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WhatsApp use among African international distance education (IDE) students: transferring, translating and transforming educational experiences

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ABSTRACT

Much of the research on how social media is embedded into the educational practices of higher education students has a Western orientation. In concentrating on a case study of the varied ways in which African International Distance Education (IDE) students actively use social media to shape their learning experiences, we discuss an underresearched group. The paper draws on analysis of 1295 online questionnaires and 165 in-depth interviews with IDE students at UNISA, South Africa, one of the largest providers of IDE globally. WhatsApp emerges as 'the' key social media tool that opens up opportunities for IDE students to transfer, translate and transform their educational journey when studying 'at a distance'. Although WhatsApp does provide a 'space of opportunity' for some students, this is framed through socio-technical marginalisation, itself a reflection of demographic legacies of inequality. Exploring social media practices though the case of African IDE students places these students centre stage and adds to the awareness of the multiple centres from which international education is practiced.

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Introduction: African international distance education and social media

There has been much debate in the popular global press, policy circles and academic fora on the potential for digital technologies to 'alleviate' the education 'crisis' in the global South, especially for those populations with least access to education. Indeed, Sustainable Development Goal 4.3 aims to ensure equal access for all men and women to affordable quality education, with a clear emphasis on tertiary Higher Education (HE) (United Nations 2018). This issue of equitable access to HE is particularly prescient in the African context, where gross enrolment in HE is 8%, the lowest of any continent (Mohamedbhai 2014; UNESCO 2017). International distance education (IDE²) has been proposed as one way to expand access to HE, especially for those who face socio-economic disadvantage (Garrett 2016; UNESCO 2015), although its ability to achieve such goals is coming under sustained scrutiny (Funes and Mackness 2018; Lee 2017; Prinsloo 2016).

To date, however, much of the focus of global education research has been on students who move for their education and has been 'dominated by studies reflecting a Western orientation, discourse and understanding' (Kondakci, Svenja, and Zawacki-Richter 2018, 517; Lee 2017; Mwangi et al. 2018). This is despite the long history of student migration within the global South, with students studying in the Russian Federation, SA, Uganda and Senegal, for instance. More recently, increasing numbers of students are studying in situ at 'home' (Waters and Leung 2013), through branch campuses (Lane 2011) and regional hubs (Knight 2014), leading Knight (2008) to call for a distinction between Internationalisation Abroad and Internationalisation at Home, However, still less studied is a third category, Internationalisation at a Distance (Mittelmeier et al. submitted; Béché 2018). This rise in demand for IDE has been substantial in recent years, particularly in the African continent, with its youthful population that is not adequately served by current HE provision. Several African nations are participating in the global provision IDE, such as Ghana (Edumadze et al. 2017), Nigeria (Agba 2017) and South Africa (SA) (Gunter and Raghuram 2016). Amongst these, the University of South Africa (UNISA) is the largest open distance e-learning (ODeL) university in Africa (Letseka, Letseka, and Pitsoe 2018), with 381,544 students on 3000 courses, distributed across the African continent (and beyond). This paper concentrates on such IDE students studying at UNISA, thus investigating an under-researched group of students who might provide fresh insights into global digital education.

These recent trends in the global provision of HE have been promulgated through new technologies and there is now a rich stream of literature examining the way in which digital technologies are altering, and being altered by, digital education practices. In particular, recent years have seen an increased awareness of the significance of social media in the educational experiences, cultures and pedagogies of various international student groups across different places (Chugh and Ruhi 2018; Mnkandla and Minnaar 2017; Sleeman, Lang, and Lemon 2016; Tang and Hew 2017). Such research commonly focusses on undifferentiated groupings of 'international' students, 'Asian' students, or 'Chinese' students, frequently located in northern institutions, especially in the US, UK and Australia (see, for example, Zhao 2017 or Forbush and Foucault-Welles 2016). Indeed, following a wide-ranging review of social media and HE, Sleeman et al. (2016, 403) note the spatially restricted nature of much of the research, which focuses 'predominately on Asian learners' and they suggest the need for investigations of students from 'less researched backgrounds' to provide 'more extensive knowledge of culturally diverse student populations'.

Whilst acknowledging this spatial myopia, it must also be recognised, however, that there is a growing parallel body of work surrounding African HE students' use of social media in African institutions which is often not drawn upon in the Euro-American literature. SA is a particularly rich source of such work as the country enters the fourth phase of technology-enhanced teaching and learning – flexible learning and social media (Ng'ambi et al. 2016). Mbodila, Ndebele, and Muhandji (2014), for example, examine the effect of Facebook on students' engagement and collaboration in the learning process while Bosch (2009) notes the potential positive benefits of using Facebook particularly for the development of educational micro-communities, but she also recognises that challenges remain surrounding ICT literacy and uneven access. Regarding WhatsApp, Gachago et al. (2015) discuss how it can be used to foster student learning and Rambe and Bere (2013) identify heightened student participation as a key outcome of integrating WhatsApp into pedagogic delivery. However, whilst a growing range of case studies exist exploring social media and HE in the South African educational context, Ng'ambi et al. (2016, 850) argue that there is still a need to further interrogate the 'situated knowledge practices' that students use to engage with social media for communication, expression and social action. In doing so, they argue for taking social media beyond the confines of the classroom, while still keeping it within the educational context.

Much of the existing research on social media thus focuses either on international students who travel to northern countries for their education or African students who study at face-to-face institutions. Less is known about how social media practices are used in an African distance learning context, where students stay 'at home' and engage with their university digitally. This is particularly important because for these students social media replaces the benefits of proximity, of campuses, and of contact. Indeed, according to Mnkandla and Minnaar (2017, 228), social media present

great opportunities for teaching and learning in such IDE institutions but to date, it has had 'very little impact on the way in which open and distance learning (ODL) institutions are functioning'. This is perhaps surprising given the accessibility, flexibility and affordability potential of social media in resource scarce environments to bridge 'digital divides' (Brown and Czerniewicz 2010; Yeboah and Ewur 2014) and enable mobile learning anywhere, anytime (Pimmer et al. 2014). This paper, therefore, focuses on social media practices in the specific context of a little studied group: African international distance education students.

Our approach to understating social media is informed by Muhirwa (2009, 2) who notes that 'a thorough investigation into the less tangible aspects of the process of IDE interaction remains scarce at best.' In the context of this paper, we are particularly interested in exploring how students use social media to shape their learning experiences as one of these 'less tangible aspects' of IDE interaction. We envisage this shaping of the student learning experience through social media as lying in the nexus between students' habitus and lifeworlds, the institutional habitus and its social, academic and operational modes, and the macro-societal factors and contexts impacting on students, the institution and the quality and scope of engagement between students and the institution (Subotzky and Prinsloo 2011). As such, students' learning and their engagement with social media is entangled with, and connected to, their learning materials, their lecturers and peers, institution norms, access to technologies, government policies on HE, etc. Within this complexity, IDE students are important agents of knowledge formation (Madge, Raghuram, and Noxolo 2015), so understanding their experiences requires linking students, staff, institutions and knowledge resources (see Gunter and Raghuram 2018). By approaching social media as embedded within such complex wider worlds, our paper therefore responds to Zhao's (2017, 163) call 'for more nuanced approaches to understanding international students' lived experiences through the multiple ways they integrate digital media technologies like social media into their everyday lives.' It is this issue of how IDE students actively negotiate their learning experience, particularly through the medium of social media that forms the focus of this paper.

The case study is of UNISA, which has been described as 'a mega university, and the only dedicated distance education provider in the African continent' (Letseka, Letseka, and Pitsoe 2018, 122). Approximately 8% of UNISA's student body are 'foreign' and students are attracted from 130 countries globally (UNISA 2018). Students from African countries (excluding SA) represent over 80% of these foreign students and of these 85% are from SADC countries. This is partly explained by SADC's protocol on HE which prescribes that 5% of HE places be reserved for SADC members (Lee and Sehoole 2015) and lower tuition fees are charged compared to non-SADC students (Lee 2017). This large number of students from the SADC region (19,595), other African counties (2954) and American, Asia, Europe and Oceania (1070), makes UNISA's educational provision important not only for the region but also globally.

UNISA has a comprehensive course offering, including academic and vocational programmes, certificates, diplomas and degrees (undergraduate and postgraduate) (UNISA 2018). Modules are conducted as open distance e-learning (ODeL) and are conducted in English. One central feature is the university's e-learning portal, my.unisa. This functions as an important tool for contact between students and the university, as well as between students. All UNISA students are registered on the portal, and this is where they submit assignments, communicate with lecturers and tutors via the discussion forum and obtain contact details of other students to engage in group discussions. Thus my.unisa is both a learning portal and the formal means though which pedagogic issues may be discussed. Whilst UNISA does not have a formal institutional policy regarding use of social media for pedagogic purposes, several lecturers have engaged with social media to support and enhance the learning of their DE students. Makoe (2010), for example, has explored the use of MXit (a cell phone instant messaging system) to facilitate social interaction and establish communities of learning. There has, however, not yet been any large-scale exploration of the role of social media in the learning journey of UNISA students and this is what our paper sets out to examine.

In examining the social media practices utilised by UNISA students to actively adapt to, negotiate and enhance their IDE experiences, the paper is structured into six sections. Following this introduction, section two summarises the methodology, while section three outlines a general morphology of social media use by UNISA students, identifying *WhatsApp* as particularly important. Section four then explores transfer, translate and transform as three ways in which engagement with *WhatsApp* might be conceptualised, before going on in section five to briefly consider how socio-technological marginalisation influences these forms of engagement. Finally, section six discusses the key implications of the case study for thinking about social media technologies and digital education more broadly.

Methodology

This paper is based on a transnational research project entitled 'International Distance Education and African Students' (IDEAS). The overall project aims to investigate how far IDE offers equitable access to students in Africa by understanding the varying experiences of students studying through IDE provided by UNISA, SA. IDEAS is a multi-institutional project (with ten researchers located at UNISA in SA, and the University of Leicester and the Open University in the UK) involving an interdisciplinary team, covering the fields of education, geography and learning analytics (Mittelmeier et al. 2018). The project involves multiple mixed methods: large-scale data analytics of student data, an extensive online questionnaire survey with 1295 students, 165 online interviews with UNISA students and 17 face-to-face interviews with educational providers and policy-makers in SA, Nigeria, Namibia and Zimbabwe. The online questionnaire and student interviews form the focus of this paper.

The online questionnaire survey was collected from undergraduate students studying across faculties and related to their overall university experiences (Mittelmeier et al. submitted). It was based upon prior research on international students and academic adjustment, in particular, Rienties et al. (2012). One section of the questionnaire related to students' experiences with using social media to support their education at UNISA and this data was aggregated at a descriptive level in order to provide a broad understanding of IDE students' overall feelings towards social media in their HE experiences. A total of 1295 students responded, representing a 16% response rate, which is considered healthy for online surveys (Nulty 2008). As noted above, UNISA is a worldwide institution with a large international student population, especially from SADC countries. In our sample 63% were international students, representing 25 different countries across Africa including: Zimbabwe (33%), Namibia (14%), Botswana (5%), Swaziland (5%), Zambia (4%), Nigeria (2%) and 39% were South African.3 The demographics of the sample broadly mirrored that of UNISA as a whole, being 58% female and 70% black (compared to 65% female and 72% black for UNISA as a whole). Survey respondents predominately studied part-time (75%), while working full-time (63%), were self-funded (83%), had an average age of 34 and mostly lived in an urban environment (77%), thus being fairly typical for 'modern' distance learners (Mittelmeier et al. submitted; Subotzky and Prinsloo 2011).4

The questionnaire was followed up by 165 one-to-one online interviews which delved deeper into the experiences and perceptions of social media of different UNISA students. There were two interviewers: one who lived and interviewed from SA (of Zimbabwean nationality and had good knowledge of the local context, having been an international student in SA); and one who lived and interviewed from the UK (of Dutch nationality, familiar with SA and education in Africa). IDE students from Zimbabwe and Namibia, two of the most significant locations of UNISA IDE students, were interviewed. The interviews lasted between 30 and 90 minutes and were conducted via *Skype* to *Skype* (audio only) or *Skype* to phone. During the semi-structured interviews students were encouraged to reflect on the diverse ways in which social media were mobilised (or not) to aid their learning journey while at UNISA.

Table 1 Social Media Platforms	· Which social	media do	vou use to suppo	t vour university	experience?
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Platform Used (percentages calculated for each platform type)	Yes	No
WhatsApp	739	501
	(60%)	(40%)
Facebook	527	713
	(43%)	(57%)
YouTube	327	913
	(26%)	(74%)
LinkedIn	117	1123
	(9%)	(91%)
Twitter	113	1127
	(9%)	(91%)
Instagram	51	1189
	(4%)	(96%)

Morphology of social media engagement

The questionnaire revealed that the clear majority of participants indicated that they used social media to support their education experience (n = 1215, 94%). The main platforms employed by those reporting using social media included WhatsApp (n = 739, 60%), Facebook (n = 527, 43%)and YouTube (n = 327, 26%) (Table 1⁶). While still significant, the importance of 'Facebook' as 'the' HE student social media platform was being challenged by WhatsApp in our case study, as noted elsewhere in Africa (Gachago et al. 2015; Ng'ambi et al. 2016; Rambe and Bere 2013).

Participants were also asked about how frequently they used social media to support their learning experience. To this, the most common answers were several times a week (n = 365, 28%) or several times a day (n = 315, 24%). This does suggest that social media was regularly employed by many students, forming part of the fabric of their lives as IDE students studying from UNISA. Such regular use of social media by HE students has been noted by Sin and Kim (2013). For many participants in the IDEAS project, their use of social media had increased since studying with UNISA (n = 464, 36%). Perhaps surprisingly, 17% of students (n = 219) stated that they used social media less since starting their UNISA studies. An open question revealed this was because social media was either seen as a distraction, irrelevant to studies or problematic in terms of quality, authenticity and privacy of data, issues that have also been noted in many other countries in the context of HE (Anshari et al. 2017; Yeboah and Ewur 2014).

When asked about whom participants contacted on social media to support their education, three key groups emerged. First were other UNISA students, both on their own course (n = 713, 55%) and on other courses (n = 311, 24%). Second were family members and friends who were also taking UNISA courses (n = 515, 40%) or studying elsewhere (n = 424, 33%). A large number also contacted family or friends who were not involved in any university studies (n = 505, 39%), reminding us that IDE students are not only students but are also involved in many other roles, such as within the family as part of ever-changing mobile lives (Findlay et al. 2012). Thirdly, members of UNISA staff were contacted, including their own academic tutors or lecturers (n = 321, 25%), administrative staff (n = 158, 12%), and less frequently tutors or lecturers who taught courses they were not taking (n = 86, 6%). Altogether, these descriptive data demonstrate that IDE students at UNISA used social media frequently to contact other students and family and friends, but less often to contact staff or administration at UNISA, again reflecting studies elsewhere which indicate low levels of direct interaction between students and academic staff on social media (Madge et al. 2009; Sobaih et al. 2016).

It was also important to discern why the students were using social media. Participants were asked their agreement with 10 Likert scale items related to the role of social media in supporting their education experience; results are summarised in Table 2.7 On average, participants were slightly positive about the role of social media in finding resources, networking, and developing an academic community with peers. Neutral to positive average responses were elicited in relation to questions about finding educational opportunities, gaining motivation, socialising, and using social media in relation



Table 2. Reasons for using social media: Social media helps me ...

Question Social media helps me	Avg. (scored out of 9)	Standard Deviation	% Agree with social media scale items
Find resources on my study topic	6.24	2.618	67.0
Network for my future career	6.35	2.543	67.0
Discuss my academic work with other students at UNISA	6.21	2.643	65.3
Feel part of the UNISA community	6.03	2.618	63.7
Find out about educational opportunities at UNISA	5.89	2.713	60.2
Gain the motivation to continue my studies at UNISA	5.87	2.730	59.1
Develop friendships and socialise with other students at UNISA	5.73	2.747	58.0
Support my academic work through learning activities assigned by my lecturers	5.72	2.781	57.9
Communicate with UNISA academic staff	5.05	2.846	47.6
Communicate with UNISA administration staff	4.47	2.781	37.4

to learning activities assigned by tutors. When asked about connecting with UNISA staff, participants were, on average, neutral about communicating with lecturers and slightly negative about connecting with administration. Table 2 suggests that students most actively used social media for selfmotivated purposes (using SM to search for resources, for future career networking and to discuss work in self-motivated and peer-organised learning communities, etc.), thus becoming an important element of their learning journey, a process mirrored widely by many other international students worldwide (Collins 2012). It also indicates that social media is more important for forming friendship bonds and developing a feeling of belonging to a UNISA student community, than it is for more 'formal' pedagogic purposes or communication with UNISA administration and teachers.

A picture is thus starting to emerge that UNISA IDE students are often using social media in similar ways to students elsewhere, although the platform of choice of WhatsApp is a noteworthy difference. However, there was a wide range of responses (as indicated by the relatively large standard deviations above) and interview data can shed further light into the varied ways different students used social media to navigate their IDE learning journey, as investigated below.

Whatsapp engagement: transfer, translate and transform

The increasing use of smartphones in sub-Saharan Africa in recent years (Porter et al. 2016) was reflected in our interviewees' widespread use of mobile phones for engaging with social media. Although most existing research focuses on the significance of Facebook and Twitter, particularly in the North American and European contexts (Ricoy and Feliz 2016; Sleeman, Lang, and Lemon 2016), the use of smartphones has also made it easier to communicate through other applications, such as WhatsApp, particularly in the southern African context. In this section, we therefore focus on WhatsApp as 'the' key social media used by UNISA students and identify three distinct ways that these students used WhatsApp: to transfer, translate and transform their educational experience.

Transfer: transferring knowledge in, about and between

Joining WhatsApp groups with other students was a common way of transferring into study - of settling in and adapting to being a student at UNISA. In the early stages of becoming a student, many found WhatsApp an easily accessible and invaluable tool to connect with other peers and obtain information about their studies that they were about to embark on but struggled to access elsewhere. Facebook was also sometimes used to connect and interact with other students at the start of the learning process but as it consumed more data and was thus more expensive, it was more commonly used to contact friends and family. In contrast, WhatsApp was easily accessible, cheaper to run and the students could get instant responses from other students to questions and queries relating to their studies. WhatsApp thus allowed students to transfer in to study. It introduced and enabled a social context for studying at a distance, which one Namibian student described in detail:

In the first semester, I really didn't use social media because maybe I was thinking it will be actually be a distraction to me and then, you know, like, I will get hooked to it and then maybe not concentrate on my studies. But then I realised that it was a mistake because there was one module that I did poorly and then the lecturer actually suggested that I join the WhatsApp group. Initially I thought that the students copy from each other and at the end of the day, when you take the exam, you won't really know much, but I was wrong. When I started using it, I actually learned that it pushes you. Sometimes you don't understand a concept really that well, and on the WhatsApp group, because on the social media, because, like, you really don't meet physically, you can ask a stupid question because the person doesn't see you and you don't see the person's face. But people respond because you have more than 20, 30, 60 people in the group, so one is bound to answer you, and, at the end of the day, you understand something that you normally would have struggled with. Even other people ask stupid questions, as well, so you feel like, okay, now we're at the same level.

There was a strong element of 'informal' learning through the WhatsApp groups. The WhatsApp groups were in general much more informal than the my unisa portal-possibly because they consisted only of students. The informality and institutionally unregulated nature of the WhatsApp groups made people feel more relaxed to ask questions relating to practical issues, such as surrounding fee payment or obtaining text books outside of SA. Although some did find the WhatsApp groups too informal and lacking academic focus, especially those from poorer backgrounds who had more limited opportunities to engage with people from other backgrounds and places, found these groups very useful in providing practical support. In this digital space, they could exchange information that was not only directly related to the course, but also related to practical issues which were vital elements to enable their formal study. These included, for example, international students in Zimbabwe seeking advice from other students regarding the opportunities for obtaining foreign currency to pay their fees for UNISA and Namibian students resolving problems relating to registration. In some cases this even involved students living in SA going to UNISA on behalf of their fellow WhatsApp group members: 'I formed a couple of relationships with some ladies that I've studied with, so whenever I'm stuck and I need something from the university, because they have access to the university they actually try and help out at the same time ... Most of them actually go to the university on our behalf.' WhatsApp was thus vital in helping students learn to navigate UNISA pedagogic and institutional systems and adapt to their new educational experience. Through these digital interactions WhatsApp aided the development of 'cross-cultural intelligence' that Mokhothu and Callaghan (2018) identify as so vital in aiding sociocultural adaption to a new institution for international students. WhatsApp groups thus constituted an informal sphere for transferring knowledge about practical issues which enabled the formal learning process and ameliorated some of the practical difficulties of studying 'at a distance'.

Finally, WhatsApp was also used by students who had been in direct contact with lecturers or tutors or had seen some relevant news and updates on the Web-portal my.unisa. They transferred information between these forms of communication and their WhatsApp group. WhatsApp mediated communication not only between individuals but also channelled information from other media. For instance, one Namibian student explained:

For instance when our registration was delayed we went to the group, we asked for those registered to send us materials and that's how we had access to study guides and tutorial letters, because when your registration is pending you can't access your study materials and in the meantime the assignments are due. So you know you're registered, registration will be processed in due course, you don't know when, but in the meantime you can access study materials from the WhatsApp group and start with your assignments.

As most of the UNISA students were studying part-time while working full-time and were selffunded, many did not have the time or the resources to log in to my unisa frequently as it required a stable internet connection to a laptop or desktop computer. WhatsApp was quicker and cheaper and came directly to the individual. Students did not need to spend browser time actively seeking out the information provided through WhatsApp, in contrast to information on the my.unisa portal. Indeed, the majority of interviewees considered WhatsApp more useful for their learning than the more formal my.unisa portal. The portal was used to check for updates, access course materials and it was also the gateway through which students obtained contact details of other students in order to set up WhatsApp groups. WhatsApp then became the main conduit for the active negotiation of the learning environment, digital and non-digital. While most students did not use WhatsApp exclusively, they would often rely on it for their everyday communication with other students and as such, it acted as an informal everyday information tool for IDE students.

WhatsApp thus enabled this particular group, Internationalisation at a Distance students, to actively transfer in to study, informally transfer practical information about their new learning situation and transfer knowledge between each other, their tutors and different digital resources. These processes of transfer acted to mediate their 'distance' from the university.

Translate: grounding study and relationships

Interactions on WhatsApp were not only about settling in or resolving practicalities relating to their studies, but it also became a digital space where the students could learn about other topics, people and societies 'beyond the classroom walls'. For many students, the WhatsApp groups became a necessary means through which to translate between their own experiences and knowledge and the South African context, within which their academic material was set. For example, the majority of the international students in this study lived in their countries of origin and could not afford frequent international travel. As a result, many had limited encounters with people from other countries. The WhatsApp groups enabled them 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. For example, one Forensic Science student explained he was able to meet colleagues in other countries through WhatsApp, and it gave him an opportunity to discuss methods and learn about similarities and differences in working practices and to translate between his lived experience and that of others situated elsewhere in Africa, thus 'grounding' his studies. Another male Zimbabwean student noted: 'We also use it to share career experiences and ideas on how to solve particular work problems; I remember some other guy, he actually brought in an issue that he had suffered at his own workplace so he was consulting us as colleagues on how he is going to handle that particular issue.' WhatsApp aided the students to digitally 'travel' between 'home', South Africa, elsewhere in Africa and sometimes beyond, enabling the co-presence of here/there and facilitating the 'on going connection with places and networks' (Martin and Rizvi 2014, 1018). This created a sense of belonging to a wider transnational community.

Through these and other interactions on WhatsApp, many students developed close friendships. Some of these remained online friendships, especially among students who lived far away from other students or in rural areas where they had few opportunities to meet other students in person. In contrast, students who lived in cities with many other UNISA students, such as Harare in Zimbabwe or Windhoek in Namibia, had more opportunities to meet other students in person. Often, students first met to study together face-to-face and support each other's academic progress, but as time passed, some of these relations developed into friendships. In one case, a male student in Namibia explained how he and three other students on the same course had met online, but had gradually become close friends through meeting in person both to study and socialise. He illustrated their friendship by pointing out that he had even been invited to the wedding of one of these students.

WhatsApp emerges, then, as a tool that not only translates knowledge and experiences but also facilitates the development of intimate friendships beyond the WhatsApp arena, thus grounding social relationships. These opportunities for translation between online and the offline relationships, as well as the translation between different contexts, made WhatsApp essential for many IDE students in their learning journey.

Transform: WhatsApp, study and students reshaped

Over time, students transformed their use of WhatsApp, to suit their personal use preferences of the social media application, and for the various types of interactions that students were having on the platform. Transformations in WhatsApp use depended on the nature of the group, and how the students' needs changed during the period of study. The size of WhatsApp groups varied, as did the level of participation of its members. Large groups acted to silence some students, with many reporting that they read other students' comments but did not contribute to the group. They appeared to be overwhelmed by the pace of conversations or did not feel confident about the relevance of their potential contribution. For example, an elderly Zimbabwean student explained that if he put down his phone for a few minutes, when he picked it back up, he would have to scroll several pages from the last post he had read to the most current group post, noting that the topic of conversation would already have moved to another. Also, a female Zimbabwean student found it difficult to follow the discussions on her WhatsApp group and feared posting an off-topic comment and seeming unintelligent. However, students who were active on these groups sometimes considered the silent participants as 'freeloaders' who took advantage of their contributions without offering them any support or insights. Questions must therefore be asked whether WhatsApp was ameliorating, or in fact exacerbating, offline inequalities between students?

The challenges of large WhatsApp groups led some students to create new, smaller study groups. For example, one participant created a separate WhatsApp group for himself and the five other most active students from a larger group. They were all from Zimbabwe and forming a new group enabled them to create a study environment that was more efficient and 'exclusive' to those who were most eager to use WhatsApp to study together with others. They set ground rules of how to run the group with a specific time in the evening to study together every weekday, and dealt with specific topics each time they met online. They set up and used this WhatsApp group to study in a more structured, planned manner, blurring the boundaries between the formal and informal learning sphere; WhatsApp thus acted as a space for learning with 'varying attributes of formality and informality' (Greenhow and Lewin 2016, 7). Interestingly, it was not only through such communal study groups that learning was transformed; sometimes it occurred through one-to-one mentorship, as explained by one Namibian student:

For instance, the guy from Nigeria, 'cause he's ahead of me and he's very intellectual, and because he's done most of the modules that I've done ... I decided to work with him because he's not somebody that will spoon-feed you and because he's ahead of me, I will approach him for clarity but then he will never give me answers, which is actually better compared to the group where you get to be told.

Learning, as an interactive communal process (either in a group or one-to-one) has a long historical precedence in Africa (Burger and Trehan 2018) which in this case of IDE students is now occurring through digital interactions on WhatsApp groups. Through such interactions the specific academic content, approaches and pedagogies of UNISA were actively interpreted through creative dialogue according to the differing (academic subject, group size, nationality) constituencies of the WhatsApp groups. Thus importantly, through WhatsApp groups, study practices (and potentially outcomes) were transformed.

WhatsApp also had the potential to transform the students. The frequent interactions with other students led to the formation of new social relations. Although students told us that their friends and families were supportive of their studies, some found other forms of support on the WhatsApp groups with other UNISA students. Here, they not only shared jokes, discussed and argued but also conversed about how others managed the challenges of balancing work, studies and family life. The shared experience and objectives of IDE students made them feel like that they were not alone. One student, a Zimbabwean man, compared the relationships he established through WhatsApp to being on a bus journey. This metaphor of people being in a shared space for the purpose of reaching the same destination illustrates how a sense of collaborative or communal learning was



shaped through WhatsApp. Yet another Zimbabwean student explained how this environment enabled him to progress in his studies:

The use of social media has made the studies a little bit informal, which is what we need. It makes the whole concept of studying or the whole concept of learning informal, and when it becomes informal it becomes exciting, and when it becomes exciting it ceases to be study, study, study, study, but it means I am studying, and at the same time I am enjoying talking to other people.

Students supported each other, transforming themselves and their studies, thus aiding retention in the IDE journey. However, although students actively engaged in WhatsApp and thereby altered the process of study, themselves and their use of WhatsApp, the accessibility and importance of WhatsApp also varied between students, as we elaborate below.

Whatsapp and socio-technical marginalisation

In this section we briefly discuss how the ability to access WhatsApp via technological infrastructure cut across social categories, highlighting how differentiation in WhatsApp use was both socio-technical and demographic.

The participants in our study described internet access as essential for pursuing their studies at UNISA. Considering the value they placed on the use of WhatsApp, they put great effort in ensuring sufficient internet access, as one Zimbabwean student illustrated: 'I buy data bundles using my phone and then I use an internet sharing facility on my phone to connect to my laptop. It's a bit expensive but when you are determined you want something, you really need to make sure that you can achieve it.' Several of the less wealthy students struggled to afford sufficient internet access, but many kept the cost down by using the Wi-Fi at work to download study materials from my.unisa, and only paying for the use of WhatsApp on their phones in the evening to engage with other students. In this way, they were generally able to access the materials that they needed. The my.unisa portal was accessible to students who could afford these connections in their homes, at work, or at study centres and libraries, but less so for students in remote areas. However, the cost of internet access constituted a major barrier for those who did not have access to Wi-Fi and who had to pay for all their use of the internet.

The majority of students found data bundles for phones to be expensive. For example, in Zimbabwe, there was a range of different bundles available. For people who could afford it, the most convenient option was to pay USD 25 for 30 gigabytes per month on the national telecommunications provider (TelOne), or to pay USD 89 for unlimited usage per month. A more common option among those who could not afford to pay a relatively large sum in one go, was to buy a 1 Dollar bundle of 250 Megabits that lasted up to 24 hours, for general internet access including email and internet browser access. Another alternative was to purchase a 'social media bundle', which would give unlimited data only for one social media application, choosing between WhatsApp or Facebook. These bundles could be purchased for various time periods such as per day, week or calendar month (respectively 35c, USD1 and USD3). This price also varied ±50c across the major mobile network providers (Telecel and Econet) and also had data limitations, such as 20MB for the daily WhatsApp bundle. As this data package was the cheapest option, students often purchased these bundles to stay in touch with student groups on WhatsApp. For those who had the means, however, it was fairly straightforward to obtain stable and fast internet connection in the form of Wi-Fi at home, as well as data bundles on their phones. Consequently, students' access to the internet was not restricted by underdeveloped infrastructure in this case, but rather to their capacity to pay for the services, which was also the case in Namibia. Such socio-technical marginalisation has also been noted by Brown and Czerniewicz (2010) who demonstrate that a deepening digital divide exists among South African students, characterised by access and opportunity to ICT rather than by age.

Moreover, this interweaving of access to technological infrastructure with socio-economic differences were compounded by deeply entrenched racial inequalities between the students. Many white IDE students, who often faced fewer financial constraints, had very good internet connections even if they lived in rural areas and could afford to hire private tutors, did not find WhatsApp such a useful resource for their studies. In addition, many white students also had well established connections in several countries and more experience of international travel within and outside of Africa, which had exposed them to a myriad of experiences which made the opportunities provided by WhatsApp seem less attractive. Owing to their relative privilege they already had sufficient access to resources and information and were not as reliant on WhatsApp for their studies. By contrast, for some black IDE students WhatsApp represented a unique way of connecting to others in a digital space that offered real opportunities to develop meaningful learning communities and enable negotiation of the IDE learning journey. This was particularly important as black students from working class backgrounds or rural areas may have previously received poorer quality public education that had not prepared them adequately for tertiary education. For these students, WhatsApp constituted a space of potential opportunity. There were, of course, inequalities and differences among black students, but the most significant inequality that emerged in the interviews was between white and black students, which is representative of the broader and longstanding racial inequalities that the region continues to grapple with in the contemporary period despite the end of colonialism and apartheid (Czerniewicz 2018; Letseka, Letseka, and Pitsoe 2018).

That said, sometimes these social differences of race and class, which entwined with problems of access to technical infrastructure, were overcome by forms of 'communality' woven into the fabric of WhatsApp practices by these IDE students. Students who had easier access to my.unisa sometimes helped other students who struggled with access by downloading UNISA coursework material posted on my.unisa and sharing it on WhatsApp groups, where all the other students could then view or download the material. Exam packs were also shared in this manner. So despite issues of socio-technological marginalisation, this does again indicate the active way in which many students were using WhatsApp throughout their IDE journey to create new communal learning communities.

By way of conclusion: emerging comments

So how then, does this example of African IDE students inform debates about global technologies, distance education and 'marginalised groups'? There are several issues worthy of reflection.

First, African IDE students show active agency in engaging with WhatsApp to shape their learning experience in multifaceted ways. In this paper we have explored transfer, translate and transform as three ways in which this engagement with WhatsApp might be conceptualised. WhatsApp was used extensively by most IDE students in an active way to shape their learning process: indeed it was seen as the learning tool for their studies. This role of WhatsApp was particularly important in the context of IDE, as it enabled students to ameliorate some of the problems associated with physical 'distance' though their digital interactions. As such, WhatsApp was used to negotiate the vast array of educational infrastructures involved in IDE. However, different students were using WhatsApp in different ways, some for inclusive and 'communal' learning purposes and others for more individualistic (and potentially exclusionary) motivations. Moreover, although WhatsApp enabled (most) students to navigate their studies more effectively and actively, the online arena was not a level playing field and offline differences between students in terms of academic ability, technological proficiency, and adjustment to HE studies, cross-cut by vectors of nationality, race and social positioning, could both be ameliorated (through sharing of information and communal learning) and exacerbated (through online exclusions). This problematises ideas surrounding both the ubiquity and the normative good of social media for educational purposes.

Secondly, although WhatsApp provided a 'space of opportunity' for some students, engagement with WhatsApp was also framed through socio-technical marginalisation, itself a reflection of demographic legacies of inequality. For students at UNISA, WhatsApp offered many unique opportunities. However, it has emerged that the use of WhatsApp cannot be seen as a tool that transcends pre-existing inequalities. Rather, students' access to and use of WhatsApp reflects and is embedded in unequal access to technical infrastructure and continuing historical legacies of social inequalities that remain central in shaping IDE students' lives. These past layers of inequalities continue to pervade students' lives, even in the digital arena, but, at the same time, WhatsApp acted as a conduit to aid study success, thus potentially becoming a route to even out some of the inequalities that have historically been reproduced through HE. This suggests that in order to understand the multifaceted use of WhatsApp in the learning process of IDE students, we need to 'go beyond the classroom walls' to start to uncover and understand wider historical and socio-economic legacies. Such legacies of inequality can both be reproduced, and challenged, through the social media arena. Social media engagement is not, therefore, a 'level playing field' but entangled with offline/real world/material inequalities, indicating the need to move beyond the 'social media bubble' to contextualise social media practices within wider arguments related to varied student experiences, social power relations and historical legacies of inequality. This is why it is important to conceptually envisage social media as enmeshed with wider socio-political structures, culture and histories, as well as well as entangled with learning materials, students, peers and lecturers and wider institutional pedagogic practices. Students' engagement with social media is thus enmeshed with their context, while at the same time social media also gives some students the ability to shape that context. Therefore, thinking about the reiterative role of social media in IDE students' lives then becomes more than a 'technological fix' but instead enables a conceptual shift from thinking about the student as 'the problem' to wider technological/social/economic/political issues being 'the problem'.

Finally, considering African IDE student experiences, which are not commonly seen in the literature surrounding social media and higher education, offers a new way to understand this reiterative relationship between social media and global education. While offline lives, power hierarchies and global circuits of education clearly still matter (and are inextricably linked to the online world, both shaping and being shaped by it), the emergence of WhatsApp as a key social media tool opens up some opportunities for IDE students to transfer, translate and transform their educational journey in ways that were not possibly in the past. Exploring such processes through everyday social media practices enables a reframing of 'global' education from an African IDE student perspective or norm, placing such perspectives centre stage and adding to the awareness of the multiple centres from which international education emanates (Madge, Raghuram, and Noxolo 2015). This is an important move in promoting more globally inclusive scholarship on international higher education research (Mwangi et al. 2018).

Notes

- 1. There are multiple reasons for African countries' low enrolment in HE, including a lack of recognition of the presence and value of indigenous African educational institutions/thinking; colonial histories which resulted in the underdevelopment of African educational institutions and often resulted in outmigration from Africa for tertiary education in the 'mother' country; and more recent neoliberal geopolitical policies, such as structural adjustment, which reduced state educational provision in many African nations.
- 2. International distance education (IDE) refers to education accessed remotely across international borders via correspondence/telematics/or internet i.e. without regular face-to-face contact with teachers in a classroom. IDE involves translocality and transtemporality, whereby students are 'simultaneously situated in more than one place' and engage in 'multiple times and temporalities' through their 'digitally connected spaces of work and study' (Sheail 2018, 56).
- 3. Many UNISA students are from South Africa, both living there and abroad, muddying simplistic dualisms of home and international in this particular distance learning context (see Mittelmeier et al. submitted).
- 4. As Peters (2010, 32) notes, while early forms of DE provided access to 'those disadvantaged by distance, by precarious economic conditions, by belonging to discriminated minorities, or by being disabled' current DE also sees 'a growing number of privileged students who do not learn at a distance because they are forced to do this by unfavourable circumstances, but rather for reasons of convenience only'.
- 5. The limitations and opportunities of these transnational online interviews are discussed in Madge et al. (submitted).
- 6. Valid percentages were calculated rather than using raw percentages since some questions were optional to answer and hence there was missing data if a student selected not to answer a particular question. Thus



- valid percentage is equivalent to the percentage of participants who answered that question (i.e. excluding missing data). This convention is followed in tables in this paper. For example, in Table 1 there is missing data from 55 participants who opted not to complete this question.
- 7. For Table 2 individual questions on the questionnaire were asked on a 1-9 Likert scale (1 = strongly disagree, 9 = strongly agree). To provide a general understanding of students' responses to these questions, we have calculated the percent that agreed with the statement, which we have defined as those who rated their response on a six or above (i.e. above the median, neutral point of 5).

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References

- Agba, P. C. 2017. "Media Technology and the Enlarging World of Distance Education in Nigeria." *International Journal of Communication* 2 (1): 18–31.
- Anshari, M., M. N. Almunawar, M. Shahrill, D. K. Wicaksono, and M. Huda. 2017. "Smartphones Usage in the Classrooms: Learning aid or Interference?" *Education and Information Technologies* 22 (6): 3063–3079.
- Béché, E. 2018. "Open and Distance Learning in French-Speaking Sub-Saharan Africa: A Literature Review." *The International Review of Research in Open and Distributed Learning* 19 (3). https://doi.org/10.19173/irrodl.v19i3. 3265.
- Bosch, T. E. 2009. "Using Online Social Networking for Teaching and Learning: Facebook use at the University of Cape Town." Communication: South African Journal for Communication Theory and Research 35 (2): 185–200.
- Brown, C., and L. Czerniewicz. 2010. "Debunking the 'Digital Native': Beyond Digital Apartheid, Towards Digital Democracy." *Journal of Computer Assisted Learning* 26 (5): 357–369.
- Burger, U., and K. Trehan. 2018. "Action Learning in East Africa: new Encounters or Impossible Challenges?" *Action Learning: Research and Practice* 15 (2): 126–138.
- Chugh, R., and U. Ruhi. 2018. "Social Media in Higher Education: A Literature Review of Facebook." *Education and Information Technologies* 23 (2): 605–616.
- Collins, F. L. 2012. ""Cyber-Spatial Mediations and Educational Mobilities: International Students and the Internet"." In *Changing Spaces of Education: New Perspectives on the Nature of Learning*, edited by R. Brooks, A. Fuller, and J. L. Waters, 244–260. Abingdon and New York: Routledge.
- Czerniewicz, L. 2018. "Inequality as Higher Education Goes Online." In *Networked Learning*, edited by N. B. Dohn, S. Cranmer, J. A. Sime, M. de Laat, and T. Ryberg, 95–106. New York, NY: Springer.
- Edumadze, J. K., J. I. Ogoe, G. Essilfie, G. E. Edumadze, and R. E. Graham. 2017. "E-learning at the University of Cape Coast, Ghana-are our Distance Education Students Technologically Ready?" *The Online Journal of Distance Education and e-Learning* 5 (1): 47–55.
- Findlay, A. M., R. King, F. M. Smith, A. Geddes, and R. Skeldon. 2012. "World Class? An Investigation of Globalisation, Difference and International Student Mobility." *Transactions of the Institute of British Geographers* 37 (1): 118–131.
- Forbush, E., and B. Foucault-Welles. 2016. "Social Media use and Adaptation among Chinese Students Beginning to Study in the United States." *International Journal of Intercultural Relations* 50: 1–12.
- Funes, M., and J. Mackness. 2018. "When Inclusion Excludes: A Counter Narrative of Open Online Education." Learning, Media and Technology 43 (2): 119–138.
- Gachago, D., S. Strydom, P. Hanekom, S. Simons, and S. Walters. 2015. "Crossing Boundaries: Lectures' Perspectives on the use of WhatsApp to Support Teaching and Learning in Higher Education." *Progressio* 37 (1): 172–187.
- Garrett, R. 2016. The State of Open Universities in the Commonwealth: A Perspective on Performance, Competition and Innovation. Burnaby: Commonwealth of Learning. http://oasis.col.org/handle/11599/2048.
- Greenhow, C., and C. Lewin. 2016. "Social Media and Education: Reconceptualizing the Boundaries of Formal and Informal Learning." *Learning, Media and Technology* 41 (1): 6–30.
- Gunter, A., and P. Raghuram. 2016. "Internationalization, Localization, and the Eduscape of Higher Education in the Global South." In *Rethinking International Skilled Migration*, edited by M. Van Riemsdijk, and Q. Wang, 111–132. London: Routledge.
- Gunter, A., and P. Raghuram. 2018. ""International Study in the Global South: Linking Institutional, Staff, Student and Knowledge Mobilities." *Globalisation, Societies and Education* 16 (2): 192–207.
- Knight, J. 2008. Higher Education in Turmoil: the Changing World of Internationalization. Rotterdam: Sense Publishers.
- Knight, J. 2014. International Education Hubs. New York: Springer.
- Kondakci, Y., B. Svenja, and O. Zawacki-Richter. 2018. "Social Network Analysis of International Student Mobility: Uncovering the Rise of Regional Hubs." *Higher Education* 75 (3): 517–535.
- Lane, J. E. 2011. "Importing Private Higher Education: International Branch Campuses." *Journal of Comparative Policy Analysis: Research and Practice* 13 (4): 367–381.



- Lee, K. 2017. "Rethinking the Accessibility of Online Higher Education: A Historical Review." The Internet and Higher Education 33: 15-23.
- Lee, J. J., and C. Sehoole. 2015. "Regional, Continental, and Global Mobility to an Emerging Economy: The Case of South Africa." Higher Education 70 (5): 827-843.
- Letseka, M., M. M. Letseka, and V. Pitsoe. 2018. "The Challenges of E-Learning in South Africa." In Trends in E-Learning, 121-138. IntechOpenDOI: 10.5772/intechopen.74843.
- Madge, C., Cin, F.M., Long, D., Breines, M., Dalu, M.T.B. (submitted) "Transnational Online Research: Recognizing Multiple Contexts in Skype-to-Phone Interviews." Qualitative Research
- Madge, C., J. Meek, J. Wellens, and T. Hooley. 2009. ""Facebook, Social Integration and Informal Learning at University: 'It is More for Socialising and Talking to Friends About Work Than for Actually Doing Work." Learning, Media and Technology 34 (2): 141-155.
- Madge, C., P. Raghuram, and P. Noxolo. 2015. "Conceptualizing International Education: From International Student to International Study." Progress in Human Geography 39 (6): 681-701.
- Makoe, M. 2010. "Exploring the use of MXit: A Cell-Phone Social Network to Facilitate Learning in Distance Education." Open Learning 25 (3): 251-257.
- Martin, F., and F. Rizvi. 2014. "Making Melbourne: Digital Connectivity and International Students' Experience of Locality." Media, Culture & Society 36 (7): 1016-1031.
- Mbodila, M., C. Ndebele, and K. Muhandji. 2014. "The Effect of Social Media on Student's Engagement and Collaboration in Higher Education: A Case Study of the use of Facebook at a South African University." Journal of Communication 5 (2): 115-125.
- Mittelmeier, J., D. Long, F. M. Cin, K. Reedy, A. Gunter, P. Raghuram, and B. Rienties. 2018. ""Learning Design in Diverse Institutional and Cultural Contexts: Suggestions From a Participatory Workshop with Higher Education Professionals in Africa." Open Learning: The Journal of Open, Distance and e-Learning 33 (3): 250-266.
- Mittelmeier, J., B. C. Rienties, J. Rogaten, A. Gunter, and P. Raghuram. (submitted) "Internationalisation at a Distance and at Home: Academic and Social Adjustment in a South African Distance Learning Context." International Journal of Intercultural Relations.
- Mnkandla, E., and A. Minnaar. 2017. "The use of Social Media in e-Learning: A Metasynthesis." The International Review of Research in Open and Distributed Learning 18 (5), https://doi.org/10.19173/irrodl.v18i5.3014.
- Mohamedbhai, G. 2014. "Massification in Higher Education Institutions in Africa: Causes, Consequences and Responses." International Journal of African Higher Education 1 (1): 59–83.
- Mokhothu, T. M., and C. W. Callaghan. 2018. "The Management of the International Student Experience in the South African Context: The Role of Sociocultural Adaptation and Cultural Intelligence." Acta Commercii 18 (1): 1-11.
- Muhirwa, J. M. 2009. "Teaching and Learning Against all Odds: A Video-Based Study of Learner-to-Instructor Interaction in International Distance Education." The International Review of Research in Open and Distributed Learning 10 (4). https://www.learntechlib.org/p/49662/.
- Mwangi, C. A. G., S. Latafat, S. Hammond, S. Kommers, H. S. Thoma, J. Berger, and G. Blanco-Ramirez. 2018. "Criticality in International Higher Education Research: A Critical Discourse Analysis of Higher Education Journals." *Higher Education* 76 (6): 1091–1107.
- Ng'ambi, D., C. Brown, V. Bozalek, D. Gachago, and D. Wood. 2016. "Technology Enhanced Teaching and Learning in South African Higher Education-A Review of a 20 Year Journey." British Journal of Educational Technology 47 (5): 843-858.
- Nulty, D. D. 2008. "The Adequacy of Response Rates to Online and Paper Surveys: What can be Done?" Assessment & Evaluation in Higher Education 33 (3): 301-314.
- Peters, O. 2010. Distance Education in Transition: Developments and Issues. Oldenberg: BIS-Verlag der Carl-von-Ossietzky-University.
- Pimmer, C., P. Brysiewicz, S. Linxen, F. Walters, J. Chipps, and U. Gröhbiel. 2014. "Informal Mobile Learning in Nurse Education and Practice in Remote Areas—A Case Study from Rural South Africa." Nurse Education Today 34 (11): 1398-1404.
- Porter, G., K. Hampshire, J. Milner, A. Munthali, E. Robson, A. De Lannoy, and A. Abane. 2016. "Mobile Phones and Education in Sub-Saharan Africa: From Youth Practice to Public Policy." Journal of International Development 28 (1): 22-39.
- Prinsloo, P. 2016. "(Re)Considering Distance Education: Exploring its Relevance, Sustainability and Value Contribution." Distance Education 37 (2): 139-145.
- Rambe, P., and A. Bere. 2013. "Using Mobile Instant Messaging to Leverage Learner Participation and Transform Pedagogy at a South African University of Technology." British Journal of Educational Technology 44 (4): 544-561.
- Ricoy, M. C., and T. Feliz. 2016. "Twitter as a Learning Community in Higher Education." Journal of Educational Technology & Society 19 (1): 237-248.
- Rienties, B., S. Beausaert, T. Grohnert, S. Niemantsverdriet, and P. Kommers. 2012. "Understanding Academic Performance of International Students: the Role of Ethnicity, Academic and Social Integration." Higher Education 63 (6): 685-700.



- Sheail, P. 2018. "The Digital University and the Shifting Time-Space of the Campus." Learning, Media and Technology 43 (1): 56-69.
- Sin, S. C. J., and K. S. Kim. 2013. "International Students' Everyday Life Information Seeking: The Informational Value of Social Networking Sites." Library & Information Science Research 35 (2): 107-116.
- Sleeman, J., C. Lang, and N. Lemon. 2016. "Social Media Challenges and Affordances for International Students: Bridges, Boundaries, and Hybrid Spaces." Journal of Studies in International Education 20 (5): 391-415.
- Sobaih, A. E. E., M. A. Moustafa, P. Ghandforoush, and M. Khan. 2016. "To use or not to use? Social Media in Higher Education in Developing Countries." Computers in Human Behavior 58: 296-305.
- Subotzky, G., and P. Prinsloo. 2011. "Turning the Tide: A Socio-Critical Model and Framework for Improving Student Success in Open Distance Learning at the University of South Africa." Distance Education 32 (2): 177-193.
- Tang, Y., and K. F. Hew. 2017. "Is Mobile Instant Messaging (MIM) Useful in Education? Examining its Technological, Pedagogical, and Social Affordances." Educational Research Review 21: 85-104.
- UNESCO. 2015. Education 2030: Incheon Declaration and Framework for Action: Towards Inclusive and Equitable Quality Education and Lifelong Learning for all. Paris: UNESCO.
- UNESCO. 2017. "Six Ways to Ensure Higher Education Leaves no one Behind." Global Education Monitoring Report. Policy Paper 30. Paris: UNESCO.
- UNISA. 2018. Student Enrolments. UNISA. https://www.unisa.ac.za/sites/corporate/default/About/Facts-&-figures/ Student-enrolments.
- United Nations. 2018. "Global indicator Framework for the Sustainable Development Goals and Targets of the 2030 Agenda forSustainable Development". Available at https://unstats.un.org/sdgs/indicators/Global%20Indicator% 20Framework%20after%20refinement_Eng.pdf.
- Waters, J., and M. Leung. 2013. "Immobile Transnationalisms? Young People and Their in Situ Experiences of "International" Education in Hong Kong." Urban Studies 50 (3): 606-620.
- Yeboah, J., and G. Ewur. 2014. "The Impact of WhatsApp Messenger Usage on Students Performance in Tertiary Institutions in Ghana." Journal of Education and Practice 5 (6): 157-164.
- Zhao, X. 2017. "International Students and Social Exclusion in the age of Social Media." Transitions: Journal of *Transient Migration* 1 (2): 163–175.