

Analysing Social Media Applications and Learning in Textiles and Clothing Programs

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ABSTRACT This paper is a qualitative case study that analysed the pedagogical functions of social media applications for teaching and learning in Textiles and Clothing programs in Zimbabwe. The participants of the study were purposively and quota sampled from the Textiles and Clothing department comprising seven lecturers, and thirty-two students. In-depth, focus group interviews and observations were used to generate data. The data were analysed for content using thematic analysis after coding. The functional pedagogical framework was used as an interpretive lens for the findings. The results showed that social media tools such as Facebook were not fully utilised whilst WhatsApp applications were mostly used for administrative purposes. The study concludes that the teaching and learning of Textiles and Clothing programs were characterised by very limited social media applications that tend to adopt collaborative and constructivist approach to learning. Lack of thorough knowledge and skills on the use of social media in Textiles and Clothing programs was found as the greatest challenge affecting lecturers and students.

INTRODUCTION

Textiles and Clothing programs in universities are technical degree programs which combine the study of every aspect related to the textiles and apparel industry (Mason 2012). The dynamic nature of the technological society has ushered new demands on the teaching of such programs where students should not only be provided with basic traditional core skills but equipped with the sets of skills that are most in demand in the 21st century. The technical education system is informed by the skills needed in the workplace at a time when industry change, communication and collaboration are some of the elements that constitute economic and social contexts of work across the globe.

Communication skills have at all times been valued in the workplace. Trilling and Fadel (2009) argued that the permeation of digital technologies in business and daily lives in the globalised economy has fashioned a new demand for skills that would facilitate communication in a way that enhances learning and working together among individuals. This new form of working together does not necessarily require face-to-face communication but relies on using different web tools

that enable participants to share their ideas, works and products in virtual environments. The Partnership for 21st Century Skills (2009) delineates the ability to, utilise a wide range of media, related technologies and communicate in different environments, as some of the essential skills individuals should possess so as to work effectively in this digital era. Therefore, to be able to communicate effectively, students have to be exposed to opportunities that would allow them to network in diverse environment whilst in their years of learning.

According to Kivunja (2014), collaboration is basically the capability to work with others as a team that seeks to achieve a common goal. Whilst it was easier a few years ago to carry out much work as an individual, it has been observed that it's different today. Much of all notable work is accomplished in groups or even global teams. In the 21st century, in learning and work contexts, collaboration has taken on new dimensions which require people to work effectively with others that they have never met, or will never come across face to face, but with whom they need to be able to cooperate on a familiar task or tasks. The purpose of collaboration is to offer members involved the opportunities to work together

er so as to generate ideas and at the same time get feedback on those ideas. With such a scenario, it requires that graduating students be prepared with such skills to be able to work effectively in the global economy.

The training of students in Textiles and Clothing programs need to focus on equipping students with skills that would enable them to adapt and respond to the irregular changes within the textiles and clothing sector. As has been observed by Marshall (2009), today's textiles and clothing designer may be expected to present their works in different fashion cities or even sell their brand and products to different stores in other continents. With such a situation, it is essential for textiles and clothing students to be well educated in the nuances of the expanding global markets, sub-cultures and digital technologies to facilitate communication and collaboration (Faerm 2012).

It follows that universities that train students for careers in textiles, clothing and design should provide an environment that not only exposes students to traditional technological applications but encourage social network and online collaboration so that students become comfortable in a digital environment. This paper seeks to emphasise the need for an educational purpose as an overarching aim for using social media applications in teaching and learning. Examples of social media include social network sites such as Facebook; micro-blogging such as twitter; wikis such as Wikispaces; media sharing such as YouTube and presentation tools such as SlideShare.

The application of social media in teaching in higher institutions of learning is on the rise responding to increased use by students and in recognition of the potential for enhancing teaching and learning experiences. A survey by Perrin (2015) among American life projects covering the years 2005 to 2015 showed a wide uptake of social media among college students. Given this increase in social media use, it is not surprising that academic staff in universities are similarly making use of social media in their professional areas and teaching practices as well (Manca and Ranieri 2016). While these researches address overall use by academics, there are fewer studies addressing the pedagogical functions these social media serve in teaching and learning. The study, there-

fore, sought to examine the pedagogical underpinning associated with the use of social media applications, the forms they take, and the functions they serve. The paper endeavoured to respond to the following research question:

- a) What functions are served by social media applications in teaching and learning in Textiles and Clothing programs?

Theoretical Framework

The functional pedagogical framework was used to analyse the social media applications for teaching and learning in Textiles and Clothing programs. This framework classifies applications in terms of their pedagogical functions. Patten et al. (2006) grouped these applications as administrative, referential, interactive, micro world, data collection, location aware, and collaborative. The administrative applications are those that are mostly used for storing and retrieving information and concentrate on scheduling, calendars and grading. Referential applications enable one to access content for teaching and learning activities. Such applications can allow lecturers and students to access and store documents in various formats. Though administrative and referential applications are widely available, Patten et al. (2006) emphasised that they are not particularly educationally inspired and tend to replicate traditional applications. Interactive applications provide students with a series of exercises based entirely on question and answer activities with supporting information and images. Though interactive applications are creative and enable user interaction, they, however encourage memorization of information. Location aware applications seek to contextualise learning activities by enabling the students to interact appropriately with their environment while data collection applications focus on encouraging participants to learn more about their context through recording relevant information and providing immediate feedback through on-the-spot analysis. According to Chen et al. (2008), collaborative applications undertake to establish a learning environment of knowledge sharing whilst educational micro worlds allow learners to construct their own knowledge through experimentation in constrained models of real world domains. These applications are more consistent-

ly informed by pedagogical principles and tend to adopt a constructionist approach to learning.

METHODOLOGY

The intentions of this study were to take the emic approach to understanding the pedagogical functions served by social media applications in teaching and learning in Textiles and Clothing programs at a selected university of Science and Technology in Zimbabwe. The study made use of a descriptive case study design. In this particular study, case study offered a thick description of how social media tools were used in teaching and learning. Purposive sampling was used in which participants were selected on the basis of their typicality and richness of information with the intention of fulfilling a particular need. The data obtained from the study were analysed for content using thematic analysis after coding. Content analysis was used as it aids in the understanding of meaning in complex data through the development of summary themes from the raw data. In this method, analysis of data was determined inductively through multiple reading and interpretation of raw data and deductively using the research question (Creswell 2013). Codes were summarised into categories suggested by the Functional pedagogical framework.

RESULTS

With respect to the functions of social media tools, the data revealed the following results which are presented under the following categories of the Functional pedagogical framework: collaborative, interactive, referential and administrative. There were no social media applications that served functions like data collection and micro worlds.

Collaborative Function

It was evident from the data that social media applications such as Facebook were used by lecturers and students to collaborate with each other. Lecturers created study groups on Facebook platforms where they conducted discussions with students. Lecturers indicated that they used Facebook as a platform to discuss designs

generated by students as evidenced by the following excerpt: “*Students post their textiles and fashion designs where they get comments about how the elements of art are combined within the designs.*” It was also obtained from the data that students used Facebook as a platform for idea generation on creative design projects as quoted: “*There are so many students on Facebook, so we post some of our design briefs for idea generation.*” The following excerpt suggests that “*the comments that the students obtained from others were used to improve the quality of the final product.*” Unfolding from the participants’ views was the idea that Facebook served as a collaborative tool where lecturers and students evaluated textiles and fashion designs. This implied that Facebook encouraged students to take on responsibilities for joint work with others and to learn to value the ideas and contributions of every member of the team of which they find themselves part.

Interactive Function

The findings showed that WhatsApp was used for conducting group discussions between students. Most of these group discussions were conducted after lectures as a way of reflecting on what has been learnt by the students. The following excerpt suggests the interactive function of WhatsApp among students. “*It has been made easier through WhatsApp to do group discussion on presentation questions to give each other ideas.*” The WhatsApp tool was mostly used to interact with students on short question and answer activities. The intention expressed in the following phrases suggests that “*it would make it easy for students to interact with each other if they feel they needed assistance.*” However, it was noted that some of the students were not part of the online discussion groups as they had mobile phones which could not take up the WhatsApp applications. It was observed that students had different types of mobile phones which make it difficult for students to receive information at the same time. Some of the students failed to access information that was in form of audios or even videos. This data showed that the interactive function of social media applications was compromised by the type of technological devices used by students.

Administrative Function

The data showed that social media tools such WhatsApp and electronic mails (e-mails) were used to achieve ease, clarity and effectiveness in the lecturers' communication with students. The WhatsApp application was mostly used for sending reminders to students without necessarily facilitating the acquisition of subject content. For example, instead of printing communication materials for students, the lecturers indicated that they would put messages on WhatsApp for students to access. The following excerpt suggests the administrative functions of WhatsApp among students and lecturers: *"We use WhatsApp to send reminders to students on the due date for assignment or even make announcements."* This implies that students could have access to their materials anytime, anywhere other than lecturers printing and sent hard copies of memorandums. The head of the department gave the benefits of using WhatsApp as compared to other social media platforms indicating that *"WhatsApp applications were taking the lead on the basis that one needed to do nothing in terms of logging in, but, just waiting for a message to come on the phone and read."* The ease of operating WhatsApp made it favourable for use as an administrative tool among lecturers especially when sending messages that needed immediate attention. The data revealed, as well, that social media tools such e-mail served mostly administrative functions in teaching and learning. Lecturer participants pointed out that *"e-mails had facilitated continuous dialogue between supervisors and supervisees even if they were off-campus."* Though challenges with poor connectivity were experienced by students, the following excerpt suggests that *"communicating through email to instruct students when they were out of campus helped students to get in contact with their lecturers anytime other than coming for face-to-face interaction."* These lecturers explained that e-mails were found very useful when supervising research projects among students enabling them to get in contact with each other anytime. However, students expressed some of the challenges they faced in using e-mails when they were away from the university campus indicating that *"it was very difficult to send research projects for marking due to poor internet connectivity."* Though problems were experienced, e-

mails served as a useful platform supporting the marking of research projects for students who would be off-campus.

Referential Function

It was revealed from the data that social media applications such as YouTube and wikis were used as applications for accessing content. The following excerpt suggests that *"when teaching courses like Grooming and Modelling, YouTube was very helpful especially when accessing videos about working methods of different practical processes."* This implied that lecturers' accessed working methods of processes from YouTube and used these for teaching students. Students showed their strong use of YouTube as narrated: *"YouTube provides us with easy to follow instructional video for making up practically related processes."* This suggests that social media like YouTube were mostly used for reference purposes other than lecturers uploading their own videos for use by students.

From the data generated, there were no social media applications serving functions such as data collection and micro worlds. It was also noted that social media tools such as web blogs, Google Doc, LinkedIn, Twitter, Flickr and MySpace were not even used in the teaching and learning in Textiles and Clothing programs at the selected university of Science and Technology. This suggested that lecturers were not knowledgeable on how these can be used for teaching purposes.

DISCUSSION

The findings on social media serving collaborative functions find support from Wankel's (2011) assertion that social media establish a learning environment of knowledge sharing. This resonates with the perspective of knowledge building communities and networked learning reported by Gruzd et al. (2016). This finding links up very well with Cuesta et al.'s (2016) view that connection among students and their lecturers facilitated co-creation by enabling groups to modify their output at the same time through the social network. Networked students become community-embedded learners who can engage with combined sets of local, online and distance communities of their own thereby bringing

knowledge to local others and to the class. This shows that social media such as Facebook can be used to share and critique information on creative design among students in Textiles and Clothing thereby encouraging collaborative learning for co-creation of knowledge thus contributing to improved teaching and learning. However, the collaborative function of social media was restricted by uneven access to information to all members as was noted in the study. This is because incorporating teamwork into the whole group can be problematic due to the uneven effort of group members, getting everyone participate and making sure everyone is actually contributing to the group as Myers et al. (2014) had unveiled.

The interactive function reported in the findings supports Camus et al.'s (2016) view that social media facilitate real-time and asynchronous text, voice and video communication. This finding expands on the assertion of Imlawi et al. (2015) that social media are helpful tools for encouraging student engagement and supporting interaction with course material outside of the traditional classroom and exposes students to practise that reflects expected future work and communication settings. This finding accords with ideas of experiential and social learning which include John Dewey's (1859-1952) emphasis on learning through lived experiences in which classroom activities are related to the complexity of real world practice. This interactive function of social media seem well aligned with social constructivist views of learning as participation in a social context and values of knowledge are decentralised, accessible, and co-constructed among a broad base of users (Greenhow and Lewin 2016). Interactive function of social media supports Valle et al.'s (2017) view that online interaction provided a way for critical reflection of the learning process as students are encouraged to look for gaps in whatever information they are given and to then seek ways in which these gaps can be filled in. This link well with the idea that through social media, students engage in reasoning, develop knowledge, apply reflection thereby developing critical thinking skills as they would be challenged to respond to the question asked on the social media application.

The finding on social media serving referential function accords with Gruds et al.'s (2016) idea of resource discovery. Students become connected with and across resources through the use of social media. However, the finding on students simply replicating information from

some social media tools support the Functional pedagogical framework's emphasis on that referential tools are not particularly beneficial to teaching as they tend to replicate traditional applications of knowledge transmission. Such type of applications do not encourage critical thinking required for constructing knowledge but instead encourages memorisation of information. This finding expands on Haylet's (2016) study on the need for research and evidence to suggest if the use of interactive social networks have a positive relationship to student achievement.

The findings on social media serving administrative function corroborate DiVall and Kirwin's (2012) view that social media tools increased peer support and communication about course content and assessment. This finding further confirms those of Prescott et al. (2013) who reported that instructors and their students preferred social media for course-related communication. This brings on to the functional pedagogical framework's emphasis that applications serving administrative functions do not encourage knowledge construction among students but useful for time tracking and management. Such social media tools have little pedagogical underpinning in their use in teaching and learning.

CONCLUSION

This paper confirms recent and earlier studies on social media used for interactive and collaborative purposes mostly in teaching and learning. Though other social media tools such as WhatsApp and YouTube were found serving administrative and referential function respectively, these were not pedagogical beneficial to encourage knowledge construction among students. It was concluded that social media applications were not fully exploited for the purposes of teaching and learning as no social media was found to serve pedagogical functions such as data collection and location-ware. Lack of thorough knowledge and skills on the use of social media in Textiles and Clothing programs were found as the greatest challenges limiting lecturers and students.

RECOMMENDATIONS

Although lecturers, under study, had used social media tools such as Facebook in their teaching, they needed professional development on how to use them beneficially for pedagogical

purposes. There is the need for lecturers to use social media that are prevalent and appeal to all students within the same academic level to ensure equal participation. There is also need to establish a social media usage agreement to address basic safety issues related to pedagogy.

REFERENCES

- Camus M, Hurt NE, Larson LR, Prevost L 2016. Facebook as an online teaching tool: Effects on student participation, learning, and overall course performance. *College Teaching*, 64(2): 84-94.
- Chen NS, Kinshuk C, Yang SJH 2008. Designing a self-contained group area network for ubiquitous learning. *Educational Technology & Society*, 11(2): 16-26.
- Creswell JW 2013. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles: Sage Publication Ltd.
- Cuesta M, Eklund M, Rydin I, Witt A 2016. Using Facebook as a co-learning community in higher education. *Learning, Media and Technology*, 41(1): 55-72.
- DiVall MV, Kirwin JL 2012. Using Facebook to facilitate course-related discussion between students and faculty members. *American Journal of Pharmaceutical Education*, 76(2): 1-5.
- Faerm S 2012. Towards a future pedagogy: The evolution of fashion design education. *International Journal of Humanities and Social Science*, 2(23): 210-219.
- Greenhow C, Lewin C 2016. Social media and education: Reconceptualising the boundaries of formal and informal learning. *Learning, Media and Technology*, 41(1): 6-30.
- Gruzd A, Haythornthwaite C, Paulin D, Gilbert S, Valle ME (Eds.) 2016. Uses and gratifications factors for social media use in teaching: Instructors' perspectives. *New Media and Society*, 1-20.
- Gruzd A 2014. Online communities. In: R Alhajj, J Rokne (Eds.): *Encyclopaedia of Social Network Analysis and Mining*. New York: Springer, pp. 1171-1181.
- Haylett C 2016. Use of social media for teaching online courses and enhancing business communication skills at the university level: Can this really be done? *International Journal of Online Pedagogy and Course Design (IJOPCD)*, 6(4): 1-15.
- Imlawi J, Gregg D, Karimi J 2015. Student engagement in course-based social networks: The impact of instructor credibility and use of communication. *Computers & Education*, 88: 84-96.
- Kivunja C 2014. Innovative pedagogies in higher education to become effective teachers of 21st century skills: Unpacking the learning and innovations skills domain of the new learning paradigm. *International Journal of Higher Education*, 3(4): 37-48.
- Manca S, Ranieri M 2016. Facebook and others. Potentials and obstacles of social media for teaching in higher education. *Computers and Education*, 95: 216-273.
- Marshall T 2009. Designing design education. *Form*, 224: 203-205.
- Mason A 2012. Bridging the gap between academia and industry to build competitiveness within the textile and apparel sectors of Africa. *International Conference on Origin Africa*, 25 April, Nairobi, Kenya.
- Myers T, Blackman A, Andersen T, Hay R, Lee I, Gray H 2014. Cultivating ICT students' interpersonal soft skills in online learning environments using traditional active learning technique. *Journal of Learning Design*, 7(3): 38-53.
- Partnership for 21st Century Skills (P21) 2009. Framework for 21st Century Learning. From <http://www.p21.org/storage/documents/1___p21_framework_2-pager.pdf> (Retrieved on 20 February 2017).
- Patten B, Sanchez IA, Tangney B 2006. Designing collaborative, constructionist and contextual applications for handheld devices. *Computers & Education*, 46: 294-308.
- Perrin A 2015. *Social Media Usage: 2005-2015*. Pew: Research Center for Internet, Science & Technology.
- Prescott J, Wilson S, Becket G 2013. Facebook use in the learning environment: Do students want this? *Learning, Media and Technology*, 38(3): 345-350.
- Trilling B, Fadel C 2009. *21st Century Skills: Learning for Life in Our Times*. San Francisco, CA: Jossey-Bass.
- Valle ME, Gruzd C, Haythornthwaite D, Paulin S, Gilbert S 2017. Social Media in Educational Practice: Faculty Present and Future Use of Social Media in Teaching. *Proceeding of the 50th Hawaii International Conference on System Sciences*, 4 January - 7 January, Waikoloa, HI. Hawaii: IEEE Computer Society Press, pp. 165-173.
- Wankel C 2011. New dimensions of communicating with students: Introduction to teaching Arts and Science with new social media. In: C Wankel (Ed.): *Teaching Arts and Science with New Social Media*. Bingley: Emerald Group, pp.3-14.

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