INVESTIGATING BEHAVIOURS AND ATTITUDES TOWARDS USE OF SOCIAL MEDIA AS A LEARNING TECHNOLOGY AMONG HIGHER EDUCATION STUDENTS IN SAUDI ARABIA

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Introduction

This paper presents the initial results of a work in progress regarding the use of social media technologies (henceforth known as SMTs) as learning tools among higher education institutions in Saudi Arabia. It highlights the way SMTs are being used at different levels by institutions, staff members and students in Saudi Arabia to aid their studies, and the attitudes and perceptions of students regarding the same. It also highlights certain mismatches between the usage patterns of University and staff members and those of students. The findings of the study are expected to contribute to the literature in terms of institutional, instructional and student usage of social media as a learning technology in the higher education sector and lay the groundwork for policy development among higher educational institutions in Saudi Arabia.

Background

Groff (2013) argues that the lives of millennials today are dependent on technology and social media to the extent that their social and cultural practices would probably be completely different should their digital access be revoked. Similarly, Paavola and Hakkarainen (2005; p.535) point out learning today is "an intensely social activity". Consequently educational systems of today can no longer rely on traditional learning theories or practices alone for their curriculum development. Instead, they need to embrace digital social learning and explore theories related to it to promote connectivity among learners and create learner-centred environments. The current study proposes to add to the research in this area, in the context of Saudi Arabian higher education system.

Learning Theories for the Digital Social Era

Educational systems have traditionally relied on learning theories such as associative theory, situative theory and cognitive theory to aid in curriculum development and teaching practices. However, given the shift in the learning styles of neomillenial students, these theories may no longer be sufficient on their own to cater to the evolving educational needs of such students. There have been calls from multiple segments towards the enhancement and expansion of traditional learning theories to include and support the learning styles of neomillenial students who have grown up in the digital era. Of the developments that have occurred as a result, Siemens' (2005) theory of connectivism remains the most prominent.

The theory of connectivism (Siemens, 2005) is essentially based on the idea that learning occurs when a learner gains knowledge through the process of connecting and feeding information to a learning community. Siemens (2005) posits that knowledge is distributed across an information network and stored in different digital formats. Each learning community is a node, which is a part of the overall knowledge network. As information continues to change based on new discoveries and contributions to the community, it impacts the learners' understanding of the field in turn as they navigate through the nodes or communities. While the theory has its critics, with some like Kop and Hill (2008) arguing that its contributions are not significant enough to warrant it being treated as a new learning theory, it is nevertheless acknowledged that connectivism plays a key role in explaining the new learning trends and styles of the digital era and its autonomous learners. Indeed, the emergence of social media combined with the theory of connectivism creates interesting opportunities for educational institutions where they can reconsider, reimagine and redesign their pedagogies to encourage more active learning. Yet, educational systems continue to struggle to adapt to the connectivist model and social media-based learning, partly due to the fact that they have not caught on to the possibilities offered by these, partly because of variations in learner skills and partly due to lack of research in the area, particularly among Middle Eastern countries like Saudi Arabia (Kop & Hill, 2008; Alharbi, 2013).

Research Aim and Objectives

The aim of this study is to investigate the current and potential uses, and implications of integrating social media into higher education in Saudi Arabia by exploring the behaviours and attitudes of higher education students in Saudi Arabia towards the use of social media in learning. The following are the key objectives of this research:

- Objective 1: To explore the state of art of social media as learning technology in higher education pedagogy in Saudi Arabia.
- Objective 2: To explore the behaviours and attitudes of students towards the use of social media as a learning technology in higher education.
- Objective 3: To determine the implications of using SMTs in Saudi Arabian higher education.

Research Methodology

The aim and objectives of the research require quantitative as well as qualitative data. On one hand, the researcher hopes to generalize the results generated by the present study to the larger Saudi Arabian student population, and this needs some form of representative sampling within the framework of a quantitative methodology. On the other hand, the study also aims to fully explore the perceptions and attitudes of participants, in this new and under-researched field of social media in higher education. This can only be accomplished through a qualitative element. Hence, a mixed-method research approach following the "Sequential Explanatory Design" (Creswell, 2009) has been chosen as appropriate to answer the research questions in the most effective manner. This includes a dominant quantitative strand with

surveys as the research instruments, followed by a secondary qualitative strand with interviews as the instruments. Participants are students, teachers and administrators belonging to three Universities in Saudi Arabia: Princess Nourah University, King Saud University and Al-Imam University.

Conceptual Model

A conceptual model has been developed to act as the theoretical guide and provide the theoretical context for the present study. The model draws references from the theory of Connectivism proposed by Siemens (2005), and is supplemented by the theory of Communities of Practice (Wenger, 1998). According to the theory of Connectivism each learning community is a node, and various nodes together form a knowledge network through which users traverse to gain and share knowledge through their differing perspectives. The theory of Communities of Practice enhances this further by elaborating on the modes that facilitate participation and knowledge generation within the learning communities. According to Wenger (1998), these modes are Engagement, Imagination, and Alignment. Engagement refers to the motivation (why) or the willingness of the community members to actively participate in communities. Imagination provides the understanding (what) and helps members make sense of the activities of the community and their own belonging in it by understanding each other, locate their own position, reflect on it and develop new perspectives. Alignment is the process (how) through which the perspectives of various members, activities, actions, communications and laws are aligned within the communities to result in the desired outcomes.

The outer layer of the conceptual model in Figure 1 is based on the concept of connectivism. Students belong to personal networks (PLs) through their social media connections. Within these networks they share and gain knowledge, leading to the creation of virtual learning communities (VLC) comprising of students from multiple personal networks. When students traverse through these communities, sharing and gaining knowledge, learning occurs. When they are motivated by the usefulness, learning, fun and pleasure of the activities in the learning communities, engagement happens. Imagination is fostered when they understand the meaning and objectives behind the activities and interactions of the community. Alignment happens when students are comfortable with the community and its members, and are able to interact, communicate, share knowledge, ask questions and respect the rules of the community. Overall, these three enabling conditions help members engage, commit and stay on in the communities, encourage them to contribute and keep the communities active. Further, the communities themselves co-exist and function efficiently due to their enterprise, mutuality, and shared repertoire of resources.

The teachers and administrators of the University facilitate or hinder the learning process through their own usage or avoidance of SMTs, participation in communities and other activities. The teachers can participate, contribute, share resources and monitor the learning processes in the communities. The administrators provide technical support and

infrastructure, enable or disable access to specific SMTs or features, assist users and design social media policies. They may also control funding, training and other resources for SMT usage within the institutes. Additionally, both teachers and administrators may consider the feedback of students within virtual communities and act on it. The entire process takes place within the context of the higher education institutes.
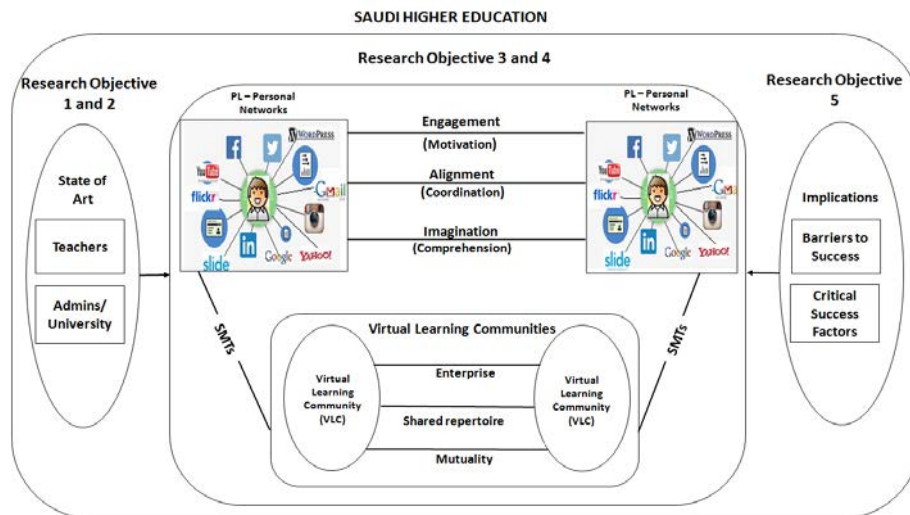

Figure 1. Conceptual Model

Overall, in the above model, SMTs play a key role due to their ability to aid digital, many-to-many interactions. They facilitate connections between members and their networks, as well as between the virtual learning communities.

Pilot

In order to test the validity of the conceptual model, processes and instruments, a pilot survey was conducted with all three groups of participants selected using a convenience sampling technique. Responses were received from 51 students, 10 teachers and 5 administrators each. Some interesting findings from the pilot survey are as follows:

- Most students (82%) seem to spend at least 3-4 hours online on a daily basis, confirming their status as digital natives. All of them also seem to have access to the devices necessary to use SMTs.
- Students indicated that they use SMTs for a variety of academic and non-academic purposes like communicating, collaborating and information sharing. From the responses, it is also evident that a majority of the students support the use of SMTs to support their studies.
- The survey analysis indicates that students use mobile devices like smartphones and tablets much more frequently compared to academics and administrators, who seem to rely more on traditional devices like laptops. This may have implications for the type of SMTs used, as some tools like Whatsapp that are used by almost all the students are much easier to use on mobile devices.

- The pilot data also indicates that traditional SMTs like Facebook and Twitter are being overtaken in popularity by mobile messaging apps like Whatsapp.
- From the survey of administrators, it also appears that there is support and encouragement for the use of SMTs at the University level. However, it appeared that the usage at the University level is mostly restricted to marketing and communication purposes rather than for teaching and learning.
- All three group of participants indicated privacy concerns as major roadblocks to their use of SMTs in studies. This may be particularly relevant for a conservative and gender-segregated country like Saudi Arabia. It indicates the need for better privacy control at University level.
- Some of the administrators indicated unfamiliarity with the features of SMT as a roadblock for their usage. This points to a lack of adequate training at the administration level although it is difficult to be sure at this stage given the limited number of administrators who participated.
- Lack of adequate bandwidth was another issue that emerged as a roadblock from the administrators' survey. Again, it is not possible to draw any conclusions at this stage although it merits further investigation.
- There are discrepancies in the choice of SMTs the students and staff members use and/or consider important. For e.g.: 100% of administrators and 66.67% of the academics say that Dropbox is one of the most important SMTs to them whereas 80% of the students say that Myspace is the one the most important SMTs they use. This indicates that the usage patterns as well as priorities students and staff may be different when it comes to academic use of SMTs and that there may be a certain lack of synchronization.
- About 53.13% of the students said that their gender does not influence the usage of SMTs while the rest indicated that it has an influence. Around 50% of the students said that their academic discipline does not impact their use of SMTs, the rest said that it does.
- Overall, while the pilot survey results largely indicate that all three groups have identified the benefits of SMTs in Academics and support using SMTs in Academics, the data also shows that the actual usage, type of SMTs used and perceptions regarding the importance of various SMTs vary drastically between the three groups, and this indicates a gap between student and staff.
- The data shows that responses of administrators and academics are more in line with each other compared to students, indicating that there may be a disconnect between the perceptions of staff and students.

Next Phase of Research

The next phase of research will involve collecting qualitative data through pilot interviews with a subset of the survey participants. After the qualitative data has been analysed and interpreted, the research processes, instruments and tools will be reviewed and refined in line with the findings. Then, the actual data gathering will be conducted using a combination of

convenience and purposive sampling from April 2017 to July 2017. Subsequent analysis of the quantitative and qualitative data will contribute towards fulfilling the research aim and objectives of the study. The conceptual model will be refined based on the findings and the results will be analysed for their implications in the Saudi Arabian higher education context.

Conclusion

Social Media Technologies (SMTs) play a key role due to their ability to aid digital, many-to-many interactions. They facilitate connections with not only a person but with network of learning communities. Students of today are relying on digital devices and SMTs more than ever before for their information needs, and to contribute knowledge. Higher education institutes should harness the power of SMTs to create learner-centred environments that help students utilise their existing social media connections, skills and affinity to learn more effectively. Studies in this area show that it is indeed happening, although the knowledge regarding the use of SMTs in conservative societies like Saudi Arabia remains limited. Consequently, the implications of such usage and the issues around it remain unexamined. The present study hopes to fulfil some of the gaps related to this area, and contribute towards the development of a framework for integrating social media as a learning technology in higher education institutes in Saudi Arabia.

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