ADOPTION OF BLENDSPACE TECHNOLOGY FOR EFFECTIVE SERVICE DELIVERY BY LIBRARY AND INFORMATION SCIENCE EDUCATORS IN SOUTH-SOUTH NIGERIA

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Abstract

Blendspace technology is a digital learning platform designed to enable teachers to access various resources and create bundled interactive lessons. This survey is born out of the fact that blendspace technology is rapidly transforming the traditional method of teaching and learning in higher institutions, especially with the significant paradigm shift to collaborative technologies. Although, there may not be any stated policy framework on the adoption of blended learning in higher institutions, it is being used by educators and students to enhance teaching and learning experiences. Library as an instrument of knowledge development and transfer in any academic institution has a significant role to play in supporting teaching, learning, and innovation. Blended learning is indeed characterized by blending the traditional teaching method with the online learning method, which attract the use of digital content. A descriptive survey research design was adopted with a population of eighty library educators in addition to a structured questionnaire that was administered to the respondents. The results revealed that, proficiency in the use of technological gadgets is believed to increase librarians' ability to obtain, process, and analyze information contents. The result of the studies also revealed that, librarians are expected to carve a niche for themselves in the digital space by acquiring the requisite skills needed to respond to innovations and providing any kind of digital services, and they should not just acquire the requisite skills, but should as well offer the services.

Keywords: Blendspace technology, Digital Learning, Collaborative Technologies, ICT, Library Educators.

Introduction

Library and information science educators in Southern Nigeria have been challenged to explore and adopt the application of blendspace technology to enhance effective service delivery when rendering their services through teaching, learning, and research. While some may regard this as a difficult task, it is important to consider the potential benefits that such an adoption could bring to facilitate knowledge transfer as well as ease learning and

understanding from students. In this work, the researcher will explore the reasons why library and information science educators should consider adopting blended learning technology to enhance effective service delivery in the areas of teaching, learning, and practice. Due to shortage of economic resources for this type of investment, some universities in South-South Niggeria, do not have the latest technological architecture, which also gives rise to the proliferation of printed books. Students' inability to access and familiarize themselves with adopting technology can also contribute to the institution's abandonment. With regard to these challenges, as library and information science educators, it is essential to provide sufficient practice that would enhance the student's practical skills and help them become more confident in their training. This is the base of the Nigerian university education blueprint, where "the focus is on the educational development and leveraging of ICT to scale up quality learning across Nigeria" (MOE, 2012). Therefore, this research is conducted to explore and adopt the use of blendspace technology to enhance effective service delivery in teaching, learning, and research.

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Blended learning is a student-centered, self-paced, flexible, and multi-modal learning approach (Neals, 2010). Blended learning is a teaching method that combines traditional face-to-face instruction with web-based instruction and learning. It is a popular instructional model that assists schools and communities in addressing issues of students engagement, challenges of studenst achievement and disciplines, access to professional staff, and the expectations of twenty-first century learners. Furthermore, it requires students to apply previous knowledge, gain new knowledge, and use their creativity to solve real-world problems using a variety of synchronous and asynchronous tools (Neals, 2010; Sharma & Barrett, 2007). One of the most common definitions recognizes a combination of physical and psychological factors (face-to-face), Blendspace technology is required for effective and current information delivery services. It does not only introduces new methods of information dissemination and transfer, but it also causes a change in the very structure of information and its communication concepts, such as improving teaching, learning, and research regardless of location, highly personalized services matching users' needs and interests with document databases, full-text searches, storage and retrieval with speed and accuracy, and so on (Rana, 2008). Students will benefit the most when this technology service is in place and properly utilized by library personnel.

Furthermore, according to Grgurovic, (2011), adopting blendspace technology involves a wide spectrum of technologies, such as the telephone, fax machine, television, video recorders, CD-ROMs, personal organizers, radio, and computer. In several situations, not only a computer and software used in scientific research, but digital equipment is connected to the computer and used when a digital recording is made: a microphone, digital camera, web cam, computer-controlled microscope, and an added camera are connected to the computer. E-mail, newsgroups, chat rooms, blogs, wikis, and video conferencing are used for educational purposes. A large number of websites that focus on chemistry were developed for academic purposes. Nor, and Kasim, (2015) observed that home projects, online books, and complete courses in science, physics, chemistry, or biology are available on the web. In science research, students use different tool applications and also learn what needs are met by these applications and when and how to use different features. For example, the following application tools can be used in science learning: Word processing software can be used for organizing ideas, writing assignments, and project work. Spreadsheets can be used to analyze data and do modeling.

Objectives of The Study The objectives of the study is to:

- 1. Investigate the demographic characteristics that predict the adoption of blendspace technology by LIS educators in south-south, Nigeria.
- 2. Investigate how adoption of blendspace technology influences effective service delivery by LIS educators in South-South, Nigeria.

Research Questions

- 1. How does demographic characteristics that predict the adoption of blendspace technology by LIS educators in south-south, Nigeria?
- 2. How does how adoption of blendspace technology influences effective service delivery by LIS educators in South-South, Nigeria?

Literature Review

Library and information science educators in South-South Nigeria have been quick to adopt blendedspace technology in order to enhance effective service delivery. This has resulted in increased access to library resources and services for students, departmental staff, and faculty members. Henderson (2020) observed that using technology in the classroom, both teachers and students can develop skills essential for the 21st century. Students can gain the skills they will need to be successful in the future. Awoyemi, and Soyemi, (2020) is of the opinion that modern learning is about collaborating with others, solving complex problems, practicing critical thinking, developing different forms of communication and leadership skills, and improving motivation and productivity.

To collaborate with his view, Suryani (2010, 2001) in the OECD (2001) observed that teachers should also use ICT for their professional development. Using ICT in the classroom necessitates technical skills and knowledge in addition to content knowledge.," According to the OECD (2001). "Teachers must have a range of technical and pedagogical skills, with continuous updating to match advances in technology and modes of use. Thus, teachers who use ICT in the classroom have a greater responsibility to master their subject matter, learn, and constantly update their technological skills.

The adoption of blended space technology has enabled libraries and information science educators to create new, more efficient, and effective service delivery methods. Al-Ani, (2013) provided an example of the use and use of online tutorials and video conferencing to provide library orientation and teaching. Users now have a more interactive and engaging experience, as well as more access to library materials and services.

In a related development, Camonia and Irgang (2020) enumerate factors that encourage the success of the blended methodology: Certain factors play a central role in the success of this methodology: on the students' side, many aspects are relevant to their profile, their commitment, their ability to work alone with discipline and perseverance, and their ability to share knowledge with your group to create collective intelligence. On the teacher's side, he or she has to be trained periodically to have adequate content and a consistent platform in a flexible format. Emphasis is placed on the need to create realistic expectations in the students so that they can plan the hours of dedication, learn the tools, follow up on the proposed activities, and understand their relationship with the educational proposal.

Hussain and Ahmad (2021) believe that in blended learning online conveyance of content and teaching gives the student partial control over time, place, and the pathway of understanding. This kind of pedagogy is one that allows the students to learn at their convenience.

The students are no longer limited to the classroom or the university, but also to the virtual world. In light of this, the timetable and the uploaded content give them the freedom

to learn according to their individual needs. According to Emilie, (2010), blended space technology has been effectively applied in the creation of digital collections to provide users with convenience by establishing 24/7 access to a broad variety of library items, such as e-books, e-journals, databases, e-newspapers, e-magazines, and so on.

Ravichdran et al. (2017) opines that Blended learning seeks to assess the effectiveness of face-to-face instruction combined with the use of a digital platform to produce short videos based on academic writing, which are then uploaded on blackboard for students to learn at their own pace. Students whose first language is not English are often expected to meet the demands of a university degree on their own, without the support of their lecturers.

According to Horsfall, Omehia, and Nsirim, (2021), Blended learning, as stated earlier, is the integration of traditional learning into e-learning. Face-to-face learning is becoming obsolete as society embraces the innovations occasioned by ICT. As a result, librarians and library and information science (LIS) educators are now embarking on some blended learning practices using collaborative technologies like electronic media and the Internet, such as digital boards and projectors, video conferencing tools such as Skype, Zoom, and Google Meet, instant messaging such as WhatsApp, Facebook Messenger, Telegram, etc., and cloud technologies such as Google Doc for collaboration, One-Drive, email, etc., and other communication tools such as Yahoo groups, Google groups, etc. Whichever Horsfall, Omehia, and Nsirim, (2021). Ajso nottedd that, blended learning, is the integration of traditional learning into e-learning. It is worthwile to note in contempory times that Face-to-face learning is becoming obsolete as society embraces the innovations occasioned by ICT. As a result, librarians and library and information science (LIS) educators are now embarking on some blended learning practices using collaborative technologies like electronic media and the Internet, such as digital boards and projectors, video conferencing tools such as Skype, Zoom, and Google Meet, instant messaging such as:

WhatsApp, Facebook Messenger, Telegram, etc., and cloud technologies such as Google Doc for collaboration, One-Drive, e-mail, etc., and other communication tools such as Yahoo groups, Google groups, etc. Whichever tool is leveraged by LIS educators for lecture delivery and communication with students towards the adoption of blended learning, digital materials are required to facilitate blended learning. Araceli et at (2015) Unfortunately, if librarians still think in organizing physical objects by different shapes and formats, relegating digital information analysis, the organization system will take longer to be modified, learning behind every new event in the digital environment. Platforms manifest the way in which disruptive technological innovation breaks through the barrier of access to the library and its collections. It opens the possibility of creating services that connect people with knowledge along with digital content managers. These professionals capture, organize, store, and recover digital information while combining the traditional functions of library practices, of final user service, and with external communities, or functions of theme experts.

Generally, the adoption of blended space technology by libraries and information science Educators in South-South Nigeria has resulted in increased access to library resources and services for students, faculty, staff, and the general public. Cohen, Lawrence, Cohen, Manion, and Morrison, (2007 opined that technology has also allowed for the development of more innovative ways of delivering services that are more efficient and effective.

Research Methodology

The research design used for the study is descriptive survey design but it was limited to three universities in South-South Zone of Nigeria. This includes: the University of Calabar, the University of Uyo, and the University of Port Harcourt. The population of the study consists of all the library and information science educators in three universities. The number was

small hence there was no sampling; lecturers in all the universities were 80 in number. The instrument used for data collection were validated by experts in the field and reliability test was carried out to ensure the internal consistency of the instrument. Data collection was analyzed using descriptive statistics of mean and standard deviation.

Findings

In recent years, there has been an increase in the adoption of the blended learning approach by Library and Information Science Educators in South-South Nigeria. A study by Okoye (2018) found that this was motivated by a desire to improve service delivery and meet the information needs of a more diverse range of learners the use of technology-based platforms such as blackboard and web CT was found to be effective in facilitating this with students reporting increased engagement and satisfaction with their learning experiences.

The findings of the study suggest that library and information science educators in South-South, Nigeria are increasingly harnessing the potentials of blend space learning to enhance effective service delivery. This is a positive service delivery as it highlights a commitment to meeting the information needs of all learners.

Data Analysis Demographic Characteristics of Respondents

Demographic Characteristics		Frequency	Percentage
Gender	Male	32	40
	Female	48	60
	Total	80	100
Age	30-39	20	25
1150	40-49	28	35
	50-59	16	20
	60 and Above	16	20
	Total	80	100
Income Level	Below N100k	2	2.5
	N 100k-N200k	35	43.8
	N 200k-N300k	30	37.5
	N 300k and		
	Above	13	16.2
	Total	80	100
Computer Literacy			
Skills	Basic	4	5
	Intermediate	15	18.8
	Advanced	45	56.2
	Proficiency	16	20
	Total	80	100

Objective One

Investigate the demographic characteristics that predict the adoption of blendspace technology by LIS educators in South-South, Nigeria. With regard to this objective,

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respondents were asked to indicate their gender, age, income level, and computer literacy skills. Table one presents the demographic characteristics of LIS educators in South-South, Nigeria. With regards to gender, male respondents constituted 32 (40%) of respondents, while female respondents constituted 48 (60%). This implies that there is a prevalence of female LIS educators to their male counterparts in South-South, Nigeria. With regards to age, the majority of respondents within the age range of 40-49 were 28 (35%), followed by 30-39 who were 20 (25%), followed by both 50-59 years and 60 years and above who were 16 (20%) each. This implies that the majority of the respondents are young adults, hence various literatures have revealed that young adults are more active users of mobile technology as compared to older age people (Bellion & Milo, 2016). With regards to income level, respondents who earn ₹100k-200k were 35 (43.8%), followed by those who earn between №200k-300k who were 30 (37.5%), also followed by those who earn between №300k and above who were 13 (16.2%), the list earners who earn Below 100k were just 2 (2.5%). This implies that a significant percentage of respondents' income level is between №100k-№200k. This is supported by Rogers, (2003) who attested that individuals at a higher and average income level tend to adopt technology as compared to those at a lower income level. With regards to the level of computer literacy skills of LIS educators, respondents who were at an advanced stage were 45 (56.2%), followed by those who were at the proficiency stage 16 (20%), then followed by those who were at the Intermediate stage were 15 (18,8%). This implies that the majority of the respondents are computer literate enough to adopt blendspace technology. This assertion is in agreement with a study conducted by Kapondera and Ngalande, (2017) quoted by Awoyemi, & Soyemi, (2020) which revealed that the proficiency in the use of technological gadgets is believed to increase librarians' ability to obtain, process and analyze information contents.

Objective 2

To investigate the adoption of blendspace technologies by LIS educators in South-South, Nigeria. With regards to this objective, respondents were required to provide suitable answers to a number of questions. Table 2 presents data on the acceptance of blendspace technologies by LIS educators in South-South, Nigeria.

Table 2 reveals the adoption of blendspace technologies by LIS educators in South-South, Nigeria, with regards to its usefulness and how it influences effective service delivery by LIS educators and compatibility with their methods of lecturing. The result from the table indicates that 54 (67.5%) of the respondents agreed that the adoption of blendspace technology would help them in tracking their students' progress while 26 (32.5%) disagreed. 49 (61.3%) of the respondents agreed that the adoption of blendspace technology will provide them with up-to-date information in their areas of interest, while 31 (38.75%) disagreed. Also, 52 (65%) of respondents agreed that the adoption of blendspace technology will enable them to lecture effectively from the comfort of their homes while 28 (35%) of respondents disagreed. 44(55%) of respondents agreed that the use of blendspace technology will help them integrate online content such as videos, images, text, etc with a single link while 36 (45%) disagreed. 50 (62.5%) of respondents agreed that their operations are capable of being enhanced by the adoption of blendspace technologies, while 30 (37.5%) disagreed. Again, 46 (57.5%) agreed that the adoption of blendspace technology will promote their professional development, while 34 (42.5%) disagreed. Also, 59 (73.5%) of respondents agreed that the adoption of blendspace technology will enable them to effectively function as information professionals in the 21st century, while 21 (26.5) disagreed.

S/N	Item	N	% Agree	N	% Disagree
1.	I perceive that the adoption of blendspace technology will help me in tracking of student progress	54	67.5	26	32.5
2.	I perceive that the adoption of blendspace technology will provide me with up-to-date information in my areas of interest	49	61.25	31	38.75
3	I perceive that the adoption of blendspace technology will enable me to lecture effectively from the comfort of my home	52	65	28	35
4	The use of blendspace technology will help me integrate online content such as videos, images, text, etc with a single link	44	55	36	45
5	I perceive that my operations are capable of being enhanced with the adoption of blendspace technology	50	62.5	30	37.5
6	The use of blendspace technology will promote my professional development	46	57.5	34	42.5
7	I perceive that the adoption of blendspace technology will enable me to effectively function as an information professional in the 21st century	59	73.5	21	26.5
	I am fascinated with the extent to which mobile technologies enhance my operations	50	62.5	30	37.5

Ddiscussion Of Findinds

Objective one implies that there is a prevalence of female LIS educators to their male counterparts in South-South, Nigeria.

Objective one, stated respondents were asked to indicate their gender, age, income level, and computer literacy skills. From the table it implies that there is a prevalence of female LIS educators to their male counterparts in South-South, Nigeria. With regard to age majority of the respondents were young adults who were determine to use ICT. Which is in line with Awoyemi, and Soyemi, (2020) view that majority of the respondents are young adults, hence various literatures have revealed that young adults are more active users of mobile technology as compared to older age people.

Table 2 reveals the adoption of blendspace technologies by LIS educators in South-South, Nigeria, with regards to its usefulness and how it influences effective service delivery by LIS educators and compatibility with their methods of lecturing. The result from the table indicates that a significant number of respondents agreed that the adoption of blendspace technology would help them in tracking their students' progress which is in tandem with Henderson (2020) who observed that using technology in the classroom, both teachers and students can develop skills essential for the 21st century. Students can gain the skills they will need to be successful in the future.

To corroborate with him Awoyemi, and Soyemi, (2020) observered that modern learning is about collaborating with others, solving complex problems, practicing critical thinking, developing different forms of communication and leadership skills, and improving

motivation and productivity. Also, a significant number of respondents agreed that the adoption of blendspace technology will enable them to lecture effectively from the comfort of their homes while 28 (35%) of respondents disagreed. Which is tandem with Suryani (2010, 2001) in the OECD (2001) who observed that teachers should also use ICT for their professional development. Using ICT in the classroom necessitates technical skills and knowledge in addition to content knowledge. Majority of the respondents also agreed that the use of blendspace technology will help them integrate online content such as videos, images, text, etc with a single link while 36 (45%) disagreed. This is also in tandem with Al-Ani, (2013) that provided an example of the use of online tutorials and video conferencing to provide library orientation and teaching. Users now have a more interactive and engaging experience, as well as more access to library materials and services.

Recommendations

Adoption of blendedspace technology is very essential for library and information science educators. However, findings revealed that all the institutions under study have not fully implemented this technology. Being a developing country, there are certain challenges hindering the adoption of these technologies as indicated by the participating librarians. These include poor financial position of library schools, no specific budget under the technology head, lack of web technology skills and knowledge among librarians, as well as a lack of support from the university management. Therefore, the following recommendation are advanced:

The universities in South-South and indeed Nigeria need financial support to fulfill their technological needs. additionally, the level of application and practical demonstration arising from the services rendered by the student who acquires knowledge in a formal classroom environment has produced a low level of output However, to ameliorate this ugly scenario the institution under study should engage

in consortium development skills, regular staff development training, country-level policy, adequate knowledge of the latest technologies, and current trends in university libraries are the areas of concern that will accommodate the adoption of blend technology in the institutions under study. Cooperation with the IT department within the institution is also essential in this regard. The Ministry of education and non-governmental organizations funding agencies of the country can play an important role in inviting proposals for the technological development of university libraries.

This technology can as well assist educators to create a more interactive and engaging learning environment for the student. Moreover, blendspace technology can also help libraries

to save costs and increase efficiency which can inturn promote rewards for LIS educators.

Library and Information Science Educators should be encouraged to use it in their classes and offices The initiative which should be taken by The academic libraries should take an initiative towards establishment of an e-learning support center that would undertake the training of the academic staff in integrating educational technology into the curriculum to provide access to the content. As a part of this initiative an Educational Technology unit will develop e-learning smart classrooms, along with video conferencing and assignment tools enabling flexible learning and teaching with the students studying at their places. The academic library must have a holistic approach in e-learning whereby different traditional and digital methods and media are integrated into learning and teaching. As faculty and instructors have begun to adopt e-learning strategies as a part of their teaching repertoire, libraries played a key role, helping to find and organize resources to complement programs and courses making use of e-learning to provide support to students working through their assignments.

Conclusion

In spite of the fact that adopting technology into institutions South-South, Nigeria is faced with numerous challenges ranging from power outages, lack of system engineers, lack of web technological skill as well network failure, however adopting blendedtechnology tend to focuson modifying the role of teachers in an online teaching environment. It's as well create a platform where teachers will act as virtual guides for students who use electronic media. Ultimately, it also enhance the learning experiences of students as well as enabling them to think independently and communicate creatively. It can as well assist the students to develop successful careers and lives, in an increasingly technological world.

The adoption of blended technologies by academic libraries to provide accessto resources and services in support of learning, teaching and research has benefited both oncampus, part time as well as distance learners. Both students and lecturers can undertake learning and research without being in the library. An academic library, faculty and academic development department managing e-learning may use appropriate technologies to facilitate learning and access to resources and services. It is quite understandable that an e-learning environment can provide both students and faculty with a sustainable infrastructure and seamless access to knowledge, course content, information resources and services, all from integrated service point.

References

- Araceli et al (2015) The blended librarian and the disruptive technological innovation in the digital World Institute for library and information studies, National Autonomous \University of Mexico, Mexico City, Mexico;
- Awoyemi, R. A. & Soyemi, O. D (2020). Mobile technology adoption by librarians in colleges of education in South-West, Nigeria. Library and Information Perspectives and Research, Vol. 2, no. 2: 38-46, 2020 ISSN: 2672-5886 (Print) 2672- 5894 (Online)Available online at credencepressltd.com, http://doi.org/10.47524/lipr.v2i2.6.
- Al-Ani, W. T. (2013) Blended learning approach using moodle and student's achievement at sultan Qaboosuniversity in Oman. *Journal of Education and Learning*, Vol. 2 no. 3: Camonia and Irgang (2020) Challenges in the Teaching of Management through Blended Education
- Emilie, M. 2010. Using video messaging as a tool to develop students'speaking ability: A Preliminary study. *The Pan-Asia Conference / The 18th Annual KOTESOL International Conference, Seoul, Korea* pp. 97-104. Korea: KOTESOL.
- Cohen, Lawrence, Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*(6th ed.). United Kingdom: Taylor & Francis
- Grgurovic, M. (2011). Blended learning in an ESL class: A case study. *CALICO Journal*, *Vol. 29*. no. 1: 100–117.
- Harlina, A. (2014). The utilization of technology to Improve English speaking skills. *Journal* for the Study of English Linguistics, Vol. 2. Vol. no. 2: 19–24
- Henderson (2020) Benefits of ICT in education: international digital organizatio(n for scientific ResearchIdosr Journal Of Arts and Management Vol. 5. no. 1: 51-57, 2020.
- Hussain and Ahmad (2021) Adoption of smart technologies in University libraries of Pakistan: A Qualitative Review
- Horsfall, M.N., Omehia, A. E., &Nsirim, O. (2020) Digital library services and blended learning
- Kementerian Pendidikan Malaysia. (2012) *Pelanpembangunanpendidikan Malaysia 2013-2025*.
- KualaLumpur: PusatPerkembanganKurikulumKementerian Pendidikan Malaysia.

- Kim, J.-r. (2003). Using mail talk to improve English speaking skills. *Korea National University of Education*, Vol. 58. no. 4: 349–369
- Levy, M. (2009). Technologies in use for second language kearning. *The Modern Language Journal*, Vol. 93. no. 1: 769–782
- Liebowitz, J., & Frank, M. (2011). *Knowledge management and e-learning*. Auerbach Publications, Taylor&Francis Group, LLC. USA.
- Malaysian perspective. *Procedia Economics and Finance*, 31, 170–1850mar, H., Embi, M.A., &Yunus,
- Moreno, L., Gonzalez, C., Castilla, I., Gonzalez, E. J., &Sigut, J. (2007) Use of constructivism and collaborative teaching in an ILP processors course. *IEEE Transactions on Education*, Vol. 50. no. 2, 101–111
- M.M. (2012). ESL Learners' Interaction in an online discussion via Facebook. *Asian Social Science*, Vol. 8. no. 11: 67-74.
- Neals (2010). Blended Learning: Any time, any how, many ways. Nsw Country Areas Program. The Nswdet Rural and Distance Education Unit
- Nguyen Van Cuong, N. T. (2015). Integrating Information Technology Into Teaching English. *TESOLConference*2015, pp. 1-8.
- Nor, A. S. M., &Kasim, N. A. A. (2015). Blended learning web tool usage among accounting students: A
- OECD, (2001) Learning to change: ICT in schools. Paris: Organisation for Economic Cooperation and Development
- Ravichdran, S., Kretovics, M., Kirby, K., & Gosh, A. (2017). Strategies to address English language writing challenges faced by international graduate students in the US. *Journal of International Students*, Vol. 7. no. 3, 764-785.
- Sharma, P. & Barrett, B. (2007). Blended learning: using technology in and beyond the Language classroom. Macmillan Education, Oxford.
- Stracke, E. (2007) A road to understanding: A qualitative study into why learners drop out of a blended language learning (BLL) environment. *ReCALL*, *Vol.* 19, 57-78.
- Tselios, N., Daskalakis, S., & Papadopoulou, M. (2011). Assessing the acceptance of a Blended learning University course. Educational Technology & Society, Vol. 14, 224–235.
- Turner, Y. (2015) Last orders for the lecture theatre? Exploring blended learning approaches and accessibility for full-time international students. The International Journal of Management Education, Vol. 13 no. 2, 163–174