WEB 2.0: A TOOL FOR USER EDUCATION AND INSTRUCTIONS IN LIBRARY SERVICES

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Abstract
This paper examined the use of available Web 2.0 technologies for delivering library user education and instructions in academic libraries. This paper described, identified and explained the concept of user education, library instruction, traditional methods of delivery, and Web 2.0 technologies availability, its features, application with its benefits. It is evident that Web 2.0 tools support and enhance the innovative and efficient delivery of library user education and instruction. Some of these technologies are assumed to successfully attract new patrons to the library, others may help to retain existing users or make libraries become more important as centres of learning and information resources that is indispensable in academic institutions. The study recommended among others that instructional librarians should be ready to adopt Web 2.0 tools for effective delivery of library education or instruction to the users so as to open a way to interact/share information with users.

Keywords: Web 2.0 technologies, Library education, Library user education, Library instruction, Library programme, Information literacy

Introduction

Libraries the world over, in particular, academic libraries support the teaching and research needs of institutions they serve. It is the libraries' responsibility to ensure that the use of its information sources, resources and services are maximized to benefit ~~its~~ users, hence the necessity for user education programmes. User education can be defined as various programmes of instruction, education, and exploration provided by libraries to users for more effective, efficient and independent use of information sources and service accessibility (Gichora & Kwanya, 2015). -Specific components of user education entail familiarizing and educating users on information seeking skills that can assist in retrieving materials manually or electronically using online public access catalogues and CD-ROMs.

The revolution brought by information and communication technology has resulted to change in the way libraries activities and operations are carried out. Use education was usually conducted in a face to face manner before the adoption of ICTs by academic libraries. In line with the integration of technologies into education generally, the delivery of user education in academic libraries now involve the use of one or two technologies, especially Web 2.0

Web 2.0 is a network or platform spanning all connected devices. Web 2.0 technologies have blurred the line between producers and consumers of content and have shifted attention from access to information toward access to other people (Brown & Adler, 2008). Emphasizing a participatory culture, Web 2.0 technologies encourage and enable teachers and learners to share ideas and collaborate in innovative ways. It also presents challenges for educators to review the conventional means of teaching and learning by transforming educational practices through supporting more active and meaningful learning in bid to promote the concept of “learning to be” as well as “learning about.”

Web 2.0 technologies make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing own data and services in a form that allows remixing by others, creating network effects through an 'architecture of participation' and going beyond the page metaphor of Web 1.0 to deliver rich user experiences (O'Reilly, 2005) as cited in (Kehinde & Tella, 2012; Tella & Oyegunle, 2016) . Applications of Web 2.0 technologies are playing a significant role to enhance the best practices of library activities as well as online digital reference services. They are dominating the personal and professional lives of millions of users. The popularity of the technologies have drawn the attention and changed the ways libraries, museums, archives and other cultural heritage organizations work. As librarianship changes and adapts to the needs of the internet generation, use of these technologies has become an essential feature in the work areas of the professionals (Baro, Idiodi, & Godfrey, 2012). Web 2.0 technologies have provided an innovative alternative in practices to the conventional way of discharging services in the library profession. Web 2.0 technologies presently offered by libraries include Blogs, Wikis, RSS, Podcasts, Videocasts, Instant Messaging, Social Network Services (SNS) and others (Baro, Idiodi & Godfrey, 2012). The use of Web 2.0 ~~tools~~ technologies brought substantive change in library collection and services. The library collection ~~is~~ has changed, becoming more interactive and fully accessible. The library services are changing, focusing more on facilitating information dissemination and retrieval rather than providing controlled access to it (Arora, 2012).

However, many libraries, be it academic, special, public, school, and research, still do not make use of the opportunities provided by Web 2.0 technologies to promote and facilitate the delivery of user education and instruction. Hence, there is need to explore emerging technologies, like Web 2.0, for user education and instructional environments in library services (Bower, 2015). This paper, therefore, discussed and focused on user education on library instruction, the conventional methods of delivery of user education in the library, Web 2.0 technologies availability features and application. Conclusions and recommendations were put forward to encourage the use of Web 2.0 for library user education process.

Concept of User Education in Library Services

User education is an attempt to change the behaviour of an individual in developing a search strategy to retrieve useful information. Individuals learn the skills of information retrieval in the~~ir~~ formative years at school and are exposed to how to use the catalogue or the Dewey Decimal System in primary school. However, there's a difference between learning skills specific to the task at hand, and learning skills which will enable you to adapt to a future learning situation (Widodo, 2009). Generally, the skills learned in formative years were specific to that library or even to the subject being researched upon at the time. There was often no change of behaviour on the part of the student, rather an acceptance that information was found to suit the assignment. Shinga and Sharma (2015) defined user education as various programmes of instruction, education and exploration provided by libraries to users as a more effective means ~~to~~ of educating ~~the user~~ or introducing them to how they can make the best use of the library. In user education, library staff introduces the user to the~~ir~~ services, operations, rule and regulations etc that is in operation. Lectures, library tour, printed booklet, guides, seminars and workshops, orientation week, display and audio-visual method etc are the techniques of user education.

The objectives of user education can be summarised as follows:

- Introduce students to facilities and sources in the library to meet their needs and make students independent users and learners in the library.
- Develop library skills of users. To develop self-sufficient users. To establish the library as the centre of academic activity.
- Provide basic understanding of the library so that users can make efficient use of library material and services.

- Introduce library to first year students.
- Educate users about information sources and resources and how to exploit such resources effectively and efficiently.

Aside of the objectives listed above, it should also be noted that people talk about the belief that to know how to use the library is an essential part of education-for-life; which is to prepare students for the continuing process of self-education once the formal process has been completed. In fact the American Library Association issued a policy statement making it clear that *all* types of libraries, not just university and high school libraries, needed to be responsible for user education; in part, it says, "It is essential that libraries of all types accept the responsibility of providing people with opportunities to understand the organization of information. The responsibility of educating users in successful information location demands the same administrative, funding and staffing support as do more traditional programs."

Another importance and objectives of user education was made by Otis Robinson who asserted that "a librarian should be more than a keeper of books; he should be an educator... No such librarian is fit for his place unless he holds himself responsible for the library education of his students. All that is taught in college amounts to very little; but if we can send students out self-reliant in their investigations, we have accomplished very much". Harold Tuckett defined the self-reliant user as a successful bibliographic problem-solver who learns through information use. This seems to fit Robinson's meaning- they are users who don't bypass the librarian, thinking they know how to use the library without assistance; instead, self-reliant library users know and use the reference librarian as one of the resources that can aid them.

As mentioned in the background, the integration of ICTs into library activities and operations has changed the way and technique in which library user education is being conducted. Apart from the traditional methods and techniques, Web 2.0 technologies are now being used. In order to capitalize on Web 2.0 technologies, librarians and educators need to first understand the sorts of Web 2.0 technologies that are available for library user education and their various features (Redecker, Ala---Mutka, Bacigalupo, Ferrari, & Punie, 2009). Therefore, the next section focuses discussion on Web 2.0 technologies being use by libraries to facilitate teaching and learning.

Utilizing Web 2.0 Technologies for User Education in Library Services

The term Web 2.0 refers to the development of online services that encourage collaboration, communication and information sharing. It represents a shift from the passive experience of static "read only" web pages to the participatory experience of dynamic and interactive web pages. In other words, Web 2.0 reflects changes in how we use the web rather than describing any technical or structural change Chartered Institute of Library and Information Professionals (CILIP, n. d.). The service types of Web 2.0 and corresponding examples are: Social networking (Facebook, Bebo), Video and photo sharing (YouTube, Flickr), Blogging (Blogger, Wordpress), Micro-blogging (Twitter, Tumblr), Social bookmarking (del.icio.us, Digg), Wikis (Peanut Butter, TikiWiki), Resource organising (Pageflakes, Netvibes) (CILIP, n. d.). Many Web 2.0 services are often referred to as "social media" due to the~~ir~~ role it plays in supporting communication and building online communities.

Web 2.0 services are increasingly becoming embedded in many areas of life as more people, from teenagers to national governments, recognize and harness these powerful communication tools (Exeter et al., 2012). Similarly, libraries and librarians all over the world are using Web2.0 technologies to promote library users' education services, share information, and engage with users and network with colleagues, on a global scale. It is believe that social media websites have great potential to enhance the delivery of library services and to contribute to the professional development of library staff. As service users increasingly come to expect interactive online services in all spheres of life, libraries must keep pace with developments elsewhere in order ensuring a responsive service for the future.

There are features that make Web 2.0 compatible with the delivery of library user education and instruction. Web 2.0 websites typically include some of the following features referred to by McAfee (2006) with acronym SLATES meaning search, links, authoring, tags, extensions, signals.
Search: the ease of finding information through keyword search which makes the platform valuable.
Links: guides to important pieces of information. The best pages are the most frequently linked to.
Authoring: the ability to create constantly updating content over a platform that is shifted from being the creation of a few to being the constantly updated, interlinked work. In Wikis, the content is iterative in the sense that the people undo and redo each other's work. In blogs, content is cumulative in that posts and comments of individuals are accumulated over time.
Tags: categorization of content by creating tags that are simple, one-word descriptions to facilitate searching and avoid rigid, pre-made categories.
Extensions: automation of some of the work and pattern matching by using algorithms e.g. amazon.com recommendations.
Signals: the use of RSS (Really Simple Syndication) technology to notify users with any changes of the content by sending e-mails to them."

Mohmed (2009) also identified other characteristics of Web 2.0 technologies that make them compatible with the delivery of library user education as follows:

Participation: Every aspect of Web 2.0 is driven by participation. The transition to Web 2.0 was enabled by the emergence of platforms such as blogging, social networks, and free image and video uploading, that collectively allowed extremely easy content creation and sharing by anyone. Participatory architecture is an architecture where user can add or edit value to the application according to their requirement.
Contrary to the traditional web which was somewhat one-sided, with a flow of content from the provider to viewer, Web2.0 allows the users to actively participate online.
Standards: Standards provide an essential platform for Web 2.0. Common interfaces for accessing content and applications are the glue that allows integration across the many elements of the emergent web.
Decentralization: Web 2.0 is decentralized in its architecture, participation, and usage. Power and flexibility emerges from distributing applications and content over many computers and systems, rather than maintaining them on centralized systems. It is about communication and facilitating community.
Openness: The world of Web 2.0 has only become possible through a spirit of openness whereby developers and companies provide open, transparent access to their applications and content.
Modularity: Web 2.0 is the antithesis of the monolithic. It emerges from many, many components or modules that are designed to link and integrate with others, together building a whole that is greater than the sum of its parts. Users are able to pick and choose from a set of interoperating components in order to build something that meets their needs.
User Control: A primary direction of Web 2.0 is for users to control the content they create, the data captured about their web activities, and their identity. This powerful trend is driven by the clear desires of participants.
Identity: Identity is a critical element of both Web 2.0 and the future direction of the internet. We can increasingly choose to represent our identities however we please, across interactions, virtual worlds, and social networks. We can also own and verify our real identities in transactions if we choose.

Strategies for Web 2.0 Implementation for User Education in Library Services
Web 2.0 encompasses several technologies and services which are useful to provide and facilitate the delivery of library user education. Some of them are discuss here along with how they can be applied.

Blogs: A blog is a website where library users can enter their thoughts, ideas, suggestions, and comments (Singha & Sharma, 2015). Blog can be used to promote library services providing links to recommended

sources, listing book reviews, promoting entertainment, providing news for LIS professionals, initiating book discussions, facilitating communication amongst library users and encouraging the development of a community (Mohmed, 2009). Blog entry might contain text, images or links to other blogs and web pages. Any library user can publish a blog post easily and cheaply through a web interface, and any reader can place a comment on a blog post.

Applications of Blog in Library User Education

- Blogs serve as a platform where the users can file their concerns, queries and suggestions regarding the services and activities of the library,
- Blogs can also be used for the collection development where the users request the resources,
- Blogs can be used tools for marketing of the information as well as the library,
- Can be used as tool for posting Minutes of the Meetings for necessary actions,
- Blogs can serve as discussion forum.

SNSs (social networking sites) encourage a variety of library user education services such as library user education announcements, posting news, updating resources, communicating with users, providing reference service, collaborating on projects, for user services, sending alerts about requested materials, as a way to share information about professional/educational development opportunities, for cataloging, for internal updates, and for networking with other staff, libraries, and library-relevant organizations (Singha and Sharma, 2015).

Application of SNSs in Library User Education

- It can serve as platform to share user education resources,
- It can serve as announcement tool for user education programme,
- It can be used to give back to the users on user education assignments.
- Libraries can create a page to reach to new users
- Social networking could enable librarians and patrons not only to interact, but to share and change resources dynamically in an electronic medium.
- For building network among the interested group of users in discussing the common interest
- User content can be added to the library catalogue, including users book reviews or other comments

Really Simple Syndication (RSS): RSS feed through library can offer a variety of services such as workshops/classes, to market ideas, activities, event announcement, new acquisitions, exhibitions, to share library news and content, as well as to gather and distribute related information from other web sources (Mohmed, 2009). LIS professionals can use RSS feeds for Current Awareness Service and SDI (Selective Dissemination of Information) services. This resembles the traditional library services namely CAS and SDI.

Applications of RSS in Library User Education

- Announcement of the availability of new books and other resources in a given subject area.
- Librarians can subscribe to RSS from the sources for compiling their customized alerts.
- Promote events organized in the library for Library Users.
- Enhance Library Instruction for different Web 2.0, Library 2.0, Blogs, Wikis, RSS, Tagging, Podcasting, IM programs/courses by integrating appropriate resources.
- Announce availability of new research and learning opportunities in various academic/ research departments.
- Integrating library services through RSS feeds.

Podcasting: A podcast is a series of audio or video digital-media files which is distributed over the Internet by syndicated download, through Web feeds, to portable media players and personal computers (Mohmed, 2009). Though the same content may also be made available by direct download or streaming, a podcast is

distinguished from other digital-media formats by its ability to be syndicated, subscribed to, and downloaded automatically when new content is added.
As Singha and Sharma (2015) postulated, podcasts can be facilitated through a variety of library services like provision of weekly updates new arrival book, lectures, tutorials, events, conferences, in information literacy instruction, library marketing, library instruction, keeping patrons up to date with library information, library guides and tours. Libraries can distribute iPods to their users to intensify their podcasting services and resources.

Applications of Podcast in Library User Education

- Podcasts promotional recordings about the library's services and programs.
- Podcast highlights about new resources
- Podcasts enable librarians to share information with anyone at any time.
- Podcasting can be a publishing tool for users and librarians' oral presentations.

Instant Messaging (IM): IM is a form of real-time communication between two or more people based on typed text, images etc. IM has become increasingly popular due to its quick response time, its ease of use, and possibility of multitasking. It is estimated that there are several millions of IM users, using for various purposes viz: simple requests and responses, scheduling face to face meetings, or just to check the availability of colleagues and friends.

Application of Instant Messaging in Library User Education

- Instant clarifications for the Questions from users and vice versa.
- Online meetings
- For providing virtual reference services.

Tagging: A tag is a keyword that is added to a digital object (e.g. a website, picture or video clip) to describe it, but not as part of a formal classification system. The concept of tagging has been widened far beyond website bookmarking, and services like Flickr (Photos), YouTube (video) and Audio (podcasts) allow a variety of digital artifacts to be socially tagged.

Applications of Tagging in Library User Education

- Tagging can be applied to the LMS for editing the subject headings from the user point of view and thereby enhancing the indexing and relevancy of the searches, making the collection more dynamic.
- Tagging would greatly facilitate the lateral searching.

Benefits of Web 2.0 Technologies ~~in~~ for User Education in Library Services

Reaching your audience: The global nature of web based services means that libraries can reach a vast audience, serving more people in the virtual sphere than would be possible at a physical location (CILIP, nd*). For example, by establishing a presence on social media websites, libraries can reach beyond the 'walled garden' to interact with users in online spaces that they are already visiting, rather than passively waiting for users to seek us out. A strong web presence, including representation on social media sites, improves awareness of library services and contributes to a progressive and modern image, which may in turn lead to increased physical visits.

Faster time to Advertise Library User Education- The information environment within which libraries are functioning today is changing faster than ever before. Library 2.0 is a concept of a library service intended towards meeting the needs and expectations of library users faster through its tools such as RSS, Blogs, Social networks etc. Libraries are required to go beyond the needs, wants, and demands of their users and should try to fulfill them by anticipating them as far as possible.

Increased responsiveness- Increased responses are because publishing is easy; so you can focus on content delivery. You can create, update, and publish information on a blog from any computer that's connected to

the Internet. Weblog encourages readers to comment. The content can be entered in plain text –and design templates are available. There is no need to have special servers or software installed on your computer.

Closer relationship with customers- Library 2.0 is a user-centered virtual community. Users interact with one another and with the instructional librarians and create more content in less time. User participation in the library user education activities builds a relationship with the users of the library. Relationship is built during the information flow from the user back to the library like comments and questions on library blogs, users uploading their own historical photos to Flickr to create community photo archives and allowing users to review and rate books in the library's catalogue.

Raising awareness and promotion Web2.0 services can be updated quickly and published instantly. This means that time delays associated with traditional web publishing, where IT departments often retain control over website content, can be ignored. For example, by using blogs or microblogs, librarians can go straight to the user with news and up to date information related to new services, materials or service developments.

Professional development

Librarians have been using the internet to communicate, share ideas and offer support for a long time, mainly by using the email network. The advent of Web2.0 technologies presents new opportunities for large scale professional collaboration and cooperation. Many librarians now use Twitter, for example, to get information about activities and initiatives going on elsewhere; and to share ideas or ask colleagues for support. This rapidly expanding network draws on the experience of colleagues at an international level, allowing for the widespread sharing of information and expertise, which then feeds into service developments at a local level.

Conclusion

This paper has examined the use of available Web 2.0 technologies for delivering library user education and instructions in academic libraries. The paper has been able to describe the concept of user education and library instruction, identified the traditional methods of delivering user education in the library, identified and explained the Web 2.0 technologies available to facilitate user education delivery, their features and application together with their benefits to the delivery user education or library instruction. With these discussions, it is evident that Web 2.0 tools support and enhance the innovative and efficient delivery of library user education/instruction to the library users. Some of these technologies are assumed to successfully attract new patrons to the library, others may help to retain existing users or make libraries become more important as centres learning and information resources that is indispensable in academic institutions.

Recommendations

Web 2.0 is not just a technology or a thing but a new paradigm and innovative ways provided by technologies to promote library user education and instruction and makes it more effective. The heart of Library 2.0 is user-centered change. Therefore, there is need for implantation of Web 2.0 technologies in all academic libraries.

Many Web 2.0 tools are freely available in the web and students are already taking advantage of them. They can participate, contribute and collaborate in the creation of a new content over the web. Moreover, there is no financial constraint in using these tools. Thus, University Authority should support the use of these existing technologies rather than developing new technologies from scratch.

The Web 2.0 tools are good in supporting and enhancing the excellent as well as innovative and more efficient library instruction to the users and will also help in reaching out to new potential users. Instructional librarians should therefore be ready to adopt Web 2.0 tools for effective delivery of library education or instruction to the users so as to opens a way to interact/share information with users.

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