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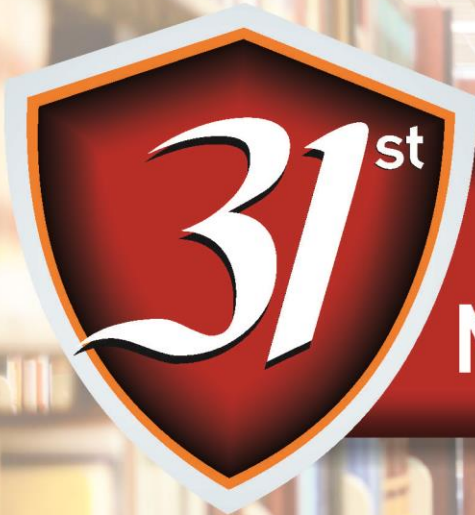
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THE SCHOOL LIBRARY AS A TRANSFROMATION ROOM INTO AN AVATAR FOR ACTIVE LEARNING

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Abstract

Avatars are 3 dimensional animations that represent individual in the Virtual World. Engaging avatars for learning with the aid of Web and Library 2.0, makes learning in the library become more engaging, active, collaborative and captivating. The study hinged the use of avatars on the need by children and adolescents to overcome library anxiety and their quests for anonymity. With the aid of avatar-mediated library service which encourages higher level of anonymity, students are courageous and they can express themselves without any inhibition knowing that their privacy is protected and they have a sense of 'intimacy' with the avatar librarian depicted by 3D animations as their favorite cartoon and comic heroes or some inspiring concepts.

It is recommended that librarians should upgrade their ICT skills and explore studies on Second Life, a popular social media platform that encourages the use of avatars for interraction and communication by its residents. Authors of this work have not been able to register on Second Life, though several attempts have been made. The reason is not yet known. This raises the need to study the procedures for becoming an avatar on Second Life. Likewise, the authors could not lay hands on any literature from Nigeria making reference to SL. It is estimated that 90 percent of UK higher education institutions have some kind of SL presence. The largest SL campus is that of the University of Texas, which committed to SL as a major learning environment in 2009 (Aujla, 2009). Since an informal approach could be adopted to communicate on SL platform, librarians should be willing to jettison the status quo and adopt names of children's comic and cartoon heroes such as Ben Ten, City Hunter, Dora, Lion King Spiderman and many more as their own avatar name instead of the Librarian nomenclatures. This according to the paper has psychological effect on students that they are not chatting with the adults who may want to scrutinize their perceptions but their cartoon or comic heroes who has answers to all reference queries. This alleviates fear and encourages active learning.

Introduction

The aptness of Information and Communication Technologies (ICTs) to proffer solution to human challenges has been documented in literature (Fatoki, 2005; Aina, Mutala & Tiamiyu, 2008). Despite the enormity of the moribund state of school libraries in Nigeria (Aniebo 2006; Selbar, et al., 2009), ICTs could, to a very large extent arrest the nose-diving trend experienced in school libraries. With the introduction of ICT, three dimensional animations have been adopted to revamp students' interest in libraries. Educators earlier found that children and adolescents are fascinated by graphics especially motion pictures, hence the introduction of 3 dimensional animations to make learning very interactive and engaging. Retention and recall are also rated as higher with 3D animations and games than it is in traditional learning (Knobloch, 2005). This discovery has influenced librarians to engage the use of avatars in engaging students for active learning in libraries (Guernsey, 2014). According to Guernsey, adolescents are free to express themselves before animations and are excited to accept instructions from them.

Avatars have been described as virtual representation of persons with the aid of three dimensional animations on virtual platform (Peterson, 2005). Persons could be represented by their cartoon or comic heroes or their concepts of life. The use of avatar to mediate in library service to children and teenagers in line with this paper is hinged on two factors: library anxiety and the quest for privacy by students (Mellon, 1986; Mizrachi, 2010) which hinder students from coming to the library. Avatars are used in chat reference for higher speed of interraction, detailed description of information and users are emboldened to make their demand without fear (Lee 2004; Lippincott 2006). Benefits of digital reference services have also been documented by Janes (2002). Ruppel and Fagan (2002) found that users rated chat reference highly due to the convenient access to a reference librarian. Pomerantz and Luo (2006) also noted the users' ability to remain anonymous. Library anxiety was first identified by Mellon (1986) as the negative and overwhelming feelings many students experience when needing to use the library for an information need. Library anxiety is the feeling of being overwhelmed, intimidated, nervous, uncertain, or confused when using or contemplating use of the library and its resources to satisfy an information need. It is a state-based anxiety that can result in misconceptions or misapplication of library resources, procrastination, and avoidance of library tasks (Mizrachi, 2010). Library anxiety is characterized by ruminations, tension, fear, feelings of uncertainty and helplessness, negative self-defeating thoughts, and mental disorganization, which debilitate information literacy (Onwuegbuzie & Jiao, 2000). Several scholars have found that users do not like approaching the librarian with questions out of fear of appearing stupid (Radford 1999; Ruppel and Fagan 2002) or because of the unwelcoming body language of the librarian (Nilsen and Ross 2006; Radford 1999). The perception that secondary school students have about teachers who they see as disciplinarian may also be transferred to librarians and consequently interfere with their reference queries. Pomerantz (2005) has found that the face-to-face reference interaction is often the solution of last resort arrived at only after all other means of resolving an information need has been exhausted.

Students, especially the adolescents have pertinent questions which may be very personal to them. The fear of being stigmatized or given unrequested counsel by the adult persons in the library could be one of the reasons the school library users may want to prefer a platform which will secure their privacy. As Williams (1988) affirmed, anonymity is a part of human existence and everyday experience. The American Library Association defines a right to privacy in a library, whether physical or virtual, as "the right to open inquiry without having the subject of one's interest examined or scrutinized by others. Alan (1967) conceptualized individual privacy as having four basic states of solitude; intimacy; anonymity; and reserve with four functions of privacy in a democratic society, namely personal autonomy, emotional release, self-evaluation, and limited and protected communication. Health information and legal issues could be subjects of reference query or information needs. Users may not want to divulge such information. Although the ethical responsibility of librarians mandates confidentiality but is apparent that humans have tendencies to err, hence the need for mediated approach to meeting the needs of

library users. Ethical issues have constantly been addressed in libraries across the world. Milton (2008) and Kaddu (2010) mentioned certain ethical issues such as concealment of information, misinforming clients, divulging private information; disseminating false information. These factors necessitates the need to introduce technology mediated school library services

Avatars and their Implications on Education and School Library Services
Avatars have been defined by Peterson (2005) as online manifestations of self in a virtual world, noting that they are designed to enhance interaction in a virtual space. Deuchar & Nodder (2003) extends this by adding that avatars allow 'the user to take on a visible persona within a virtual world, affording them the opportunity to engage in surreal and imaginary experiences that transcend the actual world in which they live (Deuchar & Nodder, 2003). In essence, avatars are not strange objects to facilitate communication, they are products of human imagination converted to 3D animations to create a sense of belonging and assume the actor on the internet through motion devices. The popular platform where avatars are deployed is called Second Life. Second Life (SL) is a 3-dimensionalVirtual World (VW) and the trademark of Linden Lab. Virtual Worlds have been characterized as persistent (existing whether or not an individual is logged in), multi-user, enabling representation through avatars, and facilitated via a wide area network (Robbins-Bell, 2008). Via their 3D avatars in SL, people can create and trade objects, rent land, and participate in a variety of activities organized by other SL residents. There is a main grid (for over-18s) and a teen grid for younger users. People can create avatars without charge, and a distinguishing characteristic of SL is that most things within it (virtual houses, clothes, educational tools, etc.) have been created by SL 'residents' rather than by Linden Lab. However, if people want their own customized space, they have to rent this from Linden Lab for a monthly fee. Whilst there are now many different VWs, SL is the publicly-accessible VW that is most used by educators worldwide. This is, for example, evidenced in the regular series of surveys of the use of VWs in UK Higher Education (HE) carried out for the Eduserv Foundation (Kirriemuir, 2009), which give examples of SL use in a wide variety of disciplines. J. Kirriemuir Kirriemuir (2009) estimated that 90 percent of UK higher education institutions have some kind of SL presence. The largest SL campus is that of the University of Texas, which committed to SL as a major learning environment in 2009 (Aujla, 2009).

Increasingly, bodies of research are exploring the use of avatar-based virtual worlds for supporting student learning, with particular emphasis on the establishment of authentic, rich learning tasks, which, according to Deuchar & Nodder (2003) 'provide a safe pedagogical platform to facilitate the achievement of learning goals'. Etymologically, avatar originates from the Sanskrit word *avatara*, meaning "descent," to describe an incarnation or a bodily manifestation of an immortal being in Hinduism. Hindu deities are believed to come to Earth as avatars to help humans in their struggle toward enlightenment and salvation. With the advent of the era of information and technology, it is not completely clear as to how the word trickled into popular usage, but it is commonly attributed to Neal Stephenson's 1992 science fiction novel, *Snow Crash*. In this novel, users of a computer-based system are able to enter virtual worlds and interact with virtual versions of one another, referred to as "avatars." Broadly defined, any form of representation that marks a user's entity can be considered an *avatar*. A name, a voice, a photo, a top hat used in Monopoly: these can all serve as a user's avatar although they may not look or behave like the user (Bailenson et al 2008). Different traits such as the degree of form realism (i.e., how the avatar looks like a human user) and behavioral realism (i.e., how the avatar behaves like a human user) influences how another person perceives and responds to an avatar (Blascovich et al 2002). In the past, avatars typically served as mere visual markers of users (i.e., icons with limited movement), while much of the actual interaction in digital environments relied on textual communication (Taylor 2002).

Over time, avatars have become more complex creations, rendered in three dimensional forms with an extensive range of animated movements that aid in the expression of the avatar's

personality and supplement various social interactions. Options for individual customization of avatars have increased significantly as well, allowing users to modify a number of physical features including eye color, hair style, height, body shape, clothing, and even facial expressions. Using these diverse features, users have great freedom to build not just a graphical marker of themselves, but *virtual humans* with distinctive personalities, unique appearances, and individualized behavioral patterns. These avatars move and communicate as their owners' (i.e., users') digital surrogates to interact, build norms and rituals, and develop a unique culture of their own, presenting rich potentials for research (Bainbridge 2007).

Web 2.0 and 3D Animations as Precursors for Avatar-Mediated Library Service
As reported by Chad & Miller (2005), the etymology of Library 2.0 could be traced to Michael Casey who coined the terminology from Web 2.0. According to Chad & Miller (2005), Web 2.0 was a product of Tim O'reilly's philosophy which established that collaboration and interaction among others were the major secrets of companies that survived the technology market crash. This thought pattern was the initiative adopted by the originator of Library 2.0 to make the library active, interactive and collaborative. As expressed in a work by Maness (2006), library 2.0 connotes application of interactive, collaborative and multimedia web based technologies to library services and collection. Primarily, the principle of library 2.0 is to engender a new approach to library service through the use of internet to make it more interactive, personalized, collaborative and driven by community needs (Mallikarjun & Bulu, 2008).

Ezeani and Eke (2010) posit that the most applicable web 2.0 technology for library services is the social networking tools – where librarians can interact with their users to study their needs and give a feedback; photo sharing – where archival pictures can be posted to users or uploaded on the library websites…"Librarians in Nigeria are gradually utilizing these tools to offer "on the spot" library services to users. These are made possible with the present social networking sites such as Facebook, MySpace, Wiki, etc. which provide interactive platform for users to access and generate content. Information is now produced in a variety of media whose representation can no longer be presented in the physical books alone. Libraries need to realize that in order to engage with their users they will need to reach them "in their preferred methods of communication" (Topper, 2007).

An Overview of Youths and their ICT Preferences
It has been established that majority of Nigerian youths engage phones to access the internet for pleasure and interact on social media platforms, especially the Facebook. More than 48% of Nigerian youth 12 to 17 years of age use the Internet, and nearly half log on daily (Lenhart, Madden, & Hitlin, 2005). Once connected, adolescents engage in a wide variety of social media behaviours, including doing schoolwork, playing games, shopping, downloading music, text messaging and chatting and so forth. The Internet has become a virtual meeting place where secondary school students hang out with their peers to pass time (Gross, 2004; Roberts, Foehr, & Rideout, 2005).

The uniqueness of persons born at the beginning of the millennium is reflected in their affinity with information and communication technology (ICT). Their generation has been variously represented by several nomenclatures such as generation Y and Z (Windham, 2006; Oblinger, 2003; Prensky, 2005). They are said to be impatient, ambitious, unrealistic, quick learners, technologically inclined, daring and pleasure-driven. Their dexterity in relation to ICT and accompanying gadgets has been constantly referred to in literature as commendable; and when compared to adults, the dichotomy is vivid. Their most preferred mode of communication is through ICT. They are also referred to as 'net savvy' generation; google generation; and generation M for Media, Myspace or the Millenias (Pew Research Center, 2011; Levin, Richardson & Arafeh, 2002).

The 21st century youths are technology savvy. Information and communication technology (ICT) is the prevalent mode of communication among them, with 75 percent of 12 to 17 year olds owning cell phones, and text messaging at an incredible rate of more than 3000 messages per month (Rowlands et. al., 2008; Vie, 2008). Among the taxonomies ascribed to them, digital native is the most prevalent (Prensky, 2011). The level of involvement with digital contents and dependence on ICT by digital natives surpasses that of the adults as they do more than sending and receiving of text messages and doing some official works on the computer systems.

As observed by Harris & Rea (2009), the most preferred point of convergence for interraction among digital natives is the virtual world where they can engage in several activities across the world, breaking the barrier of distance. According to a UK survey, teens' reliance on the gaming console to surf the web has increased significantly (Ofcom, 2010). Recent reports also suggest that virtual environments or worlds are one of the most popular modes of interaction on the web (Harris & Rea,*2009)*. The total number of users registered for virtual world sites is now more than one billion, of which the largest demographic group is between the ages of 10 and 15 (Watters, 2009). Their involvement in digital content has however affected their learning preferences and information seeking behaviours (Windham, 2006; Oblinger, 2003; Prensky, 2005). Their information seeking behaviours and the aforementioned characteristics constitute a major fulcrum for redefining the roles of librarians in meeting their needs.

Computer games, digital comics, social media, electronic mail, smart mobile phones, online communities and many other ICT-enabled platforms have been able to make impression on youths who constitute majority of school library users. It therefore becomes paramount for librarians to move to the platform where users will maximize their staff expertise, resources; embracing the opportunities embedded in ICT, especially the Web 2.0 which facilitates the Library 2.0 in which library service is made interactive, collaborative and engaging (Chad, 2005).

Learning Commons, Avatars and Active Learning
Several works have suggested and reported the use of technology-mediated approach to library service in order to remotely meet the information needs of library users. The use of text messages (Fatoki, 2005), social media platforms such as face-book, linked-in and many other technologically assisted platforms Tiamiyu & Aina (2007), have been highlighted.

Libraries need to revise and adapt their traditional roles, services, resources, and physical spaces in order to meet the escalating, ever changing demands and expectations of a new generation of users. One of these innovative approaches is the Learning Commons which could be a veritable platform for placement of electronic resources where students can have access to internet and register online as avatars, relate with avatar librarians, other students depicted as avatars request for information with their avatar names. Learning Commons (LC) also known as Information Commons can be defined as "a new type of physical facility or section of a library specifically designed to organize workspace and service delivery around an integral digital environment and the technology that supports it" (Beagle, 1999). According to Bailey and Tierney (2008), LC also incorporates traditional library, promoting collaborative learning, emphasizing the 'continuum of service' and remaining library-centric." However, in LC, traditional library restrictions are more relaxed, and library furnishings are more comfortable, providing an environment where students can easily socialize as they work. Lippincott (2010) observes that the LC "supports the social aspects of learning." The core activity of a learning commons would not be the manipulation and mastery of information, but the collaborative learning by which students turn information into knowledge and sometimes into wisdom. A learning commons would be built around the social dimensions of learning and knowledge and would be managed by students themselves for learning purposes that vary greatly and change frequently (Bennett, 2003). With the aid of avatars, learning among students and interraction with the library becomes active and more engaging.

Conclusion

ICT has been appraised as a veritable tool to bring school library users back to the library. Active learning could be made possible by transforming school librarians and the library users into avatars through access to the internet and registering on the Second Life (SL) social network. With more than 48% of Nigerian youth who are within the ages of 12 and 17 having access to internet as at 2005 (Lenhart, Madden, & Hitlin, 2005), and the recent report from the stable of the Nigeria Communication Commission (2016) that the number of new subscribers as at January, 2016 could not be rated below 100 million. This invariably suggests that since the younger generation that are called the digital natives have higher tendency to access the internet, introducing them to avatar mediated will result to active learning in libraries. If school librarians could work with this data to introduce the use of avatars on the Second life platform, higher percentage of students would engage the library for their reference queries. Avatar mediated library service has high tendency to promote active learning in the library, especially with a high degree of anonymity which will simultaneously reduce anxiety. The game approach and the active nature of the avatars on the Second Life platform with freedom to make choice of the preferred avatar-appearance, youths could be gainfully engaged psychologically and be at ease with the reference librarian. The ICT inclination of students is a major panacea to infrastructural challenge faced by school libraries. More than 48% of Nigerian youth 12 to 17 years of age use the Internet, and nearly half log on daily (Lenhart, Madden, & Hitlin, 2005).

Recommendations

Noting the inherent benefits of engaging the use of avatars in school libraries, especially being a panacea to library anxiety and securing anonymity, it is therefore recommended that:

1. Librarians should consciously engaged in skill development, focusing on emerging technologies
2. Embrace social media platform and conduct research
3. Think globally but act locally by adapting the Second Life pattern to create an active social media for Nigerian students by collaborating with computer scientists
4. Conduct further studies on the use of avatar as this piece is expository on avatars
5. Be willing to jettison the status quo and become innovative
6. Try and register on second Life social network

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