there are enough computers in the library?
I don’t think it’s too bad right now. They’re rarely all taken up. A lot of people are bringing in their laptop.

4. What about the software available on the library computers?
People prefer using their personal devices, because they have all the software they use. We are not asked too often for new software. Although it would be good to have all the software available updated as fast as possible.

5. How often do you have students asking for help about a machine (computer, scanner, printer…)?
I can’t really answer that, since I don’t work in the front desk.

6. What’s the question you get the most?
I mostly get general questions on how to use databases.

7. Do you think there are enough staff members compared to the number of students?
We have enough concerning the front desk members for now, although we would need more people if we want to stay opened longer. On the other hand we need more librarians in order to teach students about how to use the library.

1. Do you use the library website regularly?
Yes, of course.

2. Are you familiar with jargon used?
Yes, I am. Part of my job is to maintain the web page. The jargon has been modified a few times, mostly to be easier to understand.

3. Do you think the website is useful to students, in general?
I do. The top part of the page is dedicated to resources, which is mainly by students, and then at the bottom there are some links for more expert users, and tutorials for students who don’t want to go and ask for help.

4. Do you think they take full advantage of the resources available?
No, I don’t. That is why we try to teach students about it. Right now it is only done for freshmen in the first bridge, but we would like to spread it to all the levels.

5. What do you think the reason is that some students go to other search engines instead of the library website?
I think most of them haven’t used databases before, and haven’t had to write a scholarly paper. Some of them came from a background completely different where they either got away using Google only, or they just had to go physically to their library and it was basically handed to them. A lot of them just don’t know the difference, and don’t realize that not everything on the Internet is reliable. It’s also because Google is easy and students can just type the subject and immediately get results.

6. Are there things you would like to change on the website?
The interface needs modernizations in order to be clearer, etc. One thing we would love to have is a federated search engine, which is kind of like Google, and searches through all the e-books, journals, databases.

Felicia Wolontis – student (sophomore)

1. How often do you ask for help and what kind of help do you usually ask for?
I usually don’t ask for help, unless I need to find a book that I really can’t find. I try to do it myself though.

2. What do you like about the library?
I like the atmosphere. It’s quiet. I think it’s a good place to study.

3. Would you like to add or change something about it?
I would like to change the decorations. The hours are good.

4. Do you think there are enough Library staff for the students?
Yes definitely.

5. Do you often borrow books or use the online resources?
I rather use the online resources. I usually go through journals and the sites for Psychology Information.

6. Do you take advantage of the Library Study Hours (during exam times)?
Yes I do.

7. What do you mostly use the Library Computers for?
Working, doing research, writing papers.

8. Do you always have a place to work whenever you come to the Library?
Yes I have.
9. Do you have any more comments regarding the Library?
Not that I think of, I think it works very well.

Website
1. What do you usually use the website for?
Research
2. Why do you come here instead of using the website?
I don’t have internet at home, I use it here because it’s free.
3. What do you like about the Library website?
I think it’s pretty easy to use if you know how to use it, a lot of possibilities you can use.
4. What do you dislike about it?
I haven’t really thought about it
5. Can you easily navigate your way through the website?
Yes I think so.
6. Do you know where to search for online resources, books, DVDs, journals etc.? I know that there are links, but I don’t use them.
7. Do you understand the jargon that the website uses?
I haven’t really thought about it.
8. Have you used Google Scholar before? If so, how does it compare to the Library website?
Yes I have, I prefer going through the website, because you get the articles directly from the sites.
9. Do you have any more comments?
Not that I can think of.

Mark Mbugua – student (Graduate)
1. How often do you ask for help and what kind of help do you usually ask for?
I ask them for help when for example there’s a link that I need to get to and if there’s a link (jargon) on the website that I don’t understand. Also when I need to find articles or books I can ask the staff for help.
2. What do you like about the library?
Mostly that it is quiet and I can always go there if I need a place to work.
3. Would you like to add or change something about it?
Maybe the opening hours because they open really late especially on the weekend. Also it will be great if they are open 24/7.
4. Do you think there are enough Library staff for the students?
Yes I mean they are always there when I need to ask something.
5. Do you often borrow books or use the online resources?
I rather use the online resources actually when I need to find articles.
6. Do you take advantage of the Library Study Hours (during exam times)?
Yes especially since I’m a graduate.
7. What do you mostly use the Library Computers for?
I don’t really use the library computer because I bring my own laptop to work. But when I do, usually just to print out stuff.
8. Do you always have a place to work whenever you come to the Library?
Yes always.
9. Do you have any more comments regarding the Library?
Just that it will be nice if it can be open whenever I need a place to work
5. Can you easily navigate your way through the website?
Right now yes because I've gotten used to it.
6. Do you know where to search for online resources, books, DVDs, journals etc.?
Yes, but if I don’t know where to go I usually just ask for help.
7. Do you understand the jargon that the website uses?
Not all of it but most of it yeah since I've been using it for awhile.
8. Have you used Google Scholar before? If so, how does it compare to the Library website?
Yes but I prefer the Library website actually because of the huge database it has. But I go to Google first then go to the library website when searching because in google, you just type in what you’re searching for and it’s there.
9. Do you have anymore comments?
No that’s it.

Eduoard Aghion – student (junior)

Library
1. What kind of help do you usually ask the staff?
I don’t ask for help.
2. What do you like about it?
It’s quiet…and peaceful
3. Is that it?
To place to study, I mean yeah.
4. Would you like to add or change anything about it?
Uh very honestly no because I’ll be gone in a year but I mean if I had to change something uh I would make it more resourceful in a sense that they should help you with their essays and stuff like that.
5. Is there enough library staff for the students?
Um I don’t think that’s a problem to be honest. I don’t think the problem of the Library comes from the Library staff but it comes from the Library itself.
6. Do you often borrow books or use the online resources on the website?
I have but I don’t really do it much, I mean via the Internet, it’s easier to find the resources on there. Uh…I mean with JSTOR and the other online resources
7. Do you take advantage of the Library hours, especially during exam hours?
Usually not, I only go when I have a lot of work and there’s no other place for me to study. I actually don't find the Library that helpful for me to study
8. Do you always have a place to work whenever you go to the Library?
Um yeah, there’s always a place to work usually
9. Do you have any more comments?
No, that’s about it”

Library website
10. What do you usually use the website for?
I don’t but when I have used it, maybe twice in the last two years. It was because we had to take this course in Frist Bridge, where we had to be familiar with the website
11. Would you rather use the website to find your books, or use the library to find the books itself?
Umm probably use the website
12. What do you like about the website? Why
No, I don’t like it, there’ s no particular reason but I don’t really…I’m indifferent to it. It’s not really well presented.
13. Do you want to add/change/not change?
I think change should be implemented, I think the format of the website itself is not user-friendly
14. Can you easily navigate your way through it?
Not really, it’s kind of confusing but after awhile I got used to it.
15. So you’re saying it’s not fairly easy to get used to?
Yes, absolutely
16. Do you know where to go to find the online resources, journals, DVDs, books etc.?
DVDs yes and the books, yeah of course. I mean I know how to use the Library but it’s just the way it’s set up in the most possible way, especially the website is really not user-friendly. It’s not good if you’re in a rush for example because it can get a little confusing
ON–SITE OBSERVATION
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17. Do you understand the jargon that the website uses?
No, definitely not
18. Have you used Google scholar before? And if so, how does it compare to the school’s website?
Yes I have. I mean it's Google, you can't really compare Google to the library website. But if I have to compare I would say that the Google scholar is just as good as JStore because it shows you where to go and such. The library website, as far as finding articles wasn’t as helpful at all.

Astrid Orozco– student (senior)

Library:
1. How often do you ask for help at the library, and what kind of help do you usually ask for?
I rarely ask for help, because I don't go that enough to the library.
2. What do you like about the library?
I like the cushions in the back, and the small study rooms.
3. Is there something you would like to change at the library?
No.
4. Do you think there are enough library staff members compared to the number of students?
Yes there are.
5. Do you often borrow books, or do you rather use the online resources?
I rather use the online resources.
6. Do you take advantage of the library study hours, during exam times?
No, I usually study at home.
7. Do you use the library computers?
No, I prefer using mine.
8. When you go to the library, do you always find a place?
I don't go that often.

Library Website:
1. What do you usually use it for?
To find resources for term papers.
2. Do you prefer going to the library, or using the website from home?
I'd rather access the website from home.
3. What do you like about the website?
It allows me to access databases from home, and be in peace and quiet.
4. Do you find the website clear, and easy to use, or are there things you would like to change on it?
No, I like it, and find pretty easy to use.
5. Have you used Google Scholar before?
Yes, I have a couple times.
6. How would you compare them? Which one do you prefer using?
Maybe Google Scholar... The layout of the site is pretty nice, and it's easy to search for things more precisely, like text inside all the pages, without having to scroll all the results.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Read</th>
<th>Write</th>
<th>Type</th>
<th>Other</th>
<th>Laptop</th>
<th>Library Com.</th>
<th>N/A</th>
<th>Leisure</th>
<th>News</th>
<th>N/A</th>
<th>How much do they ask for help</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/10/10</td>
<td>14:35-15:35</td>
<td>10</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>No staff is present on weekends</td>
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<tr>
<td>25/10/10</td>
<td>17:10-18:10</td>
<td>12</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>Not much really</td>
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<td>Most are focused on their own work</td>
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<td></td>
<td></td>
<td>They brought their own books with t</td>
</tr>
<tr>
<td>26/10/10</td>
<td>17:05-18:00</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>19</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>27/10/10</td>
<td>18:30-19:30</td>
<td>8</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>10</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

average=  

9   1   4.5  1.5  8.25  10   0.5   1  0.25  0
ON-SITE OBSERVATION

C. Basilio, S. Ali, A. Bouzoubaa

Additional Comments

Most students are focused on their work, they use the library to meet up with people and study. Most students brought food with them as well.

Students use the quiet rooms for group meetings, usually the lower room is more crowded than the upper one. Most of the students study with their books open and then proceed to type in their computers. I only saw one using Facebook. The atmosphere is quiet and busy, and feels like a place you can study in peace.

No one uses the magazines displayed on the second floor. There are more students using the quiet rooms this day (firstbridge class). Generally not many people are present. Students like to use the sitting area to read printed work. Both downstairs and upstairs quiet rooms are reserved for the firstbridge class even if they are only using the downstairs class. No one uses the sitting area (mattress with plush pillows) to work on. The most apparent noise is the sound of the printer.

There were two groups of students working on their projects on the upper quiet rooms. The library is busier at this time of the night compared to other nights.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Students' and professors' Queries (What do they ask for)</th>
<th>Staff working procedures (What do they work on)</th>
<th>Number of people who approached the front desk</th>
</tr>
</thead>
<tbody>
<tr>
<td>40476</td>
<td>16:03-17:03</td>
<td>Searching for a movie and a document, borrowing a book</td>
<td>One staff is working on his computer, a woman in charged on the front desk is online when noone is asking for help. She looks through the database to help the student look for their document and movie. A student worker comes in and gets blank paper to replace the papers on the printers, goes back and uses the computer.</td>
<td>5</td>
</tr>
<tr>
<td>40477</td>
<td>15:09-16:05</td>
<td>Help with the scanner inside the com room, Returning lost and found items, Searching for a book</td>
<td>The student worker helps a student retrieve a book inside the com room. The same student worker, returns returned books to designated shelves. Another student worker helps a student look for a book.</td>
<td>7</td>
</tr>
<tr>
<td>40478</td>
<td>17:11-18:11</td>
<td>When is the library closing today</td>
<td>One student asked for some paper for printer. The staff jumps right to it and helps to replace the papers. A graduate uses the library stationery in front of the desk.</td>
<td>7</td>
</tr>
</tbody>
</table>

average = 6.3333333
A graduate student approaches the front desk and converses with the woman in charge. She comes back repeatedly to ask her about something in the internet. The woman asks for the name of the book/document and looks for it herself in the database. There are long periods of time when no one is asking for help on the front desk.

There are 2 present Library staff in the front desk. They are student workers and are different from those working yesterday. The library today is decorated with Halloween ornaments and seems busier than yesterday. There are 2 more Library staff that comes and goes to the front desk. If the student workers know the students that approach the front desk, they chat with them for a bit then go back to their work. The staff worker from yesterday is also present today and is now in charge of working around the library (photocopying papers etc.) The staff worker aids and supervises the student workers and regularly checks up on them. Even if there are not many students asking for help, the staff desk is always busy working on something.

One student approached the front desk just to get the complimentary candies. Another student just wanted to chat with the person on the front desk. There is only one person on the front desk today and was different from the ones yesterday. There are long periods of time when no one is approaching the front desk.
Questionnaire Report for [The American University of Paris]

Date of Report: [December 6, 2010]
Date of Test: [October 25, 2010]
Location of Test: [Paris, France]

Prepared for: [First Name, Last Name]
Phone Number: [XXX-XXX-XXXX]
Email: []

Prepared by: [Colin Conway, Camille Riviere]
Phone Number: [XXX-XXX-XXXX]
Email: []

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Abstract

The purpose of this questionnaire is to gather information that can help improve the design of The American University of Paris library website. We focused on research questions which address's several aspects of the use of the library resources at AUP, which includes: design, usability, resources and functionality. At the end of our research we found that many students find that there is very reliable information and resources on the AUP Library website but the functionality and the design of the website makes it very difficult to find these resources.

Introduction

The main purpose of our questionnaire was to gather reliable information about AUP’s library website design, usability, availability of resources, functionality and how these match up to students expectations. Our main goal was to find out if AUP students have common and specific problems with using the library website and how those problems relate to the design, usability, availability of resources, and functionality of the website. Our main research was based on these questions: Does the library service match student’s expectations/needs? How easy is it to navigate through the website and find the content or resources that are needed? What is most useful for students, physical or digital resources? Is the library web site intuitive to use?

Questionnaires consist of a set of questions and are designed for a selected group of people and are large enough to allow a statistical analysis of the results. We created a questionnaire to gain reliable information regarding the AUP library website. Our participants were all AUP, transfer, full time and part time students. We were able to use different types of tactics such as checklists, scaled items and open-ended questions to help gather data from our subjects on their perceptions and attitudes towards the AUP Library. Our questionnaire includes a series of questions that will ask students of AUP about his or hers experience with the AUP library and library website. We made sure our questions were concise, consistent and clear.

Our hopes are to gather data that will show patterns or similarities to isolate major problems of the AUP library site. If many students have common, specific problems, it might help direct the ones responsible for it to focus on common issues. We expect to highlight the most problematic and common problems first and then go into other minor issue that discourages students from using the library resources.
Method

We worked in five main steps:

1. We defined the objective of our questionnaire
2. We have clearly chosen our targeted Sampling group
3. We wrote our Questions
4. We administered the questionnaire
5. We gathered and interpreted our results

We first focused on the look of the questionnaire; it must be appealing, not crowded and overall, easy on the eyes to attract the subject. Second, the instructions and order of items must be clear and organized to keep him or her engaged. We started out with background questions such as the gender, age and nationality; then moved on to the more substantive sections and finally open-ended questions which are a bit more specific. The first questions are easy and then gradually become more complex and deep. The format of the questions is organized according to the information we need. In general, quantitative questions are more exact than qualitative however they are easier to use when gathering results. Qualitative questions require more care in design by the authors of the questionnaire because they must be phrased perfectly to avoid ambiguity. Also with qualitative questions, the participants may become bored sooner considering they need more time and depth to fill them out.

First we choose a free questionnaire website that helps you create surveys. We choose kwiksurveys.com rather than the usability questionnaires proposed on Gary Perlman's site because the representation of the questionnaire was much more professional looking. We based our questions on the PUEU (Perceived Usefulness and Ease of Use) questionnaire from Gary Perlman's site and changed the questions to fit our participants. After creating a questionnaire on kwiksurveys we quickly found out that the representation of data collected and the export options to excel were very limited. Once finding this out we choose to remake our questionnaire in Google documents forms. With Google docs we were able to make a very professional looking questionnaire and represent our findings through graphs and charts. We were also able to export these representations to excel. We sent out about 100 questionnaires through a group on Facebook created to help us gain as many results as possible, by invited many or our friends that attend AUP. We also sent out a mass message to all AUP students email with the help of the SGA office. The participants were asked to fill out the questionnaires directly through a link we provide which will take them to our online questionnaire created by Google docs; the website then analyzes the data which helps us measure the results. We hoped to get an average of 50 questionnaires back and we received 35.
Here are some quick findings we noticed by looking and studying the graphs:

**General Information:**
- More than 3/4th of the participants are between the ages of 18 and 25
- 69% of the participants are female
- The leading nationality that answered is Americans
- We had 71% freshman students, 23% transfer students, 0% visiting students and 6% graduate students.
- The leading major held by these students was 37% for Global Communication

**Library Information:**
- Most students spend more than 3 hours on a digital medium at 57%
- 71% of students did not learn how to use the AUP Library in a course
- 40% doesn’t use the library regularly and 29% go 1-5 hours a week
- 82% of students use the library to study, 48% go to find books and 36% go to find online resources.
- Half of the Students use the library to use its physical resources (books) for Papers.
- 51% of students find digital resources most useful.
- Students mostly look for journals at the website and 2/4th of them say its helps them save time.

**Rating:**
- Most students find the website to help them be more productive and facilitate their research.
- Most students (43%) find the ability to find resources on a research topic to be neutral.
- 46% of students think the design of the website is bad and rate the organization of links on the site to be ineffective at 31%
- The usability of the website is rated at 34% with useful but most agree that it is difficult to learn how to operate.
- 51% believe the website has reliable information and most agree on its average speed.

**Open Ended Questions:**

Not many students participated in the Open ended questions however for the first question:

1. **Does the library service match you expectations and needs as a student.**
   We received a variety of answers. The students who answered Yes did not go into detail, however the ones who answered no included detailed answers. Many requested more online databases and more books from different fields. Many of them complain on how much time is needed to find what they are looking for.

2. **Is there anything you would like to change, or not change?**
   Many requested longer hours and easier access. The physical setting was also an issue; many believed it needed a bigger space. Many also felt the website was boring and unorganized, hard to navigate through.

SEE:
- Aup Library questionnaire below
- Spreadsheet with results below
- Google summary of results below
Google document has made the task of collecting and extracting valuable material more efficient. We tried to find patterns in the diagrams to help analyze results from the numerical data. For the open-ended questions, it is harder to interpret because they all give unique and different answers, however we could use them as comments or advice or to find a link between them and the quantitative data. One main finding was that many students believed that the AUP library had useful information and resources, however finding them with the libraries inefficient website layout and links just takes them more time and effort. We concluded this result because 46% of students think the design of the website is bad but 51% believe the website has reliable information.
Hello from the students of Human and Computer Interaction. We are very grateful for your participation in this course project. It is designed to investigate and collect data for an evaluation of the American University of Paris library website. The purpose of this questionnaire is to gather information that can help improve the design of our library website. We will be focusing on research questions which address several aspects of the use of the library resources at AUP which includes: services, usability, reliability and overall effectiveness. You are being asked to complete a questionnaire to assist us in that regard. We expect it will take you approximately 5 to 10 minutes to complete the questionnaire.

* Required

1. We intend for your participation in this project to be pleasant and stress-free. Participation in this study is voluntary; refusal to participate will involve no penalty. If you volunteer to be in this study, you may withdraw and discontinue participation at any time without consequences or prejudice from this institution. This survey is anonymous. Your answer below indicates that you agree to participate in this study, and for the data collected to be used in aggregate format preserving your anonymity as described above. I, user, consent to participate in this project held by the Human Computer Interaction CS/CM 348 Class, Fall 2010. *

○ Agree

○ Disagree

AUP Library Questionnaire
2. Age? *
   - Less than 18
   - 18-25
   - More than 25

3. Sex? *
   - M
   - F

4. Nationality? *

5. You arrived at AUP as a: *
   - Freshman Student
   - Transfer Student
   - Visiting Student
   - Graduate Student

6. How long have you been studying at AUP including this year? *
   - 1st Semester
   - 1 year
   - 2 years
   - 3 years
   - 4 years
   - 5 years
   - More than 5 years

7. Major(s) and minor(s) you are studying at AUP? *
   - Art History
   - Comparative Literature
   - Entrepreneurship
   - European and Mediterranean Cultures
   - Film Studies
   - French Studies
   - Global Communications
   - History
   - Information and Communication Technologies
8. Time spent on the internet per day using a computer or smart phone device? *
   - Less than 1h a day
   - Between 1h and 3h a day
   - More than 3h a day

9. Did you take english bridge and learn how to use the library and library website? *
   - Yes
   - No

10. Have you ever been in the AUP library? *
    - Yes
    - No (Skip to question 15)

11. On average how many hours per week do you spend in the library?
    - Don't use regularly
    - Less than 1 hour
    - Between 1 and 5 hours
    - Between 5 and 10 hours
    - More than 10 hours

12. Why do you go to the library?
    - To study
    - To use the computers
    - To find books
    - To find online resources
To socialize

13. What do you use MOST to find information for your papers?
   - AUP library resources
   - Other library resources
   - Other online resources

14. What is the MOST useful for you in the library?
   - Digital resources
   - Physical resources

15. Have you ever used the library website? *
   - Yes
   - No (Skip to question 27)

16. What do you MOSTLY look for when on the AUP library website?
   - General information about the library
   - Books
   - Journals
   - E-books
   - Films
   - DVDs

17. Do you think the library website helps you save time for your research?
   - Yes
   - No

18. Does the AUP library website help you be more productive?
   - Very productive
   - Productive
   - Neutral
   - Unproductive
   - Very Unproductive

19. Does using the AUP library website make your research easier?
   - Very Easy
   - Easy
   - Neutral
   - Difficult
   - Very Difficult
20. How easily are you able to find resources on your research topics with the library website?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very Easy</th>
<th>Easy</th>
<th>Neutral</th>
<th>Difficult</th>
<th>Very Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

21. How would you rate the design of the library homepage?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very good</th>
<th>Good</th>
<th>Neutral</th>
<th>Bad</th>
<th>Very Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

22. How would you rate the organization of links on the library website?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very Effective</th>
<th>Effective</th>
<th>Neutral</th>
<th>Ineffective</th>
<th>Very Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

23. How would you rate the usability of the AUP library website?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very Useful</th>
<th>Useful</th>
<th>Neutral</th>
<th>Confusing</th>
<th>Useless</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

24. Was it difficult to learn how to operate the AUP library website?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very Easy</th>
<th>Easy</th>
<th>Neutral</th>
<th>Difficult</th>
<th>Very Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

25. Can you rely on the library website to find information for your research?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very Reliable</th>
<th>Reliable</th>
<th>Neutral</th>
<th>Unreliable</th>
<th>Very Unreliable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

26. How would you rate the speed of the website?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very fast</th>
<th>Fast</th>
<th>Average</th>
<th>Slow</th>
<th>Very Slow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
27. Does the library service match your expectations and needs as a student?

28. Is there anything you would like to change at the library or library website? Is there anything you don't want to change?

29. Additional Comments?
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Gender</th>
<th>Major</th>
<th>Year</th>
<th>Time spent on the internet per day</th>
<th>Books</th>
<th>Journals</th>
<th>Digital Resources</th>
<th>Physical Resources</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice</td>
<td>20</td>
<td>F</td>
<td>Global Communications</td>
<td>Freshman</td>
<td>More than 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Productive</td>
</tr>
<tr>
<td>Bob</td>
<td>22</td>
<td>M</td>
<td>Comparative Literature</td>
<td>Sophomore</td>
<td>Between 1h and 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Neutral</td>
</tr>
<tr>
<td>Carol</td>
<td>23</td>
<td>F</td>
<td>Economics</td>
<td>Junior</td>
<td>More than 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Productive</td>
</tr>
<tr>
<td>Dave</td>
<td>24</td>
<td>M</td>
<td>Communications</td>
<td>Senior</td>
<td>More than 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Neutral</td>
</tr>
<tr>
<td>Emily</td>
<td>25</td>
<td>F</td>
<td>History, Urban Studies</td>
<td>Freshman</td>
<td>Between 1h and 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Productive</td>
</tr>
<tr>
<td>Frank</td>
<td>26</td>
<td>M</td>
<td>Comparative Literature</td>
<td>Sophomore</td>
<td>More than 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Neutral</td>
</tr>
<tr>
<td>Grace</td>
<td>27</td>
<td>F</td>
<td>Communications</td>
<td>Senior</td>
<td>More than 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Productive</td>
</tr>
<tr>
<td>Harry</td>
<td>28</td>
<td>M</td>
<td>Comparative Literature</td>
<td>Freshman</td>
<td>Between 1h and 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Neutral</td>
</tr>
<tr>
<td>Jane</td>
<td>29</td>
<td>F</td>
<td>Communications</td>
<td>Sophomore</td>
<td>More than 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Productive</td>
</tr>
<tr>
<td>Karen</td>
<td>30</td>
<td>M</td>
<td>Comparative Literature</td>
<td>Senior</td>
<td>More than 3h a day</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

Participation in this study is voluntary; refusal to participate will involve no penalty. If you volunteer to be in this study, you may withdraw and discontinue participation at any time. Participation in this project held by [Institution Name] is anonymous as described above. I, user, consent to participate in this project held by [Institution Name].
1. We intend for your participation in this project to be pleasant and stress-free. Participation in this project held by anonymous.

2. Age?
   - Neutral
   - Digital resources: Yes
   - Agree
   - More than 25
   - Transfer Student
   - French
   - 18-25
   - Reliable
   - Unproductive
   - Undecided
   - Yes
   - Yes
   - yes
   - Yes
   - Neutral
   - Productive
   - Journals
   - Yes
   - Bad
   - Average
   - Physical resources: M
   - Bad
   - Useful
   - Yes
   - No
   - Digital resources: 18-25
   - M
   - No
   - Agree
   - Yes
   - Unproductive
   - Ineffective
   - Digital resources: Useful
   - Average
   - Freshman Student
   - Good
   - Journals
   - No
   - 2 years
   - F
   - Neutral
   - Neutral
   - Fast
   - Neutral
   - Confusing
   - F
   - Agree
   - Difficult
   - Less than 1 hour
   - F
   - USA
   - Difficult
   - Neutral
   - Yes
   - yes
   - Easy
   - Books
   - Agree
   - Productive
   - 18-25
   - Books
   - Less than 18
   - Yes
   - Easy
   - No
   - Very Easy
   - Neutral
   - To find books
   - Yes
   - Bad
   - Neutral
   - Less than 18
   - F
   - 18-25
   - Difficult
   - Ineffective
   - Ineffective
   - Neutral
   - Bad
   - F
   - Average
   - Good
   - Difficult
   - Very Reliable
   - Less than 1 hour
   - No
   - Yes
   - Physical resources: Fast
   - Journals
   - USA
   - Yes
   - Journals
   - 3 years
   - Swiss
   - F
   - French
   - 1 year
   - Agree
   - Agree
   - Fast
   - Yes
   - Yes
   - No
   - Yes
   - 18-25
   - Productive
   - Yes
   - Neutral
   - 1st Semester
   - Agree
   - Very Ineffective
   - Bad
   - No
   - Very Unreliable
   - Yes
   - Neutral
   - Yes
   - Easy
   - Neutral
   - Reliable
   - Yes
   - Freshman Student
   - Neutral
   - Yes
   - Journals
   - Very Bad
   - Useful
   - German
   - Yes
   - Unproductive
   - Reliable
   - Freshman Student
   - Easy

3. Options for further action:
   - If you have any questions, please feel free to ask.
   - If you need help, please let us know.
   - If you want to withdraw from the study, please let us know.
   - If you want to discontinue participation at any time without consequences or prejudice from this institution, please let us know.

4. This survey is designed to gather information about your experience at AUP. Your participation is voluntary, and you may withdraw and discontinue participation at any time without consequences or prejudice from this institution.

5. The data collected will be used in aggregate format preserving your anonymity as described above. If you volunteer to be in this study, you may withdraw and discontinue participation at any time without consequences or prejudice from this institution.

6. Major(s) and minor(s) you are studying at AUP?

7. How often do you use the AUP library?
   - Between 1 and 5 hours
   - Between 1 and 5 hours
   - Between 1 and 5 hours
   - Between 1 and 5 hours
   - Between 1 and 5 hours
   - Between 1 and 5 hours
   - Between 1 and 5 hours
   - Between 1 and 5 hours

8. Why do you go to the library?
   - To study
   - To find resources
   - Other online resources
   - To find books
   - To find the computers
   - To use the library and learn how to use the computers
   - To find other online resources
   - Other library
   - Other online resources
   - AUP library

9. What do you use the library website for?
   - MOSTLY look for information for you research? [Rate]
   - helps you save time for your research? [Rate]
   - research easier? [Rate]
   - with the library organization of the homepage are not anything you don't want to change? [Rate]
   - anything you would like to change at the homepage? [Rate]

10. Is there anything you don't like about the homepage? [Rate]

11. Additional Comments?
34 responses

Summary See complete responses

1. We intend for your participation in this project to be pleasant and stress-free. Participation in this study is voluntary; refusal to participate will involve no penalty. If you volunteer to be in this study, you may withdraw and discontinue participation at any time without consequences or prejudice from this institution. This survey is anonymous. Your answer below indicates that you agree to participate in this study, and for the data collected to be used in aggregate format preserving your anonymity as described above. I, user, consent to participate in this project held by the Human Computer Interaction CS/CM 348 Class, Fall 2010.

- Agree: 34 (100%)
- Disagree: 0 (0%)

2. Age?

- Less than 18: 3 (9%)
- 18-25: 30 (88%)
- More than 25: 1 (3%)

3. Sex?

- M: 11 (32%)
- F: 23 (68%)

4. Nationality?

french american german American American swedish American german Swiss-
American american Lebanese USA american American American USA Americaine romanian American Brazilian American American American American French Hungarian Brazi ...

5. You arrived at AUP as a:

- Freshman Student: 24 (71%)
- Transfer Student: 8 (24%)
- Visiting Student: 0 (0%)
- Graduate Student: 2 (6%)

https://spreadsheets1.google.com/gform?key=tgKSCYtl_xgS9tZ9s1evZEQ&authkey=CJuz9dIG&authkey=CJuz9dIG&hl=en&gridId=0#chart
6. How long have you been studying at AUP including this year?

- 1st Semester: 8 (24%)
- 1 year: 6 (18%)
- 2 years: 9 (26%)
- 3 years: 8 (24%)
- 4 years: 3 (9%)
- 5 years: 0 (0%)
- More than 5 years: 0 (0%)

7. Major(s) and minor(s) you are studying at AUP?

- Art History: 2 (6%)
- Comparative Literature: 3 (9%)
- Entrepreneurship: 4 (12%)
- European and Mediterranean Cultures: 0 (0%)
- Film Studies: 4 (12%)
- French Studies: 0 (0%)
- Global Communications: 12 (35%)
- History: 1 (3%)
- Information and Communication Technologies: 1 (3%)
- International Business Administration: 4 (12%)
- International Economics: 2 (6%)
- International Finance: 0 (0%)
- International and Comparative Politics: 3 (9%)
- Literary Studies and the Creative Arts: 1 (3%)
- Psychology: 3 (9%)
- Self-Designed Major: 1 (3%)
- Urban Studies: 1 (3%)
- Undecided: 4 (12%)

People may select more than one checkbox, so percentages may add up to more than 100%.

8. Time spent on the internet per day using a computer or smart phone device?

- Less than 1h a day: 1 (3%)
- Between 1h and 3h a day: 14 (41%)
- More than 3h a day: 19 (56%)

9. Did you take English bridge and learn how to use the library and library website?

https://spreadsheets1.google.com/gform?key=tgKSCYtI_xg59o2s1evZcEQ&authkey=Cjuz9dI&authkey=Cjuz9dI&hl=en&gridId=0#chart
10. Have you ever been in the AUP library?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>33</td>
<td>67%</td>
</tr>
<tr>
<td>No (Skip to question 15)</td>
<td>1</td>
<td>3%</td>
</tr>
</tbody>
</table>

11. On average how many hours per week do you spend in the library?

<table>
<thead>
<tr>
<th>Hours per Week</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don't use regularly</td>
<td>13</td>
<td>38%</td>
</tr>
<tr>
<td>Less than 1 hour</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Between 1 and 5 hours</td>
<td>10</td>
<td>29%</td>
</tr>
<tr>
<td>Between 5 and 10 hours</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>More than 10 hours</td>
<td>3</td>
<td>9%</td>
</tr>
</tbody>
</table>

12. Why do you go to the library?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To study</td>
<td>26</td>
<td>81%</td>
</tr>
<tr>
<td>To use the computers</td>
<td>7</td>
<td>22%</td>
</tr>
<tr>
<td>To find books</td>
<td>15</td>
<td>47%</td>
</tr>
<tr>
<td>To find online resources</td>
<td>11</td>
<td>34%</td>
</tr>
<tr>
<td>To socialize</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

People may select more than one checkbox, so percentages may add up to more than 100%.

13. What do you use MOST to find information for your papers?

<table>
<thead>
<tr>
<th>Source</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUP library resources</td>
<td>16</td>
<td>47%</td>
</tr>
<tr>
<td>Other library resources</td>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>Other online resources</td>
<td>13</td>
<td>38%</td>
</tr>
</tbody>
</table>

14. What is the MOST useful for you in the library?
15. Have you ever used the library website?

- Yes: 31 (91%)
- No (Skip to question 27): 3 (9%)

16. What do you MOSTLY look for when on the AUP library website?

- General information about the library: 1 (3%)
- Books: 6 (18%)
- Journals: 23 (68%)
- E-books: 1 (3%)
- Films: 0 (0%)
- DVDs: 0 (0%)

17. Do you think the library website helps you save time for your research?

- Yes: 23 (68%)
- No: 8 (24%)

18. Does the AUP library website help you be more productive? - Rate

- Very productive: 3 (9%)
- Productive: 15 (44%)
- Neutral: 8 (24%)
- Unproductive: 4 (12%)
- Very Unproductive: 1 (3%)

19. Does using the AUP library website make your research easier? - Rate
20. How easily are you able to find resources on your research topics with the library website? - Rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Easy</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Easy</td>
<td>8</td>
<td>24%</td>
</tr>
<tr>
<td>Neutral</td>
<td>15</td>
<td>44%</td>
</tr>
<tr>
<td>Difficult</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Very Difficult</td>
<td>2</td>
<td>6%</td>
</tr>
</tbody>
</table>

21. How would you rate the design of the library homepage? - Rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Good</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Neutral</td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>Bad</td>
<td>16</td>
<td>47%</td>
</tr>
<tr>
<td>Very Bad</td>
<td>5</td>
<td>15%</td>
</tr>
</tbody>
</table>

22. How would you rate the organization of links on the library website? - Rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Effective</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Effective</td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>Neutral</td>
<td>9</td>
<td>26%</td>
</tr>
<tr>
<td>Ineffective</td>
<td>11</td>
<td>32%</td>
</tr>
<tr>
<td>Very Ineffective</td>
<td>4</td>
<td>12%</td>
</tr>
</tbody>
</table>

23. How would you rate the usability of the AUP library website? - Rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Useful</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Useful</td>
<td>11</td>
<td>32%</td>
</tr>
<tr>
<td>Neutral</td>
<td>7</td>
<td>21%</td>
</tr>
<tr>
<td>Confusing</td>
<td>8</td>
<td>24%</td>
</tr>
<tr>
<td>Useless</td>
<td>2</td>
<td>6%</td>
</tr>
</tbody>
</table>
24. Was it difficult to learn how to operate the AUP library website? - Rate

- **Very Easy**: 5 (15%)
- **Easy**: 6 (18%)
- **Neutral**: 9 (27%)
- **Difficult**: 8 (24%)
- **Very Difficult**: 0 (0%)

25. Can you rely on the library website to find information for your research? - Rate

- **Very Reliable**: 2 (6%)
- **Reliable**: 17 (50%)
- **Neutral**: 9 (27%)
- **Unreliable**: 1 (3%)
- **Very Unreliable**: 2 (6%)

26. How would you rate the speed of the website? - Rate

- **Very fast**: 1 (3%)
- **Fast**: 12 (35%)
- **Average**: 16 (47%)
- **Slow**: 1 (3%)
- **Very Slow**: 1 (3%)

27. Does the library service match your expectations and needs as a student?

Yes, sometimes, then other times I have to search for sources outside the library database, such as google scholar. Never. It is extremely useless to me and ineffective in every way. Mostly more online databases would be useful only few new books for the field of art history. No. Haven't been there yet. Yeah, as a literature student, I would like a larger collection of physical contemporary literature. For the most part, no, not really. There are never journal articles available and requesting them takes far too long. I utilize the login information of a visiting student from a States University to ...
is one of my greatest disappointments when looking at AUP. I think for the size of the school, the library is pretty effective. The website could use some updating. The interface, while functional, is not very appealing or easy to navigate. I think for the siz ...
Focus Group Report for AUP Library
Dotan Schmidt-Shalev
Acadia Webber

Abstract

This paper reports on the results of a study aimed at collecting, analyzing, and interpreting qualitative and quantitative data about the usability of the AUP library website. The study was implemented primarily through a focus group involving members of the AUP community. The final objective is to use this information, along with data collected by a set of parallel studies not reported in this paper, in order to improve the AUP library resources, specifically the website. Results from the focus group have been categorized into the following: design, functionality, usability, and resources. In particular, we found that the current website is not as simple, user-friendly, or efficient as it could be. Students tend to view the AUP library website design as unprofessional and its functions as non-interactive. While students generally consider the amount of resources available to them to be sufficient, they regard the website as difficult to use, which makes the process of finding adequate resources challenging. These are thus some of the main issues that need to be addressed in the library website redesign in order to fulfill the needs of the students. Whether the redesign is simply a reorganization of some of the site pages or a fundamental restructuring of the system, the results of this study reveal that some type of improvement is needed for the satisfaction of the students.
Introduction

The aim of the focus group is to gather opinions about the digital and online library resources and the experience of using them. Our focus group was held with the intent of collectively discussing, evaluating, and analyzing present-day digital and online resources and their role in the AUP library system. Design, usability, functionality, limited resource availability, and database access were the primary issues addressed. We also collected suggestions based on participants’ comparisons of the AUP library website to other resources (e.g. search engines, other libraries, general browsing experience, etc.). The issues aforementioned are extremely important to tackle, as a university library’s digital and online resources in the 21st century are the university’s veins and arteries to knowledge and information; these concerns are especially important in an expatriate and international community such as that of AUP. Moreover, the AUP library is at the heart of the city of Paris, which carries physical constraints, as far as space is concerned, as well as constraints regarding accessibility to English publications. It is for these reasons that the AUP library should focus on its web resources; what it lacks in physical space, it can compensate for in digital space.

This study examines whether or not students find the AUP library resources to be useful. We aim to find out if students utilize the library and its resources, and, if so, for what purposes, and we are also concerned with which of the resources is considered to be the most useful: the physical library or the website. Similarly, this research explores questions such as how intuitive is the use of the library resources are according to students. It is expected that the feedback obtained from the focus group will contribute to the improvement of the AUP library resources.

Similar Work

A review of online material concerning focus groups held by other university libraries shows that a simple, usable website and reliability are among issues that are important to university students.

The AUP library and its users can have different requirements and settings than the ones mentioned in this review. All things considered, emphasis is on general design, usability, accessibility and availability; common patterns can be observed by comparing findings of various focus group studies. Only the applicable findings are mentioned in this review. A note should also be made about the dates of the studies, which vary from 1998 to 2009; in the past decade the Internet and digital databases have changed rapidly and greatly.

A focus group study was conducted at Illinois State University in order to assess “students’ use of and satisfaction with” certain features of the library website (Williams, Bonnell, and Stoffell). This study found that most focus group participants used either Advanced Search only or the Quick Search in conjunction with the Advanced Search (Williams, Bonnell, and Stoffell 134), which suggests that Advanced Search is a feature that students find useful. In terms of design, participants made many requests to move the search option under the main menu in the middle of the page, to use color to make it stand out, and to highlight it (Williams, Bonnell, and Stoffell 136). Similarly, this shows the importance of the search feature according to students.
Many other focus group studies concentrate more on the library as a whole, rather than just the website; for example, a focus group at Texas A&M University concerns issues such as “providing services at the promised time” and “dependability” in the physical library (Ho and Crowley 82). One main finding in this study is the desire to access all materials in one location (Ho and Crowley 84), which implies that students tend to look for simplicity when they conduct library research. Additionally, this study found that students often complain about timeliness of interlibrary loan procedures (Ho and Crowley 84), and the researchers concluded that reliability is an important factor for students using library services (Ho and Crowley 85).

Another study that focuses on the library overall was conducted at John Hopkins university. This study emphasizes the “use of group interaction to produce data insights that would be less accessible without the interaction found in the group” (Mazzey-Burzio 209). Findings include that students are often scared to ask for help (Mazzey-Burzio 213), which means that they might not be getting all the information they need, and they might not be using the library services as efficiently as they could be.

A study at Kutztown University used faculty focus groups and interviews with students to examine how useful they find the library to be, how the library can be improved, how the physical library relates to its digital resources, etc. (Weber and Flatley). This study found that more students used Google than the university’s library databases, and students mentioned that the library webpage was not “visually pleasing,” and that it would be beneficial to make it function more like Google (Weber and Flatley).

Another study, this time conducted at Washburn University, focuses on similar issues. Collections, or availability of resources and access to databases of all kinds, was the most prevalent concern. The findings stated that “Forty-three comments (19.1% of the total) were received. Only three of these (7.5%) were in the “working” area. Others (92.5%) suggested need for improvement. Among the chief criticisms were several that suggested the collection simply did not meet the needs of respondents in fundamental ways” (Soete 5). Another issue discussed in the findings is the lack or insufficiency of instructions: “not enough of the appropriate kind of instruction—brief in-person sessions and clear point-of-use instruction—that would help them navigate the system” (Soete 6).

A similar study was done at the University of Tennessee emphasizing personalized interaction. They recommend the ability to create an account which holds individual information for book loans and allows for easy management of book check-outs. Undergraduate students have difficulty “keeping track of when their materials are due and want an easy way of checking this, as well as any fines they may owe. Graduate students want an easy way to renew items” (Valine). Personalization of library homepage was mentioned and was popular mainly amongst graduate students in this study (Valine). Participants mentioned MyBrary (personalized library browsing) offered by Syracuse as an example of a personalization feature (Valine).

In general, many prior studies have focused on the library as a whole. Our study focuses more on the library website, while also addressing the issue of the overall presentation and functioning of the library.
Method

A focus group is a critical resource for accessing users’ opinions. As a result of a free-flow discussion, participants are able to express their sincere thoughts in an nonthreatening environment and form a well-reasoned collective critique. A focus group is thus an appropriate methodology for this research because it allows us to collect qualitative data concerning students’ and others’ attitudes toward the AUP library resources. The method allows for participants of different backgrounds to interact, and each is encouraged to participate. This not only promotes responses to our research questions but also generates discussion about related topics that otherwise might not be addressed.

Our focus group consisted of 10 participants, including students who are frequent library users and students who are not frequent library users. Supervisors included the researchers, a professor, and a library staff member. The sample was selected by contacting random members of the AUP community and by seeking out volunteers within the AUP population.

In this particular focus group, high emphasis was placed on making the participants feel comfortable, so that everyone would speak their mind and discuss with each other. It is important for everyone in the focus group to participate in the discussion in order to get input from all types of users. For this reason, we chose to make refreshments and snacks available to the group.

Prior to the discussion, we gave every participant a questionnaire in order to obtain general information about the participants. We also included questions about the library and asked them to rate certain features and aspects. In this way, we were able to collect empirical data, as well as “warm-up” the participants for the discussion. We also offered them a chance to take the usability test created by the usability test research team. After the completion of the questionnaire, the focus group was conducted, and discussions were held and recorded via both audio recording and transcription. Each participant signed an Informed Consent Form, which can be found in the appendices, along with the script of the focus group.

Results

The data obtained from the focus group discussion is qualitative, but we also have both quantitative and qualitative data from the introductory questionnaire that could be helpful for future research on the topic of the AUP library system. However, only some of these findings are important to our specific goals.

Below we report of the main findings from the focus group, followed by an analysis of the data obtained from the introductory questionnaire that contributes to our objectives, diagrams for which can be found in the appendices.

In order to easily understand the wide range of qualitative data that we collected, the results have been organized into four categories: design, functionality, usability, and resources, allowing us to explore patterns that exist in our main findings.

Design

Focus group participants described the design of the AUP library website as unprofessional. Many agreed that the design should be more “official,” “presentable,” and aesthetically pleasing. Suggestions included making a darker background, adding more colors, and creating menus in place of the current index-style
organization, where everything is listed on the same level. One participant suggested that, in order to improve the design, it might be helpful to emulate another university website.

Overall, feedback concerning the design of the library website involved issues of simplifying the homepage by emphasizing more important options and playing down others. Students showed concern regarding difficulty finding the more useful features on the homepage. Proposals for managing this issue include adding an advanced search to the main page. Much of the feedback about the design of the website concerned the organization of the links on the homepage and the inability to access valuable features or resources due to the flawed design.

**Functionality**

Students mentioned that the functionality of the website does not allow for easy interaction with the system or for interaction with other users. Suggestions for improvement involve implementing personalized functions that encourage interactivity. These functions include: a rating system, so that users can rate resources and view others’ ratings of them; a comment and chat feature, so that users can interact with each other; and context help, tutorials, and how-to links, allowing users to easily gain insight on how to efficiently use the library website.

**Usability**

Most of the participants agreed that the library website is difficult to use unless instructions are given. However, many students did not find the training sessions provided for students in the FirstBridge program to be helpful, while others could not remember having these sessions. It was suggested that, in order to make training sessions more effective, perhaps they should be offered when students are starting a research project, instead of when they are entering freshman and might not have a project to start right away that requires use of these resources. Hopefully this would make the training sessions seem less theoretical and more transparent.

It was also mentioned several times that the website is difficult to use because the search does not always find what the user searches for. The database seems disorganized (i.e. the same author or book may show up multiple times as a different entity). The general feeling of the group was that the library website is not easy to use, is messy, and is sometimes confusing.

**Resources**

Many participants implied that they were under the impression that ample resources are available to them, but that they don’t know how to access them. Participants expressed perhaps more concern about finding resources that are listed on the AUP servers as opposed to external databases. The search feature seems to be the main problem with this. However, there was also mention of possibly gaining access to more online databases.

Services that link students to external resources are particularly lacking, according to the participants. The interlibrary loan service is slow – especially for books – and sometimes the materials are lost or some type of miscommunication arises. The “find it at AUP” feature, which can potentially link students to resources that are not found in the particular database they’re on, seems to most often result in a message saying that they do not have access to the resources, which is frustrating.
While participants didn’t express many thoughts regarding the library’s physical resources, some recognized that the library is a small space, so improving the quality of the website may help to make up for this.

Focus Group Questionnaire Data Analysis

Participants were asked to fill in a questionnaire prior to the commencement of the focus group. This was done for the main reasons: firstly, in order to put the participants in the right frame of mind for the focus group; secondly, for the purpose of collecting empirical data from the participants about the library, as well as data about the participants; thirdly, as to allow participants to express themselves in writing. Details such as participants’ proficiency levels, languages spoken, origins, etc. can affect data collected regarding usage, rating, suggestions, and others. Comments made in writing were incorporated into our main findings.

• Out of 9 questionnaires filled out, 100% of participants were undergraduates. There is no diversity under this category. Diversity would have allowed responses from a larger variety of users.
• As seen from the plot line, all the participants are of very similar ages: 18-21. Similar to the previous category, this one too lacks diversity. This is depicted in diagram 1.1
• Of the 9 questionnaires filled out, 4 were females and 5 were males - a fairly even ratio between the sexes. This can be seen presented in diagram 1.2
• There is a large variety of nationalities involved (diagram 1.3) and a relatively large number of mother tongues (diagram 1.4) and languages spoken amongst the participants. The majority is American nationality and English mother tongue.
• The study major of the participants varied greatly. The most common major amongst the participants is psychology. See diagram 1.5
• 5 out of the 9 participants were library users (diagram 1.6)
• The participants rated the library usability on average at 5.388888889 out of 10. See diagram 1.7
• Diagram 1.8 shows the rating of the quality of the library’s digital resources. Average of 5.5 out of 10. Very similar score to the usability.
• 7 out of 9 participants did have library training. See diagram 1.9
• 100% of participants when asked about other resources used mentioned Google.
• 3 of the 9 participants use the resources regularly, but the majority, 6, rarely use it if at all. The average rating of library proficiency out of 10 is 5.222. See diagram 1.10

In summation, the participants were all students - predominately psychology majors - of ages 18-21 and divided fairly equally between the sexes. The participants were in majority American and native English speakers, but most of the other participants all had unique mother tongues and nationalities. This is a good diversity which represents fairly well the university’s make-up. Most of the participants had library training but rarely use the library resources. Instead, they use Google or Google scholar and other resources of this type. This can be seen in the participants’ self-rating in computer and Internet proficiency, which were all rated very high (the lowest rating was 7 out of 10).
Discussion

One of the main implications of the results is that improving the AUP library website is a sensible and meaningful act that will greatly benefit the school and its members. We have learned that students find the library resources to be relatively useful but perhaps not as easy-to-use and straightforward. It will thus be advantageous for the redesign of the website to make information more accessible. Main findings also include that the website looks “unprofessional,” so working to improve the aesthetic nature of the website will be a positive direction.

Results from the focus group indicate that it would already be a great improvement to simply reorganize the elements on the library homepage and add more color. This would help to make the website appear more user-friendly and easy-to-use, and students might actually feel like that have the ability to access all the resources that they know are available to them.

On the other hand, students expressed concern regarding resources, functions, and usability, all of which have elements that extend beyond the scope of design. Because of the dryness of the website, focus group participants supported the possibility of integrating an interactive component into the library website. Whether it is a rating system, an comment/chat feature, or tutorials, a more personalized website would help fulfill the needs of users.

Accessibility of resources also proved itself to be a main point of concern for students. A more straightforward search feature, as well as working to improve the inter-library loan, seem to be key aspects that would benefit library users and the library itself. Many of the participants seem to understand that ample resources are available to them but that they do not always know how to access them. The way that students search for these resources needs to be changed, whether it involves reorganizing the links on the homepage, updating the search feature, or other.

We found that many students do use the library and its resources, and it would be worth the effort to improve these resources. Many participants chose digital resources over physical resources, indicating that improving the library website might in fact help to make up for having a small physical library space. Overall, this research brings up many areas of concern that should be addressed in the redesign of the library website. Further research might include testing the usability and accessibility of various possible website redesigns.

Via our own research and the focus group we noticed a particular pattern and direction; it appears that other focus groups, as well as our own, draw attention to the need of interaction and personalization of library digital resources. This can be achieved through a system that allows users to create their own virtual spaces and customize them to their needs; one example of this type of system is iGoogle. Furthermore, allowing users to communicate from their virtual space with other users via the library’s website in real time can attract users and be useful method of assistance at no cost.
References


Appendices

Informed Consent Form

**CONSENT TO PARTICIPATE IN RESEARCH**

Evaluation of the American University of Paris Library Resources - Focus Group

You are asked to participate in a research study conducted by Acadia Webber and Dotan Schmidt-Shalev from CM/CS 348 Human-Computer Interaction at the American University of Paris.

**PURPOSE OF THE STUDY**

This study will examine whether students find the AUP library resources to be useful. We want to find out if students utilize the library and its resources, and, if so, for what purposes. We will also look at which of the resources is considered to be the most useful: the physical library or the website. Similarly, this research will explore how intuitive to use the library resources are according to students.

**PROCEDURES**

A focus group is a small group of people (approximately 6-8) who meet together and provide answers and opinions to some questions asked by a group leader. This focus group is designed to examine the attitudes of students, professors, and library staff members toward the AUP library resources. The AUP library resources include both the physical library and the library website.

If you volunteer to participate in this study, you will be asked some questions about your use and opinions of the AUP library resources. You will also complete a short survey that has some questions to answer about yourself. Your focus group will meet in the AUP library; it will be audiotaped and transcribed and will last approximately
30 minutes – 1 hour.

POTENTIAL RISKS AND DISCOMFORTS
This study should pose no physical or psychological risks, and you should experience no discomfort resulting from the research procedures.

POTENTIAL BENEFITS
You will not receive direct benefits for your participation in this study, but this research is expected to yield feedback that will be used to improve AUP’s library resources.

PAYMENT FOR PARTICIPATION
There will be no costs or monetary compensation for participating in the research. However, complimentary refreshments will be available to you during the focus group.

CONFIDENTIALITY
Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study. Your identity as a participant will not be disclosed to any unauthorized persons. The only people who will know your identity are the participants in the focus group and the students and professor of the Human Computer Interaction course. Any references to your identity that would compromise your anonymity will be removed or disguised prior to any presentation of the research results. Audiotapes will be erased, and notes will be discarded at the completion of this study.

PARTICIPATION AND WITHDRAWAL
Participation in this study is voluntary; refusal to participate will involve no penalty. If you volunteer to be in this study, you may withdraw and discontinue participation at any time without consequences or prejudice from this institution.

QUESTIONS
If you have any questions or concerns about the research, you can contact the researchers at a77637@aup.edu (Acadia) or a78269@aup.edu (Dotan).

AGREEMENT
Your signature below indicates that you agree to participate in this study, and for the data collected to be used in aggregate format preserving your anonymity as described above.

_______________________________________________
Name of Participant (Please Print)

___________________________________________
________________
Signature of Participant                        Date
Diagrams

Library Focus Group - Age 1.1

Library Focus Group - Sex 1.2

Library Focus Group - Countries 1.3
Introductory Questionnaire

Please answer as freely and in-detail as possible

1. Status (undergrad, grad, professor, library staff, etc.)
2. Age:
3. Sex:
4. Country/ies of origin:
5. Mother tongue/s:
   a. Other languages:
6. Area of study:
7. How many years have you been using the AUP library and its resources?
8. Computer proficiency (0-10):
9. Internet Proficiency (0-10):
10. Generally, are you a library user (Y/N)?
11. Do you know how to use the library’s digital resources- Y/N?
   a. Your proficiency (0-10):
12. Do you use the library’s digital/online resources?
   a. If so, how often (specify number of times per day, week, month, semester, etc.)?
13. What do you use the library for (IE: checkout books, check out movies, research via the library’s online resources for scholarly or personal purposes, etc.)?
14. Do you predominately use digital or non-digital sources?
15. Do you use other resources (IE Google, other libraries, etc.) – Y/N?
   a. Which ones?
16. How would you rate the digital resources and sources available via the AUP library? (0 for terrible – 10 for incredible):
17. How would you compare it to other resources/sources you’ve used (better, worse, etc.):
18. Are you accustomed/have been accustomed to a different system?
   a. If so, which system was it?
   b. Was it better/worse, why?
19. Have you ever been taught to use the library’s digital resources?
20. How would you rate usability of the library’s digital resources (0-10)?
   a. Have you chosen this rating for any particular reason/s?
21. Are you ever forced to use the library instead of another resource?
   a. If so, please explain why or how
   b. If so, do you find the experience helpful?

Script

The outline presented hereto acts as a script to the focus group; it outlines the main points that should lead the discussion and highlights through questions - issues concerning these points. The script should be and will be used as guidance and for orientation of discussion. It will not be used in order to stop the ‘natural flow’ of the discussion, given it is productive and on-topic. The idea is not to force the script or its structure.

- usability/user friendliness
  o Is it easy to use?
  o How long does it take you? - should it be quicker?
  o how does it compare to other digital resources?
  o Should the look be different?
  o Should the language/jargon be different?
  o Should the organized differently?
  o To all questions - Why, how and do you have suggestions?

- availability of resources
  o Do you usually find what you are looking for?
  o What do you do if you don’t?
  o Have you used inter-library loans?
    ▪ what are your thoughts
  o Should the AUP Library be a member of more online databases?
    ▪ if so, which ones and why?
  o To all questions - Why, how and do you have suggestions?

- other resources
  o what other resources do you use?
    ▪ why?
  o how are they different from the library’s digital sources?
  o Are they better in some way?
    ▪ how, why?
  o Are they also worse in some way?
    ▪ how, why?

- comparing the library resources to others
  o Have you used other website resources?
    ▪ how do they compare?
    ▪ better/worse - why?
    ▪ what do you suggest we can learn from them?

- training
  o should there be library training?
  o should it be mostly self-explanatory?
  o how can we design a better training system, virtually or physically?

- design
• availability of information
• quality of information
• accessibility to information
• flaws
• why you don’t use the resources?
• if you use the resources, even if rarely, what do you use them for?
• is it important to develop/improve the site?
• Comparison to other libraries
• topics raised by participants
• suggestions
Usability Test Report for AUP Library Website

Date of Report: [November 15, 2010]
Date of Test: [October 27, 2010]
Location of Test: [Paris, FRANCE]

Prepared for: [CS348 – Human Computer Interaction]
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Abstract

This paper describes the usability tests performed on the AUP library Web (library.aup.edu) site on 27 October 2010. Through logging of particular task performance on selected participants, we were able to identify and locate several usability problems including:

- overload of links in the homepage,
- missing links to some vital information,
- lack of evidence to the ability of the search bar to search only the AUP Catalog,
- and lack of evidence for users who tend to employ Google-like searches when are instead faced with index-focused search.

We go one step further recommending several possible ways of addressing the above problems. These solutions span from the simple addition or reorganization of links in the homepage to the more complex implementation of federate and agent assisted search engines. Considering the fact that the implementation of solutions like federated and agent assisted search engines is very expensive, we suggest back-up solutions, in case the first ones are evaluated unreachable.
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Introduction

Usability Study, as the name indicates, consists of analyzing the links between the system and the human who uses it. In other words it tests the Interface of the system, in our case AUP Library Website. Differently from other techniques, like “User Questionnaires”, “Focus Groups” or “On-site Observation”, Usability Studies monitor users in real life scenarios and analyze how they behave w.r.t how they should have behaved (if they had followed the optimal path to the solution).

Usability Tests are conducted because they give an objective insight of the system, albeit there are relatively high in cost if compared to other techniques. The result of a Usability Test does not depend on the users reporting about the task, but it provides direct objective measures of the user behavior when performing the predefined real-life scenario.

With this particular Usability Test on the AUP Library Website, we are trying to see whether the Library matches the expectation of the students, or at least whether it matches its requirements. To be noted is the fact that Expectations and Requirements are not the same, while expectations are always goals and evolve as soon as the current ability of the product matches them; the requirements must be always met and are actually the main interest of Usability Tests.

In this Usability Test we will be targeting in particular, the efficiency of the Library Website. Does it allow students to find the information they need? How’s the homepage designed? Do students feel comfortable with that? There are a lot of links, but are they intuitive to find? Or do students need to understand what the page designer was thinking when he/she named them?

These are part of many questions, which the Usability Test can easily answer. Considering the fact that this is a Website, Usability Test is one of the most popular techniques for testing them. Most websites pass through many usability tests at different stages of implementation and pass infinitely many during their lifecycle.

Work similar to ours includes the Library Website Usability Testes at the Lund University, Sweden (Lund, 1).

While a Usability Test does not solve the problem, in some cases, such as at Lund University, fundamental setbacks come from very simple problem like a missing back button in the search page. Such simple, yet fundamental problems are virtually “solved” by the Usability Test.
Methodology

What happened during the usability test

The usability evaluation of the AUP Library Website was conducted in Paris, France on October 27, 2010.

During the usability evaluation, five participants, matching the user profile(s), were asked to spend 20 (twenty) minutes with the site. During these minutes, participants:

- Signed an Informed Consent Form
- Filled in an Entry Questionnaire
- Performed real-life tasks on the site
- Answered questions about their overall satisfaction on an Exit Questionnaire

How many participants we tested

Technically wise, more is better, but as the test would have to be run there should be considered a Marginal Cost with respect to the Marginal Benefit of more is better. The experiment would be run by a single person, this would latter have to translate the date into readable one and interpret it, so the more date there is the more time and effort it requires.

To this decision helped a concept popularized in the early 1990s by Jakob Nielsen (at that time a researcher at Sun Microsystems). His argument is that, once it is found that two or three people are totally confused by the home page, little is gained by watching more people suffer through the same flawed design. "Elaborate usability tests are a waste of resources. The best results come from testing no more than five users and running as many small tests as you can afford."

The claim of "Five users is enough" is later described by a mathematical model which states for the proportion of uncovered problems U.

\[ U = 1 - (1 - p)^n \]

- \( p \) - is the probability of one subject identifying a specific problem
- \( n \) - the number of subjects (or test sessions).
This model shows up as an asymptotic graph towards the number of real existing problems.

![Graph showing asymptotic growth](image)

**Who we tested**

Five participants, having the following profile characteristics, evaluated the AUP Library Website.

<table>
<thead>
<tr>
<th>Participants Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen and Transfer</td>
<td>2</td>
</tr>
<tr>
<td>Sophomore</td>
<td>2</td>
</tr>
<tr>
<td>Junior</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL (participants)</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Usage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 hrs. day</td>
<td>1</td>
</tr>
<tr>
<td>3+ hrs. day</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL (participants)</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time on Library Website</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Regularly</td>
<td>3</td>
</tr>
<tr>
<td>&lt;1</td>
<td>1</td>
</tr>
<tr>
<td>&gt;10</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL (participants)</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>3</td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL (participants)</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

**What technology we used**

As described the Usability Test is done by a specific group of participants who are monitored while running the Usability Test. Such strict situation turned down the primary idea of adding a script in the website server to log the data we were looking for. Consequently, it was clear that the only solution was to implement a web browser which would keep track of the user’s surfing behavior.

Microsoft’s .NET framework offers an Internet-Explorer Trident-based engine and upon this the open-source community has released a Gecko-based control, both of them being in their own fully functional Web Browsers. [LINKS TO PRODUCTS YOU MENTION]
The Web Browser we wrote is based on the Gecko-Control (Developed by GeckoFX). The choice is pure preference over the original Trident, which will certainly do the same job perfectly.)

How does the Usability Browser(UB) work, so as to address our goals.

The UB: Start showing the user the Task (in a dialog Box with one OK button). As soon as the user presses OK the browser loads the Homepage (library.aup.edu) and starts two timers. From this point on, each time the user clicks a link, or manually changes the URL, the previous URL is pushed into a queue and one of the timers is pushed into another queue and restarted. This procedure is done for each change in URL, so we can keep track of each page the user visited and how long they spend there. The second timer runs from the beginning of a task and, if it reaches a certain amount of time (calculating each solution I decided to use 4minutes for the particular tasks I was asking), it shows the user a dialog telling that the tasks seems complex and they need to move on to the next one. As soon as they OK on the shown message the “I found it” function is automatically triggered and thus the users passes to the next task. At the end of each task, a string “TOTAL” is pushed into the URL queue and an integer 0 into the Time queue, this is all done to divide tasks from tasks when the result will have to be interpreted in Excel.

Once the tasks are completed the application, in the background, writes all the information on a file “Results.txt” (file in the same directory as the executable), in the formal URL > time. The character “>” is used as delimiter to help the transition to Excel for later analysis.

We wanted the browser to work with different sets of Tasks, therefore, in order to customize the program Tasks are stored in a “Tasks.txt” file in the same directory as the executable. The format of the Tasks.txt is simple. Each tasks is composed of two lines, first line is the tasks description and the second line is the end URL. The endURL is used by the application to define if the user found the actual finish or he/she though the answer was another. If, as in our Library case, it is difficult to find persistent links to items and therefore the endURL cannot work as one item can be accessed with more than one valid URL, the second line can be left empty. The Tasks.txt file can be filled with as many tasks as you like paired in the above described format with no space between them.
The GUI of the Application

1. **The Task Dialog** - titled as the number of the Task they are currently doing and explaining what the users have to do.

2. **Show me the task again** – This Button pops up the same Task Dialog as above so that the user can read the Task again, in the case they forget it.

3. **I found it** – This Button triggers the end of the current task and shows the next one, until the end of the tasks.

**What participants did**

During the usability evaluation, participants were asked to complete five scenarios or “real-life” tasks on the site. The tasks were presented in a particularly specified order and participants were instructed to complete them as soon as possible.

The following tasks were identified from user data collection efforts and assistance from the [project team].

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Find the article &quot;India's surprising economic miracle&quot;. (The Economist US, 2 Oct 2010)</td>
</tr>
<tr>
<td>2</td>
<td>Find the books from William Shakespeare. And open the 3d on the list.</td>
</tr>
<tr>
<td>3</td>
<td>Find the times when you can access the library building.</td>
</tr>
<tr>
<td>4</td>
<td>Find how to use the Academic Film Collections.</td>
</tr>
</tbody>
</table>
How we created and ordered these tasks

The Library Website should address one specific function: *Finding the information users need*. Considering the fact that our particular Library has no Federated Search Engine, this function is split into 3:

i) Searching the Library Catalog (which actually splits itself into two):
   a. Using the Basic Search
   b. Using the Advanced Search

ii) Finding External Material, not indexed by the library’s search engine.

iii) Searching for information directly linked from the Web Site. (This, with fine tuning of the tasks can in the same time address the generic website testing.)

Bearing all this in mind the following Tasks were defined for testing purposes:

The particular ordering of the tasks was also a major concern. Our participants were volunteering and came at the point of running the tasks after signing an Informed Consent Form and completing a long questionnaire, so we did not want them to get overstressed, as to either leave or even do the tasks without focus. The initial idea of having the tasks ordered from the most simple to the hardest was turned down by the fact that an increment in difficulty will just psychologically win over the participants concentration, so it was decided to place the two more complex tasks one in the beginning and the other at the end. In this way the participant performs the first difficult task just after the introductory task, and being a little relaxed from the questionnaire. Participants can get very uncomfortable in the first task, but they will keep doing it as he/she will think that should give the tester (in this case me) the impression that he is trying hard to help him (in this case me). The participant will arrive to the next questions expecting the same difficulty and almost sure to quit soon, but a considerable drop in difficulty will relax him/her a lot and make him/her comfortable with the current difficulty. (*Remember: Difficulty is relative.*

*Analogy: Put your left hand in cold water and your right in hot one. Then move them both to warm water. How does it feel? Hot or cold?*). It is only at the very end that the user will meet again, a fairly difficult task, but until then he/she will have two bonuses in moral: i) He/she will be relaxed with the “easy” tasks he/she has been doing. ii) It is the last task thus he/she will soon be done with this.

The rest of the tasks, are considered as fairly similar in difficulty thus ordering is not important.
What data we collected

By the end of the test we had collected:

- **Participant Completed Material**
  - ICF
  - Entry Questionnaire
  - Exit Questionnaire

- **Computer Logged Material**
  - The path (URL) each participant traveled to reach the solution
  - The time each participant spend on each page

- **The observing team notes**
  - Did the participant find the solution or no

Where we tested

Following is a summary of the participants’ computing environment:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>URL of tested website:</td>
<td>library.aup.edu</td>
</tr>
<tr>
<td>Computer platforms:</td>
<td>Dell Core 2 Duo with an 15” display</td>
</tr>
<tr>
<td>Browser tested:</td>
<td>Custom Gecko Based Browser</td>
</tr>
<tr>
<td>Screen resolution:</td>
<td>1024 X 800</td>
</tr>
<tr>
<td>Operating system:</td>
<td>Windows 7</td>
</tr>
<tr>
<td>Connection speed:</td>
<td>Shared T1</td>
</tr>
</tbody>
</table>

Results

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
<th>Task 4</th>
<th>Task 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Find the article &quot;India's surprising economic miracle&quot;. (The Economist US, 2 Oct 2010)</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>2</td>
<td>Find the books from William Shakespeare. And open the 3d on the list.</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>3</td>
<td>Find the times when you can access the library building.</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>4</td>
<td>Find how to use the Academic Film Collections.</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Solve Rate

<table>
<thead>
<tr>
<th>User 01</th>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
<th>Task 4</th>
<th>Task 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40%</td>
<td>40%</td>
<td>100%</td>
<td>80%</td>
<td>20%</td>
</tr>
</tbody>
</table>

From the table above, which shows whether the user solved (YES) a particular task, or did not solve it (NO), it can be seen that Task3 and Task4 were mostly solved, while Task1
and Task2 were little short of the 50% mark. Task5 seems to have been impossible to complete by the Participants.

According to the task creation procedures described in section 2.1, Task3 and Task4 qualified as fairly easy task, while the other three, Task1, Task2 and Task5 as particularly difficult tasks.

From the table we also see that all users apart from User1 solved at least 3 tasks.

In this new Graph, we can see how the ones who managed to solve particular task, ran through the website towards the solution, w.r.t the ideal path, which is completed by a library staff member.

At Task1
[Find the article "India's surprising economic miracle". (The Economist US, 2 Oct 2010)]
Neither User02, nor User05 (who are the only ones to solve this task) matched the ideal path. While User02 traveled 1 click more than the ideal path, it seems that User05 exploited a new faster route to the desired finish.

At Task2
[Find the books from William Shakespeare. And open the 3d on the list.]  
User04 solved the question in a slightly longer path compared to the ideal one, while User03 introduces once more one of the longest paths of the test, but once more manages to find the solution. The rest fails to solve this task.

At Task3
[Find the times when you can access the library building.]
ser02, User03 and User04 matched the ideal path of 2 clicks to find the desired result. This makes 60% of the users out of 100% that solved it. It shows that albeit User01 and User05 solved the question they did not match the ideal path, but ran through a longer one.

At Task 4

[Find how to use the Academic Film Collections.]
User02, User04 and User05 matched the ideal path of 2 clicks to find the desired result. This makes 60% of the users while there were 80% to solve this task. User03 is the one to have solved the task, even though not matching the ideal path. User03 completed 12 clicks before finding the solution, while the ideal path was of merely 2 clicks. A look at Appendix E, shows that this user traveled 5-times back to the Homepage, before finding the finish. If counted from the last time User03 visited the Homepage, he/she also matched the ideal path.

At Task 5

It is only User05 to solve this question, even he/she travels an immense 19 click path compared to the ideal path of 4 clicks.

This graph shows the time employed by each user to solve each task. The average time is calculated using the time employed only by users who solved each task, while the fastest time is the minimum time taken by a user who reached the solution.

At Task 1

[Find the article "India's surprising economic miracle", (The Economist US, 2 Oct 2010)]
User02 and User05, who are the only ones to solve the task, have almost equal times, but considering the previous graph User05 traveled a much shorter path, still with very little time benefit

**At Task2**
*Find the books from William Shakespeare. And open the 3d on the list.*
User03 and User04, who are the only ones to solve this, did spend very different times with this task. Though this seems to be directly proportional to the path they traveled in the previous exercise.

**At Task3**
*Find the times when you can access the library building.*
User02, User03 and User04 matched the ideal path of 2 clicks to find the desired result and actually they spent virtually the exact time doing this task. The time they spent is actually the fastest one. User01 falls short of the fastest time by very little (20 seconds), while User05 spent a relatively high amount of time.

**At Task 4**
*Find how to use the Academic Film Collections.*
User02, User04 and User05 matched the ideal path of 2 clicks to find the desired result, but Users02 and Users04 also matched the fastest time, User05 spent again one of the relatively longest times doing this task.

**At Task5**
It is only User05 to solve this question thus little can be inferred, but the vast amount of time spent, seems once more in direct proportion with the very long path.

In the next graph we will see how much time users spend on fundamental pages. And how is that divided into sub categories.
Homepage
Users spent a relatively high time on the homepage, but this is fair considering the fact that it is loaded by default each time they move into a Task, but as the graphs show, users have returned to the homepage after the previous visit, and the revisit albeit shorter than the first time visit, take a considerable amount of time.

Search
Basic Search Page
As the graph clearly infers the users have spent a vast amount of time on search pages and results produced by search pages. The categorized Search beats by far the basic search even though a look at Appendix E shows that the number of times each one is clicked are fairly equal.

It looks obvious that the Categorized search should take more time to be filled in, but considering the fact that questions had basic information that would take virtually the same amount of time to be filled in, one possible explanation of the vast time difference can be that the users are more comfortable and used to the basic search page.

Discussion

How did the test address our goals?

Goal 1 – See how easy is for students, to use AUP’s subscription to external resources.

This goal, as discussed in section 2.1, was expected to be addressed by Task1. [Find the article “India's surprising economic miracle”. (The Economist US, 2 Oct 2010)]

As we see from the results, Task1 is solved only by 40% of the participants, this shows that it’s not easy for students to use external resources. Apart from this, as even the two users that found the article failed to match the ideal path shows that even though they knew what they were looking for, the ideal path was not obvious to them.

Furthermore the exploration of a shorter yet non-ideal path from User05 shows that the library website is designed in such way that the staff himself is not fully aware of the paths existent, or they happen to have added a path they do not suggest.

**CONCLUSION**: One possible explanation for this difficulty is that students find it very difficult to adapt to different external resources’ interface, thus loosing time there

Goal 2 – Analyzing the efficiency of the library search engine.
This goal was expected to be addressed by Task2. *[Find the books from William Shakespeare. And open the 3d on the list.]*

Once again it is only 40% of the students to manage to find a solution and none of them matched the shortest path. The relatively excessive time spent by them on this task seems to show that they were working hard to find the solution. The website did not help them.

Checking the paths in Appendix E, we see that none of them did actually change the default search from KEYWORD to AUTHOR, but searched the author name as a keyword. This was actually a shared solution path by all of the participants, at the difference that the others went on to chose the 3d on the list of W.Sh Keyword search, while User03 an User04 seem to have realized the mistake and fix it. User03 and User04 did manage to get to author search through some nested links and manage the desired outcome.

**CONCLUSION:** Students consistently use the keyword search, even on occasion when other types of searches would be much more efficient. On explanation for this behavior is that students are used to Web search-engines queries (such as Google Searches), and they don’t see the utility of index-specific searches.

---

**Goal 3 – Analyzing the load of links in the libraries main page.**

This goal was expected to be addressed by Task3. *[Find when you can access the library building.]*

All the participants found their way through this task, but 2 of them went through longer paths. Actually, the asked finish was something that had to be obvious on the homepage and should have been very easy caught by anyone’s eye.

Even User02 and User03, who managed to find the direct link, somehow spent the double of the time User04 needed. This clearly shows that they knew the information they were looking for was on the homepage, but they did not know where it was, so they read through the links to find it.

**CONCLUSION:** The AUP Library homepage is overloaded for students’ eyes. They offer direct link to tons of information, shadowing basic info like the library hours.

---

**Goal 4 – Analyzing the naming of the links in the library’s homepage.**

This goal was expected to be addressed by the analyze of the participants’ progress through all the tasks and especially targeted by Task4. *[Find how to use the Academic Film Collections.]*

Seeing the paths of all participants on all tasks, we realize very few misjudged directions and those few ones happen to be due to fundamental misunderstanding of the website philosophy rather than wrong names of the websites (searching rather than looking for direct links).

To be more particular we created task4. Users are asked to find a How-To (the first thing that comes to mind when you try to do something you do not know how.) material, when on the website it is named guide. Almost all the participants found their way through this task and did solve it pretty fast and in very few steps, thus it seems the naming are staying good on the homepage.
Still User01 and User03, instead of looking for a link to the info somewhere did make a basic search of it. It seems they are natural at searches, but don’t take into account anything else they see, apart from the search box.

CONCLUSION: The AUP Library homepage is well named; still students seem to somehow tend to look for the natural Google instinct they own.

Goal 5 – Analyzing how easy it is to use the Advanced Search Engine.

This goal was expected to be addressed by Task 5. [Find a book on "Cognitive Science" and "Computer", published between 1950 and 2000.]

Almost none of the participants found their way through this task. Even User05 who managed to solve it spent a vast time on it. It stands pretty clear that the task was almost impossible.

The users who managed to understand that and Advanced Search was what the task demanded (60% of the total users), spent at least two clicks to get to it [“at least too clicks” does not seem too bad at all, how many clicks spent each user to reach the advanced search?].

User03 seems to be the only one to have used the Advanced Search before, as he/she knows that they have to make a dumb basic search, to get a link to the advanced one.

40% did not even know the Advanced Search existed. Other 40% found it by luck and it was just 20% to know that it existed and how to find it.

CONCLUSION: The majority of students don’t know what the Advanced Search is. There is no link from the home page to the Advanced Search, one must run a search in order to be able to use the advanced search.

How did the test address our goals?

The Conclusion, discussed in the previous section, were somehow the problems that we found on the library website. Now lets see each of them in details and suggest solutions.

Problem 1 - Students know that the library search won’t help them with external resource, but they find it very difficult to adapt to different external resources’ interface, thus loosing time there.

Compering to other questions where the search was a possible solution we see that the users, acted a little faster. The users seem to be used to the library interface, even though Task3 and Task4 showed that it is not efficient.

The obvious conclusion is to merge the external resources into the library interface. This can be accomplished by the implementation of a Federated Search Engine.

Solution 1: Implement a Federated Search Engine

Problem 2 - The AUP Library search engine is not what students are looking for. They are used to Google Searches, but not index specified library searches.

The solution is fairly straight forward. Implement Google like searches. Of course considering the case of being a library the technical solution is not that easy, but an agent assisted search engine should do the trick.
However if such and implementation is considered overpriced, there exist the case where the students should be made aware of the fact it’s not a Google search, by making the actual drop-box (keyword, title, author) more visible.

Solution2.1: Implement an Agent Assisted Search Engine
Solution2.2: Make the difference to Google-like searches obvious.

Problem3 - The AUP Library homepage is overloaded for students’ eyes. They offer direct link to tons of information, shadowing basic info like the library hours.
This solution is easy to infer by anyone. Group items together to make it less overloaded. Actually the actual website has category division, but it has to have clear that the human mind is not very friendly with learning new metaphors and the one they know now is that, “if there are menus, there are groups, if there are links, there are no groups”. Plus it is in the human nature to trust no one but the self, thus will not trust the grouping, but will read through all of them, unless it has to make a choice first. Grouping in menus will force the mind to choose from where to start, thus starting from the menu title more probable of having the solution.
Solution3: Implement Menus instead of the categories in the homepage.

Problem4 - The AUP Library homepage is well named; still students seem to somehow tend to look for the natural Google instinct they own.
There seems to be almost no problem here, though Solution1 would help make this task batter.

Problem5 - The Advanced Search is a “What is it?!“ for most students. Furthermore the staff misses the fact that out of the many links in the homepage, they did not put a link to one basic function as the Advanced Search.
This is by far the most problematic point in the Library website. A basic, vital function that is totally hidden. Obviously a much improved basic search would cover a little the need of an advanced search, but in any case, the advanced search is a must and there should be a link in the homepage.
Solution4: Add very visible link to the Advanced Search in the homepage.
May also help: A batter basic search to cover parts of the advanced search addressed by Solution1.
APPENDIX A

Informed Consent Agreement to Participate In
AUP Library Web-Site Usability Study

Alban DEMIRAJ
Department of Computer Science, Mathematics or Science
American University of Paris

Description of Study: I understand that I, _________________________________________ have been asked to participate in a usability test of the AUP Library Web-Site as part of the Alban Demiraj’s (henceforth, “the researcher”) course project for CS348 at the American University of Paris. My participation in this usability test will help the researcher to better understand the Web-site’s strengths and weaknesses. I have been asked to spend about 30 minutes participating in this test. This will involve my doing some or all of the following things:

• Using a computer.
• Reading.
• Interacting with researchers.
• Thinking aloud (explaining what you’re doing and thinking).
• Filling out questionnaires.

Risks and Benefits Expected: The study will not do me any harm. The study is not expected to help me directly. The results may help the staff of AUP Library to improve the quality of their Web-Site.

Confidentiality: I understand that all information gathered from the study will remain confidential. My identity as a participant will not be disclosed to any unauthorized persons; only the researcher and professors in the Computer Science, Mathematics and Science Department of AUP will have access to the research materials, which will be kept safe. Any references to my identity that would compromise my anonymity will be removed or disguised prior to the preparation of the research reports and publications. Any data which links my name to my code name will be destroyed at the completion of the research.

Right to Refuse or End Participation: Participation in this study is voluntary; refusal to participate will involve no penalty. Each participant is free to withdraw and discontinue participation in this project at any time without prejudice.

Alternative Procedures: If a person chooses not to participate, an alternative procedure is not necessary.

Certification: I certify that I have read and that I understand the foregoing, that I have been given satisfactory answers to my inquiries concerning this study, and that I have been advised that I am free to withdraw my consent and to discontinue participation in the project or activity at any time.

I herewith give my consent to participate in this study with the understanding that such consent does not waive any of my legal rights, nor does it release the researchers or any agent thereof from liability for negligence. I understand that I shall remain anonymous in all written and verbal reports of this study. I agree to allow the researchers to present to their instructor and classmates excerpts of the videotape taken during the study for educational purposes, with the understanding that my face will not appear on the videotape. I understand that I may request a copy of this form to keep.

Agreement: This agreement states that I have received a copy of this informed consent. My signature below indicates that I agree to participate in this study.
Hello from the students of Human and Computer Interaction. We are very grateful for your participation in this course project. It is designed to investigate and collect data for an evaluation of the American University of Paris library website. The purpose of this questionnaire is to gather information that can help improve the design of our library website. We will be focusing on research questions which address several aspects of the use of the library resources at AUP which includes: services, usability, reliability and overall effectiveness. You are being asked to complete a questionnaire to assist us in that regard. We expect it will take you approximately 5 to 10 minutes to complete the questionnaire.

* Required

1. Age? *
   - Less than 18
   - 18-25
   - More than 25

2. Sex? *
   - M
   - F

3. Nationality? *

4. You arrived at AUP as a: *
   - Freshman Student
   - Transfer Student
   - Visiting Student
   - Graduate Student

5. How long have you been studying at AUP including this year? *
   - 1st Semester
   - 1 year
   - 2 years
   - 3 years
   - 4 years
   - 5 years
   - More than 5 years

6. Major(s) and minor(s) you are studying at AUP? *
   - Art History
7. Time spent on the internet per day using a computer or smart phone device? *
   • Less than 1h a day
   • Between 1h and 3h a day
   • More than 3h a day

8. Did you take English bridge and learn how to use the library and library website? *
   • Yes
   • No

9. Have you ever been in the AUP library? *
   • Yes
   • No (Skip to question 15)

10. On average how many hours per week do you spend in the library?
    • Don't use regularly
    • Less than 1 hour
    • Between 1 and 5 hours
    • Between 5 and 10 hours
    • More than 10 hours

11. Why do you go to the library?
    • To study
    • To use the computers
    • To find books
    • To find online resources
    • To socialize
12. What do you use MOST to find information for your papers?
   • AUP library resources
   • Other library resources
   • Other online resources
13. What is the MOST useful for you in the library?
   • Digital resources
   • Physical resources
14. Have you ever used the library website? *
   • Yes
   • No (Skip to question 27)
15. What do you MOSTLY look for when on the AUP library website?
   • General information about the library
   • Books
   • Journals
   • E-books
   • Films
   • DVDs
16. Do you think the library website helps you save time for your research?
   • Yes
   • No
17. Does the AUP library website help you be more productive?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very productive</th>
<th>Productive</th>
<th>Neutral</th>
<th>Unproductive</th>
<th>Very Unproductive</th>
</tr>
</thead>
</table>

18. Does using the AUP library website make your research easier?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very Easy</th>
<th>Easy</th>
<th>Neutral</th>
<th>Difficult</th>
<th>Very Difficult</th>
</tr>
</thead>
</table>

19. How easily are you able to find resources on your research topics with the library website?

<table>
<thead>
<tr>
<th>Rate</th>
<th>Very Easy</th>
<th>Easy</th>
<th>Neutral</th>
<th>Difficult</th>
<th>Very Difficult</th>
</tr>
</thead>
</table>

20. How would you rate the design of the library homepage?
21. How would you rate the organization of links on the library website?

<table>
<thead>
<tr>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Effective</td>
</tr>
</tbody>
</table>

22. How would you rate the usability of the AUP library website?

<table>
<thead>
<tr>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Useful</td>
</tr>
</tbody>
</table>

23. Was it difficult to learn how to operate the AUP library website?

<table>
<thead>
<tr>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Easy</td>
</tr>
</tbody>
</table>

24. Can you rely on the library website to find information for your research?

<table>
<thead>
<tr>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Reliable</td>
</tr>
</tbody>
</table>

25. How would you rate the speed of the website?

<table>
<thead>
<tr>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Fast</td>
</tr>
</tbody>
</table>

26. Does the library service match your expectations and needs as a student?
27. Is there anything you would like to change at the library or library website? Is there anything you don't want to change?

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

28. Additional Comments?

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
<table>
<thead>
<tr>
<th>Description</th>
<th>Intended Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find the article &quot;India's surprising economic miracle&quot;. (<a href="#">The Economist US, 2 Oct 2010</a>)</td>
<td>See how easy is for the students, to use AUP’s subscription to external resources.</td>
</tr>
<tr>
<td>Find the books from William Shakespeare. And open the 3d on the list.</td>
<td>Analyzing the efficiency of the Libraries Search Engine.</td>
</tr>
<tr>
<td>Find when you can access the library building.</td>
<td>Analyzing the load of links in the Library’s main page.</td>
</tr>
<tr>
<td>Find how to use the Academic Film Collections.</td>
<td>Analyzing the naming of links in the Library’s pages.</td>
</tr>
</tbody>
</table>
APPENDIX D

For our last activity I'm going to give you a short questionnaire that I would like you to fill out. The questionnaire will give you a series of statements about the Library Web site. I would like you to rate your agreement with each statement.

For each statement, please mark over a number to indicate the level to which you agree with each statement. If you feel a statement isn't relevant to your experiences with the Web site, select the "N/A" (not applicable) for that item.

1 = Disagree strongly
7 = Agree strongly

<table>
<thead>
<tr>
<th>I. Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>The homepage is attractive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The overall site is attractive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The site's graphics are pleasing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The site has a good balance of graphics versus text</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The colors used throughout the site are attractive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The typography is attractive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>It is easy to find one's way around the site?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>You can get information quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>It is easy to remember where to find things</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>Information is layered effectively on different screens</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>Information is easy to read</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>Information is written in a style that suits me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>Screens have the right amount of information</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The site is designed with me in mind</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The site has characteristics that make it especially appealing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The site reflects progressive, leading edge design</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The site is well-suited to first-time visitors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>The site is well-suited to repeat visitors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>It is always clear what to do next</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>It is clear how screen elements work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>n/a</td>
</tr>
</tbody>
</table>
### APPENDIX E

#### Table 1: User Feedback Summary

<table>
<thead>
<tr>
<th>User</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggestion</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Rating</td>
<td></td>
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</tbody>
</table>

#### Table 2: User Navigation Analysis

<table>
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<tr>
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<th>2</th>
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<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation Difficulty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigation Efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigation Clarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 3: User Tasks Completion Time

<table>
<thead>
<tr>
<th>User</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Completion Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Completion Accuracy</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### Table 4: User Error Rate

<table>
<thead>
<tr>
<th>User</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 5: User Feedback on Website Design

<table>
<thead>
<tr>
<th>User</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Clarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Usability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Aesthetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 6: User Feedback on Website Performance

<table>
<thead>
<tr>
<th>User</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Speed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 7: User Feedback on Website Accessibility

<table>
<thead>
<tr>
<th>User</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility Features</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility Compliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Library Comparative Study

This study includes a comparison between the websites of AUP Library (http://library.aup.fr), the Cambridge University Library (http://www.lib.cam.ac.uk), and the Princeton library Website (http://library.princeton.edu). Each website was chosen for different strengths: Cambridge for design and usability and Princeton for the features it offers.

When visiting a library website (or any website for that matter) the first page visited is usually the homepage. The homepage is the root of the website - the navigation along the website and its features begins here! It should present information in a coherent and aesthetically pleasing manner. The user should be able to understand how the site is divided by a quick glance at the website. Consider the snapshot taken of the AUP Library homepage.

and then consider the snapshot of the Cambridge Library homepage.
The Cambridge University (CU) Library has an easy to use/understand website with the appropriate design and resources. Its design is pleasing and its organized in a very clear and coherent structure. From first glance at the home page, with the assistance of the drop-down menu, a user can understand how the site is structure and the general type of resources that are available.

In comparison with Cambridge Library homepage the AUP Library homepage seems disorganized, archaic, and unclear. Furthermore, CU library website uses simple terms when referring to features and instructions available on the site. The usage of easy to understand language along with a clear design allow for a smooth, quick, and fruitful navigation through the site.

The AUP library homepage, for instance, has a ‘search for’ and a ‘browse a list of’ section. This option is confusing, even more so when presented on the main page. The AUP library homepage is bland. It has no colors, little structure, font is small and not a single function is emphasized. It is, in blunt terms, not a pleasant website to visit - it looks like it belongs to a different decade.

On the other hand, CU library website has overcome all these issues. Their use of color, different font styles/sizes and structure allows any user to navigate easily and agreeably through the pages.

CU also incorporate up-to-date technology in their site, which allows users from all groups to browse, search and seek help in the best way possible.

However, It is important to mention the CU is significantly larger than AUP in every aspect and that their requirements are therefore somewhat different than that of AUP.

The CU library website has pages dedicated to new students and faculty. These include tutorials in written and video forms. It allows you to schedule a library tour guided by a library staff.
Overall, it explains very simply where the library is, when you can access it, how you can access it, which resources are available and for whom, and how to use the various functions and services that they offer. AUP library also offers information about location and hours and tutorials online.

The CU library website makes a relatively clear distinction between the website’s physical catalogue and digital catalogue (http://www.lib.cam.ac.uk/electronicresources/). Their digital library is organized extremely well - the resources available and tasks that can be performed are very clear. This is achieved by the use of font sizes plus style and simple layout. The AUP site falls short in this area. It is tremendously confusing when it comes to understanding what resources are available and where. Much of that information is squeezed into the main page in messy manner.

The CU library addresses the issue of disabilities.
Here the sites give links to pages that contain information about access to walking disabilities or directs you to assistive technology area to those with reading/writing disabilities.

The Princeton University website is more similar to the AUP website in style. Perhaps American and British higher education institutes have distinctively different website designs.

The terminology used in the website is similar the the AUP website, but different then Cambridge. However, the website, like Cambridge, by using background colors, font sizes, and a clear structure simplified browsing and navigation (as well as easier to use for beginners).

A function available at Princeton University (PU) allows users to sms/text the library staff (who use AIM or similar software) if they need help or have suggestions.
PU also offers access to Princeton University library digital collection -
University such as AUP which has limited physical resources should rely on digital collections. The one offered by Princeton is pleasing to look at and easy to navigate through. Clear structure and language, and contains photos and summaries of works and authors.

PU gives links to many other library catalogues -

Thus allowing bigger search range and availability of (re)sources.

Furthermore - the CU library offers a library toolbox (http://www.lib.cam.ac.uk/toolbox/) which offers a wide variety of digital tools ranging from widgets, APIs, tool bar to mobile interface. All of which can be useful and desirable by users of the AUP Library.
The AUP library lacks most notably in design and structure. The information is there (most of the time) but is badly arranged and hard to spot. Tools offered by the other institution should be considered as they may have great added value in AUP. AUP’s special needs and requirements as a result of its settings and size cannot be overstated - What the university and the library cannot supply physically should be offered digitally.
## Requirements Summary

<table>
<thead>
<tr>
<th>Design</th>
<th>Focus group</th>
<th>expert review</th>
<th>comparative study</th>
<th>on site observation</th>
<th>questionnaire test</th>
<th>usability test</th>
<th>Prototype 1</th>
<th>Prototype 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darker Background, more color</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use drop down menus, rather than large lists of information on homepage</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The homepage should represent a light version of all the resources available, highlighting the most important</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use the same style(css) links/images for a look and feel that is consistent with aup.fr</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mimic the sidebar and header navigation schema of aup.fr</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group information by category/major on homepage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Functionality

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Focus group</th>
<th>expert review</th>
<th>comparative study</th>
<th>on site observation</th>
<th>questionnaire test</th>
<th>usability test</th>
<th>Prototype 1</th>
<th>Prototype 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homepage has two view types, one for logged-in users and one for non-authenticated users. These two view types will have unique page elements, based on the current profile. View types save information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Rating system for resource usefulness, users can see other's ratings and make valuable resources part of their profile</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Chat with a Librarian/Ask a Question(e-mail form)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profile customization similar to iGoogle, with a set of available functions for users to turn on-off</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Library profiles that are major and subject specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Save favorite databases/ searches and pages with the option to put a little comment</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Search History</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide online help, organized by functionality including - context help, tutorials, and how-to links</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Login on Homepage</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>allows users to sms/text the library staff</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>consider offering a a library toolbox (<a href="http://www.lib.cam.ac.uk/toolbox/">http://www.lib.cam.ac.uk/toolbox/</a>) which offers a wide variety of digital tools ranging from widgets, APIs, toolbar to mobile interface</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

## Search

<table>
<thead>
<tr>
<th>Search</th>
<th>Focus group</th>
<th>expert review</th>
<th>comparative study</th>
<th>on site observation</th>
<th>questionnaire test</th>
<th>usability test</th>
<th>Prototype 1</th>
<th>Prototype 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>make clear the type of searches available (title, author, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adding an advanced search to the main page</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Fine tuning of the Voyager system, with specific attention to the language barrier between initiated and uninformed users</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Databases can be organised by majors/subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

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### Usability

<table>
<thead>
<tr>
<th>Requirement</th>
<th>X</th>
<th>O</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training session offered when students are starting a research project</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Improve search facility</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Improve presentation of search results</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Book search results should include an excerpt of the book displayed if available, and a Map of the location of the book in the library to make finding the resource easier</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Make clear distinction between physical and digital catalogue</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Simplify vocabulary (do not use jargon)</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

### Resources

<table>
<thead>
<tr>
<th>Requirement</th>
<th>X</th>
<th>O</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to more databases</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Better links to external resources</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Digital resources should make up for small physical size</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Give access to resources of partner libraries</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

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Other comment: may organise by people type, new students/older students

x: done; o: on its way; n: never.
FIRST PROTOTYPE
SECOND PROTOTYPE
librarynews

Academia, in collaboration with Hedegard Magazine, featured AUP in an article in their November 2013 issue entitled “Sans études américaines à deux pas de la tour Eiffel.”
learn more →

new! The Master of Arts in Global Communications announces specialization tracks in Fashion and in Visual & Material Culture.
learn more →

aupevents

Tuesday, Nov 20
Democracy and Its Disorders with Didi Gheewala
Thursday, Dec 5
How to Prepare for a Crisis and Communicate When One Happens
Wednesday, Dec 11
Achieving Corporate Integrity: G lobal Syndrome & Prudential Justice
Thursday, Dec 9
Arts Arena: Master's Writing Series
Jorge Luis Borges

Library Update

AUP Thanksgiving
Watch the broadcast here →

AUP Security Update
Online Databases

Academic Search Complete
Academic OneFile
Academic Search Elite
Arts & Humanities Citation Index
Art Index
Arts and Humanities Index
BIA and RILA (1997-2006)
BIOSIS Previews
Business Source Elite
CAIRN
Choice Reviews Online
CIAO
CNPJ Communications & Mass Media Complete
Custom Newspaper Database
Econlit
EconLit with full text
EconLit with Abstracts
EconLit with Full Text
EconLit with Full Text (1969-Current)
EconLit with Abstracts
EconLit with Full Text (1983-Current)
EconLit with Full Text (2000-Current)
EconLit with Abstracts (1983-Current)
EconLit with Abstracts (2000-Current)
EconLit with Abstracts (1983-Current)
EconLit with Abstracts (2000-Current)
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EconLit with Full Text (2000-Current)
EconLit with...
Human Attention in Digital Environments

Rodu, Claudia - 2011
Digital systems, such as phones, computers and PDAs, place continuous demands on our cognitive and perceptual systems. They offer information and interaction opportunities well above our processing abilities, and often [...] (99% found the resource useful)

Library > Computer Science > Human Computer Interaction > 813.52 Sa246

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