



Using *WhatsApp* to Enhance International Distance Education at the University of South Africa

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Abstract

Open distance e-learning (ODEL) is an essential form of e-learning for students in South Africa. It allows expanded access to higher education for students from rural or socioeconomically disadvantaged backgrounds. One of the key features of ODeL is that students can complete coursework modules virtually, without the need to step onto a physical university campus. Students from rural areas are able to participate in higher education, something they otherwise would not have had access to without ODeL. Information and Communication Technologies (ICTs), including messaging apps like *WhatsApp*, provide students with informal and formal learning opportunities, increase access to academic and community resources, and mitigate some Internet connectivity issues. Students are able to use *WhatsApp* to build connections with students and share class materials, without access to an Internet-connected computer. Using ICTs to enhance access to higher education is one way to bridge the wide socioeconomic gap in South Africa. This paper argues for additional non-Western research on socio-technical marginalization and access to ICTs for students enrolled at higher education institutions in South Africa.

Keywords South Africa · Social media · Socio-technical marginalization · Higher education

Introduction

Social messaging apps, such as *WhatsApp*, can be used to enhance open distance e-learning (ODEL) for students in South Africa facing socio-technical marginalization (Chaka et al., 2020; Madge et al., 2019). However, while social media and mobile technology use in education has been extensively reviewed and studied (Blankenship, 2011; Gikas & Grant, 2013; Manca & Ranieri, 2016; Panda, 2021; Selwyn, 2012), it is important to note that much of this research has been conducted from a “Western” perspective; that is, a viewpoint that is based on European and American values (Karr, 2016; Madge et al., 2019). The purpose of this paper is to expand on the work of Madge et al. (2019) and explore the research on open distance e-learning in South

Africa, and specifically how *WhatsApp* contributes to academic success for traditionally marginalized students.

Socio-Technical Marginalization

Socio-technical marginalization is the digital divide between those with access to information and communication technologies (ICTs) and those without, as opposed to age-, gender- or race-related divides (Madge et al., 2019). Individuals from rural or socioeconomically disadvantaged areas, and especially non-white students, have access to fewer educational resources (Czerniewicz, 2018). Brown and Czerniewicz (2010) found that among the South African students surveyed, 98.5% owned a cell phone, and there was no difference in access to cell phones among different socio-economic groups. However, students had varying levels of access to data and the Internet on their cell phones (Bajjnath, 2013; Madge et al., 2019). Students with more financial resources were more likely to have expanded ICT access, including personal laptop or desktop devices, in addition to phone access; students with fewer financial resources relied on access to computers at work, Internet cafes, or shared devices (Brown & Czerniewicz, 2010).

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Higher Education and E-Learning in South Africa

The University of South Africa (UNISA) is the largest open distance e-learning (ODEL) university in Africa, with over 380,000 students, 68% of whom are from the Southern African Development Community (Madge et al., 2019; Southern African Development Community, n.d.). Many of these students live within their home countries (e.g., South Africa, Zimbabwe, Namibia, Botswana, Swaziland, Zambia, Nigeria), attend UNISA part-time while working full-time, and access university coursework through the university's web platform, my.unisa (Madge et al., 2019). ODEL requires students to be self-directed and self-motivated, putting more responsibility on the learners to manage time and resources (Agba, 2005). Some of the benefits of e-learning include: increased access to resources, decreased costs, differentiated learning for students to work at their own pace and ability, facilitated cross-cultural relationships, and transcended geographic and time barriers (Letseka et al., 2018).

Increasing Technology Access for UNISA Students

At the time of Baijnath's (2013) report, UNISA was negotiating with retailers and service providers to provide low-cost laptops and reasonably priced 3G data plans to UNISA students. In April 2019, the university announced that, starting in March 2019, laptop devices would be distributed to students who were enrolled in a minimum of five modules and who were receiving funding from the National Student Financial Aid Scheme (NSFAS; van der Merwe, 2019). The ultimate goal of the laptop initiative is that all UNISA students will have access to remotely complete assignments and exams (Mahlangu, 2020). UNISA estimated that 8,256 devices would be distributed to students in the Spring 2019 semester (van der Merwe, 2019). According to van der Merwe (2019), once students registered their device on the my.unisa website, they would be able to access all coursework and study materials without any additional Internet connection and data fees. This free data plan was offered through the UNISA information technology department (van der Merwe, 2019). Affordable data plans and low- or no-cost computers improve the connectivity options available to students without the financial or geographic means to regularly access the Internet at home. However, as of October 2020, 150,000 students still needed a laptop (Mahlangu, 2020). The university launched a virtual race with a goal to raise approximately R500 million (\$32.7 million USD) to fully fund the laptop initiative and reduce educational inequities, especially for students in rural areas or facing socio-technical marginalization (Samuels, 2020).

Using *WhatsApp* to Support ODEL

Madge et al. (2019) found that 60% of UNISA students surveyed used *WhatsApp* to support their educational experience. The *WhatsApp* mobile app uses Internet and data, rather than short message service (SMS) and phone minutes, for messages and calls, allowing for international communication at no extra fee. Along with messages, calls, and multimedia, users can share documents up to 100 MB (*WhatsApp Features*, n.d.). Students reported using *WhatsApp* as “a tool for bridging access to learning resources” (Rambe & Chipunza, 2013, p. 336), which enables them to overcome obstacles in accessing course content by sharing advice and resources, studying together, and answering peers' academic and logistical questions by forming study groups (Madge et al., 2019).

Students created *WhatsApp*-mediated study groups to provide more than academic support between peers; these groups are also essential for students to learn how to navigate the higher education system, including registering for courses and advising questions. Students from poorer and rural backgrounds can benefit from the collective knowledge of their peers to build their practical knowledge of the university system. Students also reported that they felt more comfortable asking questions in the informal *WhatsApp* groups, as opposed to asking faculty and campus departments for help (Madge et al., 2019; Rambe & Chipunza, 2013).

Unfortunately, the my.unisa platform only operates on a laptop or desktop computer, limiting access for students who only have consistent mobile access (Madge et al., 2019). Students with computer access were able to download course materials and send them through *WhatsApp* to students who only had access through cell phone data (Madge et al., 2019). Students, many of whom work full time while attending school, also reported that *WhatsApp* provided academic flexibility and decreased their reliance on public infrastructure such as community centers and libraries for internet access (Rambe & Chipunza, 2013).

WhatsApp has powerful learning potential to benefit ODEL university students in South Africa. With improvements to infrastructure, including wireless Internet access and undisrupted cellular connectivity, e-learning opportunities will continue to strengthen over time (Rambe & Chipunza, 2013), especially for students facing socio-technical marginalization (Madge et al., 2019). Integrating ICTs such as *WhatsApp* provides students with increased access to learning and community resources to further enhance their education.

Building Positive Peer-to-Peer Relationships with *WhatsApp*

Using *WhatsApp* allowed students “to meet and interact with students from different backgrounds and places, which generated wide-ranging discussions and insights into conditions and practices in other countries” (Madge et al., 2019, p. 274). For students without opportunities to travel out of their home country, *WhatsApp* groups served as a way to meet individuals from diverse backgrounds. These technology-mediated friendships provided students from rural areas opportunities to meet people from outside their immediate community, something they otherwise had few opportunities to do. Despite some students reporting that *WhatsApp* is a digital distraction and negatively impacted their academics, the digital connections which bolster students’ feelings of community outweigh this challenge (Yeboah & Ewur, 2014).

WhatsApp Use by Instructors for Formal and Informal Learning

Some faculty integrate *WhatsApp* by creating discussion groups, posting course information and announcements, encouraging students, sharing resources, and providing a platform for connection and reflection (Gachago et al., 2015). Rambe and Chipunza (2013) advocated for additional research on how *WhatsApp* can be integrated into formal ODeL teaching and learning methods, “which focus on learner-centered construction of content, through communication, collaboration, and the sharing of multimedia materials in the form of text, audio, images and video” (Gachago et al., 2015, p. 173). Gachago et al. (2015) recommended that communication media guidelines and regulations may be necessary to protect student and faculty privacy, establish personal and professional boundaries, and prevent cognitive overload. Beyond these formalized guidelines, students will need to have responsible technology use explicitly taught and modeled, as informal social media use skills do not completely transfer to formal educational media skills (Bajinath, 2013; Heitern, 2016).

Discussion and Conclusion

The use of social media messaging apps, such as *WhatsApp*, can enhance distance education and provide a more equitable access to quality higher education in South Africa. “For students, *WhatsApp* constituted a space of potential opportunity,” providing increased access to higher education and resources to help students be successful (Madge et al., 2019, p. 277). Further research into the practical uses of *WhatsApp* can help expand and strengthen online distance e-learning (ODeL) opportunities for students in South Africa. With

the COVID-19 pandemic and the sudden shift to various methods of online learning (Dhawan, 2020), research on e-learning may address the inequities exposed during pandemic-era learning, especially surrounding socio-technical marginalization.

Finally, when examining social messaging use in higher education in South Africa, it is important that this research be conducted from a non-Western perspective to better capture the socio-technical marginalization and socioeconomic barriers for South African students. Access to the Internet, Internet-connected devices, and digital skills vary worldwide, and results from studies in western nations might be generalized to South Africa or the larger continent of Africa.

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