Emmanuel Kutorglo
Assistant Registrar (Webmaster) Publication Unit, University of Education, Winneba

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Reginald S.K. Agbo
Senior Assistant Registrar, University of Education, Winneba

Usability of the University of Education, Winneba Website

Abstract

A survey on the usability of the University of Education, Winneba website was carried out under four (4) main headings Ease-of-Navigation, Speed, Interactivity and Attitude. A five (5) point likert scale item was used to collect data under the headings. The questions were administered using a 'limesurvey' online tool hosted on the University main server and a link to them was placed on the homepage of the University of Education, Winneba website (www.uew.edu.gh). Data collected was exported into SPSS for analysis. On the whole, a mean score of 2.75 was obtained on the respondents' scores indicating that, though respondent seem to suggest that the University of Education, Winneba site was usable, a lot more needed to be done to make it really user friendly.

Keywords: *website survey, website usability survey, University of Education, Winneba Website*

Introduction

The influence of technology has been described in different parlance, forms and ways recently. The underlying fact however is that, technology has triggered a revolution in every aspect of man's life and has successfully made man dependent on it. Some may argue that, this is a form of enslavement if you wish. In education, technology now plays a major role on what is learnt, how things are learnt, when and where learning is done and now on who is learning and who is teaching…

The process of information exchange and delivery has also significantly changed over the years. Institutions the world over now depend on institutional websites for information exchange, and delivery and dissemination.

Website

A website is a group of pages on the World Wide Web devoted to a topic or related topics or a connected group of pages on the World Wide Web regarding a single entity, usually maintained by one person or an organization.

Websites today are about the important communication and marketing tools a university or an institution has. They have quickly become focal points for information access by students, alumni, faculty, staff and the community at large. Websites articulate the brand, culture, and credibility of institutions, as well as provide useful access to information on almost all topics from registration of students to alumni giving. The value of a website is felt by everyone from recruiters seeking to reach out to prospective students to researchers who depend on posted academic research to keep their information current. An emerging trend now is the ranking of University's standing in the commonwealth of institutions of higher learning using their websites.

Institutional websites are expected to contribute to the educational experience both on-campus and off-campus. Over the last several years, institutions of higher education have been faced with challenges on all fronts-including their websites. The typical institutional website has ballooned in size and complexity beyond the point of being easily maintained by a web manager or even a small group of web administration staff. Compounding the problem is today's focus on larger automated staff and student's records system requirements which comes with their own set of challenges for the Web Administrative Staff. Beyond these, there are increased expectations from prospective students, regular students, faculty, staff and alumni about what the website should provide.

At the University of Education, Winneba, in addition to its main site (www.uew.edu.gh), has a student's records system – OSIS, an accounting software – the TOPAZ, a Library Online catalogue, a Library repository and the list keeps growing. Currently, there is an online admissions system running for prospective students to use in applying for admission into programmes at the University. One can therefore say without any hint of contradiction that, the website is rapidly becoming UEW's most valuable place for information delivery and general communications.

Usability of the University of Education, Winneba Website
The University of Education, Winneba designed its first website in 2004. The design was done by a private company *Vitalinfonet* for the University. Later in 2005, the management of the site was given to students in the 'Ubuntu Club' to manage. Then in 2008 a substantive site administrator was appointed. The University site is hosted locally at Winneba on a server stationed at the IEDE café.

For the seven (7) years that the site has been in existence, it was after the appointment of a substantive site administrator in 2008 that activities of staff and students on the site became evident. A number of factors including publication of current news and events of the University and the automation of students' registration system could have accounted for this. Again the University site that had not been ranked for a long time got ranked for the first time in 2010 as the 8th best Institutional site in Ghana and amongst the first 100 Institutional sites in sub-Saharan African and has since been doing quite well in world ranking of University websites. Currently the site ranks 3rd best in Ghana, 49th in sub-Saharan African and 70th in Africa.

Even though the site seems to be doing well at the world ranking stages, comments and complaints from users of the site indicates that all might not be well with its users. Whiles complains of users not being able to locate one information or the other is on the rise, there is also a recent one of the university site taking so long to load when accessed outside the university network.

It is in the light of this the study to measure the usability of the University of Education, Winneba Website was commenced.

Statement of the problem
The University of Education, Winneba has a website where information is relayed to its stakeholders and feedback from them on varying topics received.

However, calls to the 'Webmaster' on where to find 'one' information or the other suggest that, there is a problem with its usability.

Research Questions
This study sought to answer the following questions:
- how easily were patrons of the University site able to find their way around?
- how long did it take for the site to load?
- did the site treat users as unique individuals? and
- at the end of using the site, were patrons persuaded to identify with the culture of UEW?

Purpose of the Study
- The purpose of the study is to determine how usable the university site is to its patrons.

Relevance of the study
It was hoped that the study will inform work at the web development unit to improve on the usability of the University of Education, Winneba website.

Review of relevant literature
Literature on decisions one need to make before designing a website and website usability were reviewed.

Web design decisions

The truth is that, "*No one wants to create bad web design. However, a number of factors, from opinionated clients to aging technology, show why it can happen.*"(Smiley Cat, 2011). Writing on eight (8) reasons why bad design decisions get made, he observed that, the site administrator having too much to do in limited time could negatively affect his/her output. The University of Education has one site administrator. This individual is the Journalist who goes round making reports of events and occasions, the photographer who takes relevant shots of these events, the writer of these stories, the editor of whatever is written, the programmer, the graphic artist, the content developer and virtually the all in all. As to whether he has enough time, equipment/resources and the needed support from stakeholders to do the job is another thing one could look at later.

Writing on the composition of a web development team, Patrick Lynch and Horton identified the following: Project stakeholder or sponsor, Web project manager, Account executive, Quality assurance tester, Usability lead, Information architect, Art director, Web graphic designer, Interactive designer (Flash, JavaScript, Ajax), Media specialist (photography, illustration, audiovisual, Adobe Flash), Web technology lead, Web application programmer (.Net, Java, php/Perl, Ruby), Web page engineer (xhtml, css, JavaScript, Ajax), Database administrator, Web systems expert or webmaster, Site production lead, html page coder, Site editor, Site copywriter and Content domain expert (content coordination, research). Even though they noted that, these roles could be played by one person for small web projects, it is important to have more than one person when the enterprise becomes a relatively large one.

In addition to this, Ralph and Wilson (2011) in a publication on Web Marketing today website identified twelve (12) Website Design Decisions a business or organization will need to make. These included determining one's purpose for having the site through giving the site an attractive 'look and feel' to building the final site.

It is very important to be clear on the purpose for which one sets out to develop and keep a website. Knowing the purpose for which one designs a website goes a long way to determine what is published on the site and how frequently the site content is developed, changed or updated. In addition to that, it also helps in crafting working policies that guide site use. The University of Education, Winneba website however lacks this.

The University of Education, Winneba has as its vision to be an internationally reputable institution for teacher education and research. It has a statute to guide the implementation of its mission which is to train competent professional teachers for all levels of education as well as conduct research disseminate knowledge and contribute to educational policy and development. In this statute procedures are outlined for systems, structures and rules to guide work at the University. Whiles there is documentation on everything including the composition of Junior Common Rooms in the University, nothing has been said about the University Website regarding its purpose and how it is administered.

In addition to having a clear purpose for maintaining a website, websites must have a clearly defined layout. However, it is taking too long to clearly define the site-map for the University of Education, Winneba sites. This is due partly to the non existence of an institutional organogram. It is not clear yet what the institutional culture is for the University of Education, Winneba to allow for the categorization of events and activities.

Website Structure Example
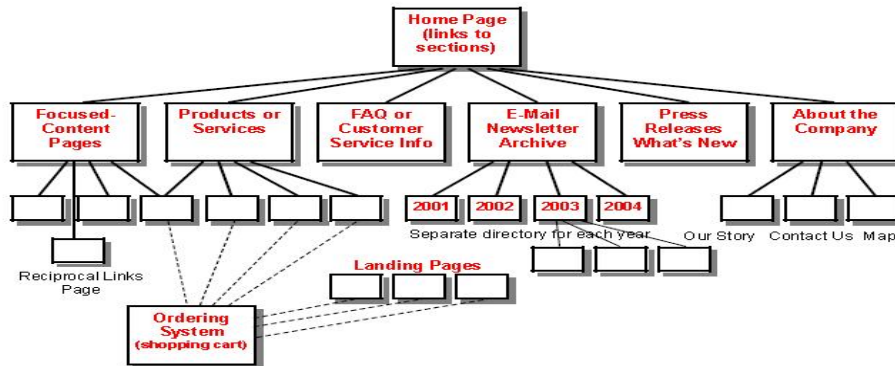
Usability of a website

The User effect consortium identifies four basic things that should be considered in assessing the usability of a website: Accessibility, Identity, Navigation, and Content. Is the website accessible at all time to client whenever and wherever it is needed? Has the site clearly identified the organization, its goals, mission, offerings/products etc.? Has it a clear navigation system – can users at all time tell where they are on the site, where they have been, and where they can go? Is the content accurate and appropriate or users might have to call back for further information?

The University of Education, Winneba site has been designed with some consistency in its look and content grouped in broad categories and themes. The use of graphics has been minimized to allow for faster load time. Flash contents are not present in the current design to ensure that users with no flash software can still access information from it. But to the extent that the content is adequate and appropriate to clients is difficult to tell. Similarly it is not easy to say users find their way through the site easily and that the site is available all the time to users. Currently the site lacks features that could allow visually impaired members of the community and outside it to use the site.

Methodology

Target Population

The target population for the study was all users of the University of Education, Winneba Website. The survey method was adopted because; the study was basically collecting the 'opinions' of people about the University site.

Instrument/Data collection

Online Survey was used to collect data on the usability of the University of Education,
Winneba website. A five-point likert scale questionnaire which scored as follows; strongly agree (5pts) agree (4pts) neutral (3pts) disagree (2pts) and strongly disagree (1pt) was used to collect views on positive statements on the website. These were developed in limesurvey software currently being hosted on university main server and a link to it placed on the homepage of the site. But for a button that said *'have your say'*, no announcement was made to draw attention of users. This was done to actually find out if the link would be noticed and if people will take interest in completing the question. Completing a questionnaire was strictly voluntary and was clearly captured in the introductory statement. The items at the end of the survey were exported into SPSS and the means for each set of responses determined.

Items

The questionnaire items were grouped under four broad headings: - Ease-of-Navigation, Speed, Interactivity and Attitude. Items in the first group sought to find out how easily users were able to find their way around when on the University of Education, Winneba Website. The second set of items was

meant to find out how fast the site loaded, when one was on it. The third set of items were to test if the site 'interacts' with the user through prompts etc. Then the final set of questions were to find out if the site was able to appeal to people in a way that would want them to want to identify with the University of Education, Winneba. The study generally sought to know what users (as in men and women, staff and students, prospective students, parents etc) have to say about the site. It therefore did not collect any demographic data on respondents regarding status, age, sex etc. Additionally, there were no items on ICT competency skill levels of users, and where and how people access the net from. In all, 47 persons participated in the survey and each respondent answered all the questionnaire items.

Per the design of the questionnaire items, the mean was used to determine the perception of users on the site. To ensure that the responses were evenly distributed, SPSS was used to draw a histogram with normal curve. Mean for each item was then computed using SPSS and the mean of means for each broad area was also computed to enable a conclusion to be made on user opinion on the usability of the University site.

Results
Table 1: Means of individual questionnaire items

xd Items	w1a	w1b	w1c	w1d	w2a	w2b	w2c	w2d	w3a	w3b	w3c	w3d	w4a	w4b	w4c
Mean	2.77	2.96	2.88	3.26	2.91	2.89	2.89	2.86	2.38	2.40	2.40	2.60	2.67	2.60	2.69

Table 2: Mean of means for items in broad themes

	Ease-of-Navigation	Speed	Interactivity	Attitude
Usability of the University of Education, Winneba Website	W1a =2.77 W2b =2.96 W3c =2.88 W1d =3.26	W2a = 2.91 W2b = 2.89 W2c = 2.89 W2d = 2.86	W3a = 2.38 W3b = 2.40 W3c = 2.40 W3d = 2.60	W4a = 2.67 W4b = 2.60 W4c = 2.69
Group Mean $\overline{X} = \frac{\sum x}{n}$	**2.9675 ~ 3.0**	**2.8875 ~ 3.0**	**2.445 ~ 2.0**	**2.653 ~ 3.0**

Mean of Group Means
$(3.0 + 3.0 + 2.0 + 3.0) / 4 =$ **2.75**

Discussion
In table 1, means for the various items were computed. From the table, the means for all the responses were less than 3. In the first category, items majority of respondents were either unsure or disagreed with the statement that, it is simple to accomplish a task one set out to do on the University site. The same holds for one's ability to find his/her way around easily, find information, but seem to suggest that, it was easy to learn to use the site. It is difficult at this point to conclude though that, users are not able to

navigate the site with ease as a result of poor navigation setting. There were no items to test the computer literacy skill level of respondents which I believe could have helped in drawing any such conclusion.

On the speed at which the site loads, the mean suggests that, respondents seemed to disagree with the statement that, the site loads fast. Whiles this could be the case, it is possible also that the internet access point of respondents could account for this. Currently in Ghana and on the University of Education, Winneba campuses, individuals access the internet using mobile broadband devises, mobile phones, or through other internet service providers. These come with different packages and speeds which could impact on the rate at which any site one visits loads.

Interactivity
From table 1, means of responses on interactivity suggest that, majority of users disagree with statements which sought to suggest that, the website offers customizations that treats individuals as unique individuals, who are provided with tailored contents and also receives adequate feedback from them. This seems to confirm discussions from literature, the site has not enough customized tools for use by varied audience.

On attitudes, the mean scores indicate that, most respondents disagree with suggestions that, the University Site builds relationship with users who use it.

From table 2, respondents could not agree nor disagree with statements that sought to measure the Ease-of-Navigation, Speed, Interactivity and Attitude of the University site. Putting all these together, a mean score of **2.75** was obtained on responses collected from users on the usability of the University of Education, Winneba website. Whiles this is a little higher than 2, which would indicate an outright disagreement with items suggesting that the site is easy to use, it also fall way shot of 4 which would indicate that they agreed the site is user friendly.

Conclusion and Recommendations
Even though the University of Education, Winneba website seem to be doing well in recent ranking of institutional websites survey results suggest a gap between its strong showing on web-ranking results and its usability. Since the major purpose for keeping a website is to reach out to stakeholders, it is important a lot more effort is put into making it more accessible, informative and current to user needs.

Whiles looking at this, it is important to take a look at the web administrator's outfit, it is important that he is well resourced to enable him perform his duties well. The number of people working on the corporate University of Education, Winneba site will have to be increased if they are currently not sufficient. Additionally, the general University community will have to be encouraged to assist with content creation and editing.
Finally, the need for the definition of a clear purpose statement and the composition or re-composition of a more representative website management committee is vital at this point than ever.

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