The role of identity and culture on web site design

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Abstract

Purpose – The purpose of this paper is to outline an instructional design approach for further development of an African ancestry learning center in order to enhance its educational utility. This is being done in an effort to use technology in transformative ways that extends the practices and opportunities for African Americans.

Design/methodology/approach – Assessing the needs of learners, performing a content analysis, and designing online resources and systems that meet learner’s needs accomplished this goal.

Findings – This paper identifies a design process whereby technology can be used to connect people of African descent to a lost history.

Originality/value – This paper provides a method to leverage technology for people of African descent to engage in genealogy research, while acknowledging their unique historical journey.

Keywords Design, Genealogy, National cultures, Internet, African Americans

In North America and the Caribbean, there is a growing interest in family history, ancestry, and genealogy (Fulkerson, 1995; Winston and Kittles, 2005). In searching ancestral history, it is frequently indicated the best method in beginning genealogy research is to work backwards “from known information about already-identified ancestors, in seeking their ancestors.” The road to discovery is not an easy one for people of African descent. The events of slavery make it difficult to retrace the history of former African slaves because for many the trail grows cold beyond 1870. Thus, working backwards, or the present to past methodology, alone can lead to many dead ends because of the unique history of people of African descent in North America.

The growing sophistications of deoxyribonucleic acid (DNA) research have opened the doors of discovery in the research of family ancestry. DNA research is often the foundational support for a forward or past to present methodology in genealogy research. However, this only answers the question of origin, and can prove to be a more difficult path to follow in tracing ancestral links to the present.

Background

People of African descent appear to be one of the most negatively impacted groups of the digital divide, thus making the internet an unlikely candidate in exploring identity, culture and unification among them. However, Everett (2002) in “The revolution will be digitized” examines the role of the internet in the phenomenal success of the 1997 Million Women Movement (MWM). Working and so-called “under-class” Black women
made ingenious uses of the new technology to further their own community uplift agendas. He states:

In circulating numerous paper copies of the MWM Web sites for their unconnected sisters in the 'hood, these computer literate and connected black women march members enacted their own brand of universal access to the technology. In effect, they deployed the traditional tactics of grassroots organizing to make the new technology responsive to the changing demands of community empowerment in an information economy. In this way, all the MWM sisters were provided with virtual computing power. Equipped with both print and online march instructions and specified platform issues, these inventive women, otherwise known as the information have-nots, nevertheless utilized the new information technologies to mobilize throngs as they marched on the streets of Philadelphia, upwards of a million strong, reclaiming their rights to participation in both the digital and material public spheres.

The MWM serves as an example of how the internet can be used to strengthen African American communities. However, the effectiveness of this medium is impacted by its design.

In designing interfaces to cater to people of African descent, there are several factors to be considered: the diversity of the audience and design techniques. The literature served a twofold purpose: to investigate the correlation between Black identity and knowledge acquisition and to demonstrate the impact of identity on the understanding and use of technology.

Situated learning and meaningful learning, serve as foundation for discussing Black identity and knowledge acquisition. Situated learning theory (Lave and Wenger, 1990) examines knowledge acquisition through active participation in the social, environmental, and cultural aspects of a situation. Through legitimate peripheral participation, learners are afforded knowledge in the communities of practice that they participate in that serves as tools to shape their understanding of the world around them (Driscoll, 2000). When a learner’s instructional knowledge is divorced from her communal configuration, developed from within her community of practice, her ability to associate her instruction to her already learned knowledge is hindered. As a result, the advantages of situated learning are not realized.

Ausubel’s meaningful reception learning theory is viewed as a process in which the learners connect new material with knowledge that already exists in memory. Meaningful reception learning operates under certain conditions: the learner must apply meaning to any learning task and materials to be learned must be potentially meaningful to what the learner already knows and how that knowledge relates to what she is being asked to learn (Driscoll, 2000). Meaningful learning becomes essential when the user first encounters new technical information. As knowledge is acquired, it is assimilated into the learner’s schema and operates as a script on which the learner builds with potential meaningful information. Meaningful reception learning continues to support how an individual’s experiences shape how she interprets new information.

Gothard (1999) explores the public relations facets of the African-American online community. Web sites such as Black Planet, Black America Web and AOL Black Voices that have developed online communities geared toward people of African descent, have gained rapid popularity over the years. There is a growing niche for offering Afro-centric products and services ranging from news, resources, and entertainment, bolstering an African American online community that brings connectivity content and commerce, to the global Black Diaspora (Gothard, 1999).
These online communities are often modeled similarly to communities of practice within the communities of people of African descent. Boykin (1986) defines the identity among communities of people of African descent as being a triple quandary. Thus, their identity is shaped by their experience in terms of the interplay among three realms of experiential negotiation: the mainstream experience, the minority experience, and the Black culture experience. Web sites developed with this in mind are then charged with presenting content that addresses the various facets of this community. Black Planet, Black America Web, and AOL Black Voices both provide community forums that include chat rooms, blogs, uplifting stories, history and similar elements that can be found to replicate and reinforce cultural ideologies. Web sites often visited by the African American online community offer interpretation and analysis of provided information, acting as a democratic inclusive medium (Gothard, 1999).

**African American genealogy**

“Why can’t I know my birthday?” Fredrick Douglass asked this question as child, thus revealing his yearnings to know not only his age but also his background (Blockson, 1977). Tracing African American ancestry research is a unique journey. The standard genealogy records and methods are applicable for people of African descent after 1870, since prior to that time African Americans were listed as property rather than being included in the census by name (White and Quednum, 2004). Some formal study of African American genealogy can be traced to historian Carter G. Woodson who authored books such as *Free Negro Heads of Families in the US Census of 1830*, which was published in 1925 (Rose and Eichholz, 2003). Though Woodson laid an early foundation, and the social historical and economical study of African-Americans families continued to develop, a study of the ancestral roots of individuals remained extremely limited (Rose and Eichholz, 2003). For many, the study of black genealogy becomes a daunting task. Genealogy search is fundamentally based on names. The varying status of people of African descent in the early history of the USA resulted in making a matter such as “names” complicated (Walker, 1977). Walker asserts this problem peculiar to black genealogy arises from the manner in which given names and surnames were acquired, thus it could not be assumed to have been consistent in families or even for one individual over a period of time. Blockson (1977), further displays the damages of the institution of slavery to black genealogy in explaining that many names were changed if sold off at a later age, and slaves were often rechristened by their new masters. Tracing the steps of a broken past, through records, breeding, plantations, slave ships, African coastal factories, and down to the actual tribe of origin is a dark road plagued with many obstacles.

**Problem statement**

People of African descent are often involved in some stage of their genealogy research with their immediate or extended family or are just inquisitive of their origins. Through this project, we hope to meet the growing demand of those attempting to piece together their history. Based upon the results, our goal was to enhance an online African ancestry learning center. Upon visiting the learning center, subjects will be able to:

- identify a process for conducting genealogy research;
- make contact either with their native land or with others of the same descent in the USA;
identify means of reconnecting with their African ancestry; and
share their findings of their genealogy studies with others.

Survey instrument
The survey, distributed to a sample population of the African ancestry client base, models data, collecting techniques of the US Census Bureau and the Pew Internet and American Life Project, to give a consistent means of measurement. The demographic categories are structured similar to the US Census Bureau categories, while the questions replicate those found in the Pew Internet and American Life Project. In addition, the identity questions of the instrument are adapted from Sellers et al. (1998). The remainder questions were derived from the literature. These efforts were sought to ensure that questions presented were valid, conclusive and reliable.

The survey instrument is composed of four main sections. The demographic section is designed to collect information varying from sex, race, to highest level of education obtained. The next section explores computer access among learners’ and gives them an opportunity to rate their level of proficiency in computer usage. Learners describe their views pertaining to their identity of one of African descent in the next section. Learners are then asked to rate their overall feelings of the internet regarding trust and privacy. The final section is dedicated to how the learners use the internet. In the development of the survey instrument, several rounds of revisions and input from the aforementioned parties were performed.

Subjects
The subjects were from a sample population of people of African decent living in the USA. The research population encompassed people over the age of 21, of African decent who were randomly selected from a pool of 3,000 online users. The survey instrument was created and utilized because of the need to identify the preferences and commonalities of the diverse population of African Ancestry clients.

Data collection methods
The study was conducted via the survey instrument described above, distributed through mail outs. African Ancestry distributed the instrument to ensure anonymity; however, the completed instruments were mailed to the researcher for assessment. Subjects were told to return the completed survey within two weeks of receipt in the pre-addressed envelope provided. The subjects received a reminder e-mail at the end of week one and all surveys were administered in English.

Data analysis
The data were analyzed using descriptive statistics. The response for each survey question was tabulated and the mean, mode, median, and standard deviations were determined. The responses to each question were summed and then divided by the total number of responses in the list to produce an arithmetic mean explaining the average responses to each question. To ensure that outliers did not skew the means, the mode was also calculated to determine the most frequent responses, thus presenting an overall perspective of what the population thought as a whole.
Results

A total of 100 surveys were mailed out, and 31 completed surveys were received, yielding a response rate of 31 percent. The survey instrument focused on several specific issues: demographics, perspectives on the identity of people of African descent, identity and the internet, and internet uses.

The resulting demographics of the majority of the participants were Black or African American female ranging in age from 55 to 59 with two adults and one child under 18-years old in the home. The participants on average had, at a minimum attained a bachelor’s degree, and reported an annual household income ranging from $75,000 to $99,000.

The participants were asked to report the location that they performed their computer activity for personal use, frequency of internet use, and their level of computer knowledge.

The participants reported utilizing the computer 90 percent at home, 50 percent at work and 9 percent at other locations. Participants labeled their knowledge of internet proficiency as intermediate; however, the frequency of their usage is described as daily.

Perspectives on identity of people of African descent

People of African descent reflected strong views in how they identified themselves. Participants disagreed with the notion that being of African decent had very little to do with how they felt about themselves and slightly disagreed that being of African descent was unimportant to their sense of what kind of person they are. However, participants overwhelmingly agreed that being of African decent was an important part of their self-image, an important reflection of which they are, and having a strong sense of belonging. Although participants strongly reported being proud of being of African descent, they were in strong disagreement with the idea that their views and thoughts generated were Afro-centric.

Participants strongly agreed to the importance of contacts, networks, community, friends, and family in gaining new knowledge and skills. When asked to compare their preference in the labeling of their identity as an individual versus one of African descent and then as Americans versus people of African descent living in the USA, participants faired neutral in their response. However, participants disagreed with a label of their identity as American and not one of the African descents.

Discussion

Overall, participants reported a marginal level of trust of information they viewed on the internet, regardless of what it was pertaining to, whom it was created by, or whether it was delivered from an African American source. One respondent stated:

The majority of things on the internet (even those that originated from Black Americans) are shown (usually) from or by a Caucasian or other group(s). Like quilting, southern cooking, even recipes that originated in the home of Blacks. There appears (to me) to be a conspiracy against African Americans not by doing anything to them necessarily, but by not telling or showing the true story (inventions stolen form blacks) – their part in the building of the Americas-the hero’s from war time-Blazing the West, getting the mail through the Indian Country when no one else could. I could go on and on. Oh and lets not forget the “Buffalo Soldiers;” when attempting to locate information on these and other topics related to Black Americans, it was close to impossible in the Public Library.
Additionally, participants were neutral with respect to how much privacy they felt when using the internet. Participants did agree that the internet could be used as a source to strengthen the African American community. Respondents expressed that the internet “allows African Americans to be in greater contact with each other especially in cases where we are few” and “for those that have access, it’s great for global information and knowledge sharing.” One respondent also observed “I have noticed that those of us using the internet share and quickly distribute lots of information about politics, current events and history that may get left out of general conversation. We keep each other up-to-date.” These findings paralleled the literature.

Internet uses
Online, African Americans were more likely to use the internet to conduct personal research. Subjects were neutral, however, to using the internet to seek religious, sports, or residential information. Researching products, leisure activity, and travel information, including booking reservations were moderately confirmed as resources for which subjects used the internet. Subjects disagreed with the notion of using the internet to partake in online games or to access music. Participants somewhat agreed to the use of the internet as a means of communication (sending and receiving e-mails), but remained neutral in their participation in instant messaging and online chats. Participants reported using the internet to obtain financial information and purchase products, but disagreed about participating in online auctions and buying/selling stocks.

Process for African American genealogy
Internet use as it related to employment was agreed upon by participants as a means to conduct work-related research and job training but neutral as a means of seeking employment. Participants sought internet use as a means of staying informed, acquiring political news or information, and visiting government web sites. Participants agreed on using the internet to seek health care information.

When asked what you like the most about the internet, one respondent expressed it best by simply stating “possibilities.” The majority of the responses regarding internet use faired neutral. There were no particular uses expressed across the board that respondents strongly agreed as using the internet to cater to, thus people of African descent cannot be generalized for using the internet in any one particular fashion. Instead, uses varied from e-mailing relatives in their homeland, researching product information before making purchase, to the shear convenience, quickness, information gathering available. Therefore, if the internet’s role is viewed as one that presents possibilities, it becomes apparent how the internet or its possibilities are expounded upon in the lives of people of African descent as they attempt to research a lost history.

In examining the project goals and objectives, the final design of developing an identified process was chosen as the best method to meet the needs of the subjects. The final needs analysis report identified four major types of services desired by people who were surveyed:

1. a process for genealogy research;
2. developing ancestral contacts, here and abroad;
reconnection with their ancestral homeland; and

an opportunity to share their results with others who have been similarly identified.

**Modeling a process**

For people of African descent, the proposed process model is a bi-directional approach. Thus, presenting a process that entails a piecemeal effort of backwards and forwards (the present to past and past to present) method. This places one of African descent in a better position to reconstruct a history that lack credible data to explain its rooted path.

**Past to present method**

Conducting genealogy research by starting as far back as you can trace and working to the present is a method presented by a number of genealogy groups around the world. In an effort not to duplicate well-researched, well-documented processes, it is our goal to make these resources available to African ancestry users.

**The next step**

Tracing African American ancestry research is a unique journey. The standard genealogy records and methods are applicable for people of African descent until 1870 (White and Quednum, 2004). Prior to that time, African Americans were not listed in the census by name, but only as property. Genealogist Burroughs (2001) presents additional steps needed to seek out genealogical history as it pertains to people of African descent.

**Present to past method**

African Ancestry presents an exceptional opportunity for people of African descent to discover their place of origin. African Ancestry uses advanced genetic research to reconstruct the past (Winston and Kittles, 2005). “We can reverse the destructive effects of slavery by looking to strengths in our past and beginning to make plans for our future” (Akbar, 1996).

Beginning with the results obtained, the learner can gather data about their tribe of origin, country, and region. This process is fueled by the links provided by African Ancestry on the “Contacts page” in the Learning Center. Most of the Africans enslaved in America came from contiguous areas in the Western part of the African continent where there had been a long history of cultural contact and a high degree of institutional similarity. Only a few generations removed from their homeland, would still show evidence of their culture roots (Sudarkasa, 1980). It is important to establish contact with place of origin, obtain their names, ways of life, and tradition to provide insight into their destination and names and traditions that were carried over well past slavery. There is an apparent strength of culture and heritage that African people brought to America’s plantations (Akbar, 1996).

The transatlantic slave trade is the next logical arena to explore. It provides genealogist of African descent a means of connecting their journey from Africa to America. Various databases exist such as The Trans-Atlantic Slave Trade a Database on CD-ROM by Eltis et al., which provides detail records of 27,233 trans-Atlantic slave ship voyages made between 1595 and 1866. Its format allows users to track information by time period and geographic region, and includes interactive maps that
allow viewers to chart the trans-Atlantic connections. The accompanying data contains materials about people on board, owners and captains, ships' characteristics, and the geographic trajectory of each voyage (Eltis et al., 1999). Although a link pertaining to transatlantic slave trade information would be featured on the Contacts page, it could also be provided as a member's only feature.

Filling in the gray spots
Reconstructing African American genealogy history during the period of slavery is a challenge to be performed in parts. These efforts are best achieved if coordinated as groups. A constant is the notion that the strength in the lives of people of African descent is unity (Hill, 1999). The “sharing page” featuring chat rooms and blogs, will give such an opportunity for those stemming from similar origins to discuss, exchange information and post their works and findings. There is a shared organizational baseline that enables people of African descent to create culture patterns (Hill, 1999).

Recommendations
Contacts
In the search for ancestry, there arises a need to reconnect the severed ties with ancestors still within the country land. The “contacts page” then becomes a resource where users can seek out information to make reconnecting possible and easier, thus serving as a portal. Within this page, the user would find information pertaining to books, internet sources, ethnic groups, cultural endeavors, contacts to the embassy and, etc. for their respective country.

Sharing
Providing members with an opportunity to share their research has several advantages such as connecting with others with similar ancestry and preventing one from reinventing the wheel. There is a strong desire to not only reconnect with ancestry abroad, but also those within the states. People of African descent are characterized by professing their individuality while operating as a community (Boykin, 1986). Online communities provide opportunities to rebuild the African American bonds, destroyed by slavery. A chat feature paves the way for such dialogue. Many people African descent must explore the same path in their genealogy research, resulting, often, in duplicated efforts. Those that have successfully traced their ancestry or that have developed useful strategies, commonly enjoy sharing their works. Those beginning their research or that have reached a dead end with similar origins can benefit from such collaboration. Features such as blogs provide users with immeasurable power to seek strength within themselves as they journey through a difficult past.

Conclusion
In the end, there is no silver bullet; there is no one perfect method that will guarantee success for everyone in tracing their roots. The study of genealogy research for people of African descent is fickle in nature regarding what will be discovered. Some people are lucky, on their search they will find the one thread, that when followed leads them through a route of discovery linking an ancestral path back through slavery and down to their tribe of origin. Others may never come across such a thread, but instead have to intertwine several threads composed of questionable information. Either way the
process of discovery, the journey through one’s history can be an enlightening one. The design of internet technology acts a vehicle on this journey to widen the narrow path of genealogy research for people of African descent.

References


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Further reading

About the authors

Wanda Eugene is a doctoral student in the Human Centered Computing Lab at Auburn University interested in how cultural, social, and personal surroundings affect the appropriation of computational artifacts and ideas and how they can serve as a resource for the design of new technologies. Her earlier work focused upon the design and development of content, curriculum, and online resources to enhance the educational utility of African American genealogy research as well as assessing how new e-learning tools can be designed to meet the needs of learners of African descent. She received a Bachelor’s in Electrical Engineering (2002) from Florida State University, a Master’s in Industrial Engineering (2003) from the Florida Agricultural and Mechanical University, and a Master’s in Interdisciplinary Studies specializing in Instructional Technology and African American Studies (2006) from George Mason University. Wanda Eugene is the corresponding author and can be contacted at: eugenwa@auburn.edu

Kevin Clark received a Bachelor’s and Master’s degree in Computer Science from North Carolina State University, and a PhD in Instructional Systems from Pennsylvania State University. Prior to George Mason University, he worked for an educational software company and was a Faculty member at San Jose State University. His corporate experience included positions as a software tester, consultant, content designer, program manager, and founder/director of a non-profit youth program. His research interests include the application of instructional design principles and learning theories to the design and development of online learning environments. He is also interested in the integration of technology into non-formal learning environments as well as issues related to digital equity. His recent research activities include projects funded by the Hoop Magic Foundation, WIN-WIN Strategies Foundation, National Science Foundation, US Forest Service, and Bureau of Land Management. He and his work have been honored by the Education Technology Think Tank and the Congressional Black Caucus Education Braintrust for his outstanding technology leadership in the community, and has recently selected as a Fulbright Senior Specialist Roster Candidate.

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