# THE USE OF SOCIAL NETWORK SITES TO ENHANCE RELATIONAL TEACHING IN HIGHER EDUCATION

Yaw Owusu-Agyeman, University of the Free State
Semira Pillay, University of the Free State

## ABSTRACT

*Emergent scholarly studies on the use of social network sites (SNSs) in higher education have focused mainly on how SNSs could enhance effective teaching and learning. However, very few studies have explored how social relationships between teachers and learners could serve as a learner-centered approach to promote teaching and learning through SNSs. To address this gap, the current study gathered and analyzed qualitative data from 27 teachers and 51 students in a public university in South Africa. The findings show how the outcomes of the use of SNSs in the university are also linked to learner-centered approaches which include: the development of the knowledge, skills, and attributes of students required for the twenty-first century; students' demonstration of good social skills, teamwork, individual self-esteem, and confidence; and empowering students through their scholarly voices in the social network environment. To the teachers, the use of SNSs enhances their relational skills, enables them to be innovative in the use of digital technology, and allows them to create new pedagogical approaches. The study also reveals that when teachers interact and share knowledge with students in the social network environment, they serve the learning needs of all students, including those from low socio-economic backgrounds and first-generation students, through leaner-centered approaches. This paper adds to the literature on social constructivism by highlighting how the development of good social relationships between teachers and learners through what the authors term as digital relational pedagogies could serve as a learner-centered approach to effective teaching and learning, especially when facilitated by SNSs.*

**Keywords:** *social network sites, social constructivism, social relationship, learner-centered approach, digital relational pedagogies*

## INTRODUCTION

The emergence of digital technology has led to the use of various online applications in the teaching and learning environment. One of such commonly used online applications in educational settings is social network sites (SNSs), which afford teachers and learners the opportunity to develop, maintain, and expand their social networks (Al-Rahmi et al., 2018; Chai et al., 2019) while they make use of the full complement of the resources available in the SNSs. Social network sites have been explained as online spaces where people set up a public or personal profile to interact with worldwide communities (Camas et al., 2021). Acknowledging its multifaceted uses and advantages, SNSs have been found to engender interaction between teachers and learners (Greenhow & Askari, 2017), support collaborative learning (Al-Rahmi et al., 2018), and enhance individual well-being, happiness, good health, care for each other, individual responsiveness, and longevity (Clark et al., 2018; Thomas et al., 2020). While

the epistemology of SNSs continues to advance, not much is known about how formed social relationships, especially between teachers and learners in higher education institutions (HEIs), could be enhanced through SNSs to support effective teaching and learning. Again, with the increasing student population across countries of the world, it has become necessary for institutions to rely on good social relationships (Xerri et al., 2018) to reduce possible social, cognitive, and cultural gaps (Suciu, 2014) that constrain effective teaching and learning.

Global changes in the cultural and ethnic profile of the population of students have also led to increases in the cultural and ethnic diversity in the demography of students that is directly connected to human growth and development (Civitillo et al., 2018). This is no different in South Africa which continues to experience growth in student population with an estimated number of 1,283,466 million students enrolled in 150 public and private HEIs in 2018, as compared to 837,776 in 2009 (DHET, 2019). This development further calls for student support through the development of effective pedagogical approaches and quality social relationships between teachers and students in face-to-face and technology-mediated learning environments.

In practice, academic support assumes different forms, such as extended programs, additional classes, information technology innovation, language support, and summer/winter schools (Heher, 2017). These support functions include the roles of academic staff in ensuring that students become persistent and succeed in their academic pursuit through effective pedagogical approaches that include the development of good social relationships through SNSs. Although previous studies have examined how SNSs support learning especially among students (Manca, 2020; Sobaih et al., 2020; Mpungose, 2020), it is not clear how social relationships formed between teachers and learners through SNSs could enhance effective teaching and learning. As a departure, the current study examines how SNSs could enhance quality social relationships between teachers and students in a South African university using the social constructivism as the theoretical underpinning. This study was guided by three research questions (RQs):

RQ1: How do social network sites enhance the social relationships between teachers and students in the learning environment?

RQ2: What SNSs are used for enhancing teaching and learning in the university?

RQ3: What are the challenges associated with teachers' and students' uses of SNSs in the teaching and learning environment?

The study further discusses the context, theoretical underpinning, and the empirical processes used to arrive at the findings.

## SOCIAL CONSTRUCTIVISM AND LEARNING IN SOCIAL SETTINGS

Originally developed by Russian psychologist Lev Vygotsky, social constructivism—which is also referred to as the sociology of knowledge—explains how reality is constructed by individuals in social groups through a set of beliefs that enables them to interpret diverse actions and events in the world (Schreiber & Valle, 2013; Taber, 2020). Again, reality is constructed by persons within social groups over periods of time through interaction, language, artifacts, symbolic behaviors, and social rituals. To Vygotsky, the effect of social and cultural influences on learners and how they experience learning could be shaped by their teachers (Lourenco, 2012). Therefore, by developing strong social relationships with learners, teachers create a conducive learning environment that is learner-centered (Krahenbuhl, 2016) and involve interaction and participation in group activities by students. Furthermore, the teachers' decision to build good social relationships with students includes the need to enhance the quality of teaching and learning (Taylor, 2019) and the desire to see students work together and relate with each other well (Schick, 2020). The learning environment is also very important because HEIs serve as the sociocultural and economic context that transforms how teaching and learning are conducted through technology-mediated processes (García et al., 2022; Wilson, 2020).

Today, as the use of digital technologies for learning in HEIs continues to expand (Ye & Pennisi, 2022), it has become necessary for researchers to explore how social relationships between teachers and learners could be enhanced through SNSs. Previous studies have shown that

the enrollment of students in universities is accompanied with possible risk of poor mental health and loneliness (Thomas et al., 2020), which could be addressed through effective relational pedagogies (Ljungblad, 2021) and interpersonal relationships (Marksteiner et al., 2019), especially through SNSs. Likewise, social relationships and interactions among learners and between teachers and students are important for enhancing the learning experiences of students in online learning environments (Händel et al., 2022). Although social constructivism provides a strong background to group learning and interaction, it has been critiqued on the basis that it is grounded in relativism (Fischer, 2019), which assumes that knowledge and truth exist in relation to historical context, institutional structure, and culture that are not absolute. In the context of the current study, social constructivism is explained as how knowledge is constructed and reconstructed by learners in formal and informal learning settings through social interaction, group activities, and active engagement that is enabled by a learner-centered approach.

## SOCIAL NETWORK SITES AND SOCIAL RELATIONSHIPS

The ubiquity of web access and digital learning technology that allows for interaction, especially in educational institutions, have led to different tools and services that teachers and learners could select from in order to enhance their interaction, support the learning needs of students, and personalize the learning experiences of students (Kompen et al., 2019; Manca & Ranieri, 2017; Scott et al., 2016). Social network sites, which include Facebook, Google Plus, and Twitter, have social-relational aims that support higher-education pedagogies (Manca, 2020; Manca & Ranieri, 2017; Sobaih et al., 2020). Also, SNSs afford students the opportunity to access, create, edit, and share course content in textual, video, or audio forms (Ansari & Khan, 2020). Generally, SNSs enhance formal and informal learning within and outside the educational environment (Scott et al., 2016) while enabling teachers to support learners through digital scaffolding. One of the important features of Vygotsky's theory of social constructivism is what he refers to as the zone of proximal development (ZPD), which underscores the role of instructors as central to the learning processes of individuals (Schreiber & Valle, 2013). Under ZPD, the role of the constructivist instructor is to support students' learning through scaffolding in an activity space (Taber, 2018) that is characterized by social interaction, formative and summative assessments, practical demonstrations, and feedback systems.

In recent years, SNSs have evolved as a tool that enables teachers and learners to engage in interaction, reflection, communication, and collaborative knowledge construction (Camas et al., 2021). Scholarly studies from different countries have revealed differences in the uses of SSNs as well as the dominant use of SNSs. For instance, prior study in Egypt has shown that while Facebook and WhatsApp serve as the dominant SNSs, teachers' use of social media was to satisfy the learning outcomes of the courses they teach, while students used social media to support each other and build an online community (Sobaih et al., 2020). Similarly, studies from Israel and Denmark have shown that students use social network technologies for social and leisure goals, sharing peer lesson summaries, taking whiteboard snapshots, providing administrative information, and doing homework (Aaen & Dalsgaard, 2016; Asterhan & Bouton, 2017). Reporting on their findings from Turkey, Akçayır et al. (2016) noted that the most used form of SNS is Facebook, while Afzal & Abdullah (2022) also highlighted the importance of WhatsApp to the cognitive, behavioral, and social development of students. Focusing on a lifelong learning continuum in Spain, Arquero and Romero-Frías (2013) show that the use of SNSs afford students the opportunity to develop new knowledge in the application of web tools, enhance content learning, have uninterrupted access to their teachers and colleagues, and enable them to continuously obtain knowledge in a lifelong setting. A similar study in South Africa by Mpungose (2020) showed that by adopting SNSs such as WhatsApp, students who may initially have challenges using online learning devices and networking sites could gradually adjust to formal digital learning platforms. Other formulations also suggest that SNSs have been used to enrich the learning processes of students and also facilitate group discussions through collaborative learning and engagement (Al-Rahmi et al., 2018; Ansari & Khan, 2020) and enable students to retrieve information and interact with their colleagues and teachers in real time (Ansari & Khan, 2020).

While the use of SNSs and tools continue to shape teaching and learning processes, especially in higher education settings (Bouton et al., 2021; Ye & Pennisi, 2022), other literature suggest that it has been used for social purposes and leisure with very little effect on students' academic achievement (Junco & Cotten, 2012). Other concerns raised include students' preference for face-to-face learning due to technology-related anxiety, frustration, anger (Tratnik et al., 2019), stress-related emotions, and loneliness (Händel et al., 2022). On the contrary, Putnik et al. (2016) show that there is a positive relationship between students' use of SNSs and their academic achievement. Similarly, Clark et al. (2018) argue that when SNSs are used to promote connections and associations, they could enable users to meet their needs for acceptance and belonging.

## RESEARCH METHODS

A recent study in South Africa has shown that challenges in the higher education sector include high attrition and low retention rates, with an estimated 50 percent of Black students who enroll in universities exiting before graduation (McGhie, 2017). Furthermore, demographic and historical backgrounds, such as first-generation status and socio-economic dynamics, play a major role in the retention of students in educational institutions (McGhie, 2017; Mpungose, 2020). To address the challenges students face in the learning environment, there have been calls for teachers to reimagine the traditional norms of teaching, learning, and assessment and to assist students in understanding how interaction and the exchange of knowledge and ideas can be done through digital technologies (Greenhow & Askari, 2017). The current study context has a student population of 41,169 and a staff population of 2,521, who are distributed in three geographical locations in South Africa. Students who enroll in the university are from diverse racial and socio-economic backgrounds. Although the university has developed social and academic programs to support the academic and social development of students, it has become necessary to assess how SNSs could strengthen the social relationships between teachers and learners in the university. Therefore, by incorporating the opinions of teachers and learners, this paper examines how SNSs could support quality social relationships between lecturers and students and further enhance the social relational aims of learning in the university. The current study adopted a qualitative research approach to gather and analyze data from participants in the study setting. One of the advantages of qualitative research is that it enables researchers to understand occurrences in their natural setting while they seek to explore the perspectives and experiences of subjects that cannot be explained through objective measurements (Castleberry & Nolen, 2018; Kyngäs et al. 2020). To provide answers to the research questions, a semi-structured interview was used to collect data from students and academics at the university.

### *Participants and Sampling Techniques*

Purposive and snowball sampling techniques were used to gather data from teachers and students across all three campuses of the university. The teachers who participated in the study were made up of 12 males and 15 females. The distribution of academics based on their faculty are as follows: Humanities (7); Education (5); Law (2); Natural and Agricultural Sciences (6); Economic and Management Sciences (1); and Health Sciences (6). All the participants were de-identified by assigning them pseudonyms. The student participants consisted of 23 males and 28 females. The distribution of students based on their faculty are as follows: Humanities (16); Education (5); Law (3); Natural and Agricultural Sciences (14); Economic and Management Sciences (6); and Health Sciences (7). All the participants were de-identified by assigning them pseudonyms.

### *Procedures*

A formal digital invitation was emailed to academics and students across all three campuses of the university. Consequently, participants who consented to participate in the study were contacted by the research team who then arranged for interviews with the participants on agreed dates and venues. The interviews were conducted between June and August 2021 across three campuses of the university using Microsoft Teams due to social distancing rules. Before the start of each interview session, participants were briefed about the purpose of the study, and a consent form was sent to them to read and sign afterwards. The duration of each interview was between forty-five and sixty minutes. Two sets of semi-structured interview

schedules were developed for the purpose of gathering interview data from academics and students at the university. The use of semi-structured interviews allowed the interviewers to probe and engage with participants using follow-up questions when necessary (Walker & Gleaves, 2016). All the voice recordings were transcribed and the transcripts were carefully cross-checked with the voice recordings to ensure that the feedback of participants was correctly captured. To ensure confidentiality of the information given by participants, three important processes were followed. First, the participants were informed of the method that would be used to safely process and store the interview data. This safety process includes storing the interview data on a password-protected computer for a period of five years. Secondly, prior to the commencement of the interview, participants were informed not to disclose any personal information that could easily link them to the data. Thirdly, although the interviews were conducted online via Microsoft Teams, only the interviewer and the interviewee were present online while each session was recorded on Microsoft Teams and a separate recorder. The current study was approved by the Research Ethics Committee of the university. Also, in line with the rules of ethical consideration—the purpose of the study—the right of any participant to withdraw from the interview was explained, if they felt they could not continue for personal reasons or due to potential risks and benefits associated with the study.

## INTERVIEW DATA ANALYSIS

The interview data gathered from the participants were evaluated using thematic analysis. The process of analyzing the interview data included the development of codes for categories and themes (Williams & Moser, 2019). By developing the codes, categories, and themes from the interview data, the study also gathered relevant details about the characteristics and perceptions of participants concerning how SNSs enhance social relationships between teachers and learners in the university (Korstjens & Moser, 2018; Nowell et al., 2017). Again, the study examined multifarious and rich datasets (Neuendorf, 2019) as well as made use of the theoretical freedom and flexibility (Braun & Clarke, 2006) that is associated with thematic analysis. The first step followed in performing the thematic analysis was to read the transcripts thoroughly to ensure that there were no language ambiguities. Secondly, the data were read to identify important phrases and sentences provided by participants on issues concerning how SNSs could be used to enhance the social relationships between teachers and learners in the university. The process of developing the codes also involved connecting the phrases and sentences to the theoretical underpinning of the study—social constructivism. A previous study has shown that linking data to the literature is important for developing codes and connecting data to a set of ideas (Locke et al., 2022; Viruru & Rios, 2021). To determine the appropriate codes that show the experiences and perceptions of participants concerning how SNSs could be used to enhance the social relationships between students and academics, phrases that appeared at least eight times or more were highlighted and named through an iterative process. Some examples of the codes that emerged were "Social network sites enhance my social relationship with students" and "I expect my teachers to communicate well with me in the online sessions."

The third step involved assembling observations gathered from the different codes into categories. The process of organizing the codes in the current study included identifying common patterns, connecting the pattern to the literature on social constructivist theory, and assessing how the codes fit into the categories developed (Locke et al., 2022; Viruru & Rios, 2021). Therefore, similar phrases from teachers and students that were connected were put under one category. The fourth step involved constructing the themes using the patterns that were generated from the codes and categories. Samples of the themes that were constructed include "the context, importance and use of SNSs among teachers" and "students' expectations of lecturers' support in the SNS environment." By making interpretations from the interview data that were analyzed using codes, categories, and themes, the study applied thematic analysis to draw conclusions (Castleberry & Nolen, 2018).

## FINDINGS

The findings of the current study are discussed based on the seven themes that explain how SNSs could be used to enhance the social relationships between teachers and students in the university.

The seven themes are: (1) the context, importance, and use of SNSs among learners; (2) students' expectations of lecturers' support in the SNS environment; (3) the context, importance, and use of SNSs among teachers; (4) the outcomes of good social relationships between teachers and learners in the SNS environment; (5) the link between participation in SNSs and the promotion of digital relational pedagogies; (6) challenges associated with the use of SNSs in the learning environment; and (7) measures that could enhance the effective use of SNSs by students. The narratives of teachers are presented first, followed by student narratives.

## TEACHER NARRATIVES

### *The Context, Importance, and Use of SNSs Among Teachers*

Participants shared their experiences concerning how they use SNSs in the learning environment. The majority of teacher participants indicated that they use WhatsApp for teaching and learning, which is consistent with the feedback of the student participants. For instance, Keitumetse indicated, "I use WhatsApp for interacting with my students and also to provide them with formative feedback for improvement." Another participant from the FHS explained, "I use WhatsApp and YouTube, depending on the task and the subject for discussion" [Nandipha]. On her part, Criske explained how other features, such as class size, could constrain the effective use of SNSs in the learning environment:

> The use of social network sites depends on the class size… so it is quite difficult to maintain a good social and professional relationship with students using the social media platforms. Again, some students do not respect the boundaries and can even call you in the middle of the night. However, a lot depends on the individual teacher and whether you can open up so much to accommodate these social interactions.

The feedback from Criske suggests that large class sizes could constrain the effective use of SNSs. However, a prior study has shown that class size does not have an impact on the academic performance of learners (Iglesias-Pradas et al., 2021). Also, concerns about boundaries seem to be one of the major reasons some teachers may not be able to sustain their social relationships with their students through social media. Such was the submission by Arabella: "I am very uncomfortable interacting with students on social media, just because it is such a personal platform for me—and besides, there should be boundaries. Maybe I don't know what to call it… defense mechanism. I just do not think it's professional." The feedback from Arabella further reveals how concerns about blurred boundaries could hinder SNSs as spaces for promoting teaching and learning in the technology-mediated learning environment. Privacy concerns (Mirabolghasemi et al., 2016) and negative behaviors that do not promote interpersonal connection (Clark et al., 2018) have been previously highlighted as some of the undesirable effects of the use of SNSs.

Some participants provided detailed information concerning why and how they use different SNSs. For instance, Agetha explained, "I sometimes share posts by the university or my department on Facebook with my students…. I also share the information on my personal page. However, I do not use it for teaching…" On his part, Richard explained, "I use WhatsApp for communicating with my students because students here at the Qwaqwa Campus have challenges with connectivity [internet]. So we try to use basic technology for teaching, and by so doing, we reach out to a lot of students." Another participant indicated, "I create WhatsApp groups for my students and also post voice notes. Now, WhatsApp can be connected to the institutional digital learning platform through Connect Yard, so it makes teaching and learning very relational using these network sites" [Thato]. The modern learning environment is characterized by the application of SNSs that affords flexibility to individuals and groups to communicate, create networks, and collaborate, regardless of time and space (Jan & Vlachopoulos, 2019). These flexible applications could also lead to innovative teaching and learning. However, some participants explained their reasons for being selective in their use of SNSs. For example, Marick indicated, "I actually prefer to steer away from the use of SNSs, such as Facebook and WhatsApp. I do not think that it is wrong to use these SNSs, but I am a bit skeptical about their use in the learning environment." The feedback from participants revealed that individual teacher preferences, class

size, challenges with internet connectivity, and privacy concerns influence teachers' choices of SNSs in the learning environment. However, in relation to internet connectivity, the recent study by Legg-Jack and Ndebele (2023) shows that limited or no access to the Internet serves as one of the major challenges to technology-mediated learning in South Africa. Therefore, while educational institutions find ways of addressing issues related to class size challenges and the privacy concerns of teachers, they also pay attention to the internet resource needs of students.

*The Link Between Participation in SNSs and the Promotion of Good Social Relationships*

Participants shared their views on how SNSs enhance their social relationships with their students. First, Lerato stated, "Social network sites enhance my social relationship with students, especially with the small groups. Sometimes I request them to switch on their video so that I can see their body language… that is, to check if the students are really seated behind their laptops and are really paying attention." She added, "If you do not check on them, they just switch their devices on and they move away. This is a clear example of how I ensure that there is both social and, what I may refer to as, digital presence in my online class" [Lerato]. The relationship between the use of SNSs and teaching innovation was highlighted by another participant who explained, "I make use of the visualization tool where I model the learning content. I also try to make the videos entertaining and relational, which is a key ingredient in motivating students. Learning should be exciting, and I try to communicate that in these video lectures. I do not subscribe to the idea that lecturers should always be available on WhatsApp or other SNSs to answer questions from students… we need to be innovative." [Michael]. The feedback from Michael demonstrates the importance of innovation in the use of SNSs and how teachers could stimulate students' learning in the online learning environment. Of course, the rapidly evolving social and technical landscape of the media also requires innovative thinking (Das et al., 2022).

Digital social pedagogies also connect to how teachers identify the technological challenges students face and attempt to find solutions to these challenges. For instance, Mandla indicated, "As part of enhancing teaching and learning, I created these videos which are between 15 and 25 minutes to help our students who are struggling with their written communication skills." He added, "By creating the videos, students are able to watch, listen, and understand how they could make rhetorical writing persuasive. However, the challenge is that some of our students do not have internet data, while others have access to a laptop once a week, so there is the need to help them" [Mandla]. Mandla also explained when and how he uploads his videos:

> I recognized, for instance, that most of the students access the material online between three and five in the afternoon, with a small majority doing it later at night. And for that reason, I decided to upload all my videos at the same time on a Monday. So, every Monday at 03:00 p.m., the videos would go up and that gives us a sense of security and stability, which is particularly important because the students do not have a physical space and a lecturer in front of them to anchor them in what they do. So, I believe that regularity is very important and I threaded this principle through to my weekly announcements.

The feedback from Mandla shows that ***regularity*** and ***inventiveness*** are important in enhancing digital relational pedagogies, especially where students have technological challenges and cannot easily access materials online. Another participant from the FHS indicated, "Social network sites open up many more communication channels for me and my students. It also addresses students' preferences for different mediums of communication, while it offers me some flexibility in terms of communication options" [Thembeka]. The feedback suggests that when teachers use SNSs, they create new approaches to teaching and learning using digital technologies while also helping learners meet their learning needs. Also, the findings show the flexibility in the use of SNSs in the teaching and learning setting as well as how SNSs allow for continuous interaction between teachers and learners.

*The Outcomes of Good Social Relationships Between Teachers and Learners in the SNS Environment*

A recent study by Camas et al. (2021) suggests that SNSs have evolved as a tool that enables teachers and learners to communicate and learn.

Participants shared their opinion concerning the outcomes of good social relationships between teachers and students in the social network environment. One of the participants explained, "Well, at the FHS, role modeling is a powerful form of developing professional identity among students. So quality teacher-student relationships, either face-to-face or online, would contribute to positive role modeling, which will mean that students will demonstrate the required professional competencies" [Thembeka]. A similar view was shared by Bonolo, also from the FHS: "Quality relationships between lecturers and students should result in effective teaching and learning and to also enable students to understand the content better. Also, effective social relationships in the digital environment should enable us to serve as mentors and coaches to our students. So aside from theoretical and practical training, we also serve as role models who they can look up to." From the faculty of education, [Lindiwe] asserted that "our primary concern here is to provide students with the knowledge and skills they need as professionals. So having a good relationship with them, either online of face-to-face, will assist them to be really good teachers and good at what they do in future." She added:

> [A]gain, we need to be able to understand our students first as human beings and that the social environment, whether face-to-face or online, in which they find themselves affects them directly and indirectly. So, elements such as helping students to develop their critical thinking abilities, graduate attributes, and also focusing on developing specific job requirements and attitudes that are needed in the twenty-first century cannot be overlooked" [Lindiwe].

The feedback from Lindiwe highlights the importance of developing the skill sets of students and equipping them for their future job roles in online and face-to-face settings. On her part, Collien indicated, "I think that, somehow, quality relationships in an SNS environment inspire students to do better academically. It also motivates them to think about what it means to be a student in my class and to feel seen, heard, and empowered" [Collien]. The response by Collien suggests that a good social relationship between students and lecturers in an SNS environment could inspire students to do well in their academic activities. On his part, Jacob explained:

> I think that SNSs play a very important role in all these because you cannot physically attend to every student in a class of 600 students…. Having quality relationship with students should engender respect and appreciation of what [teachers] do as lecturers by helping them to develop their knowledge. Remember that some of our students are from a low socio-economic background, and one of the ways to assist them is to develop a good social relationship with them that would allow them to stay focused and achieve their goal of obtaining their qualifications.

The feedback from participants shows that the outcomes of good social relationships between teachers and students using SNSs include enhancing students' understanding of the learning content, helping to shape the knowledge and skills of students for their future careers, and motivating students to achieve their academic goals.

*Measures That Could Enhance the Effective Use of SNSs by Students*

The call for teachers to reimagine the traditional norms of teaching, learning, and assessment and to assist students to understand how the exchange of knowledge and ideas could be done within and outside the learning environment through technologies (Greenhow & Askari, 2017) also places greater responsibilities on teachers to design their digital learning environment to support effective learning. For instance, Brunelda was of the opinion that there should be some form of control over the use of social media:

> We cannot assume that students use their own virtual spaces for education. They also use the virtual spaces for other things. So, if we decide to allow students to use Facebook and Twitter, then you must understand that they would make the rules. Again, we must understand that there is an age relationship gap here. So, lecturers cannot impose themselves on

> students in the virtual spaces as they would do with Blackboard collaborate…. As a reflexive teacher, you must negotiate your presence there.

Another participant explained how the COVID-19 pandemic led to a renewed urgency to explore ways of enhancing online teaching and learning: "The need to find new ways of teaching effectively online has been a consequence of lockdown. We need to rethink how we communicate to our students, how we convey our ideas, and how we overcome the social, psychological, and material difficulties to learning" [Thomas]. The feedback from the participants revealed that teachers must negotiate the rules on SNSs with their students in order to make teaching and learning effective. The challenges associated with the use of SNSs as well as control issues could be addressed through guidelines and rules set by teachers and learners. However, while different departments may have separate rules governing the use of SNSs, there is a need for teachers to rethink how they communicate to students, how they convey their ideas, and how they overcome the social, psychological, and material difficulties associated with learning through effective digital relational pedagogies.

## NARRATIVES OF STUDENTS

### *The Context, Importance, and Use of SNSs Among Learners*

Social network sites serve as one of the important tools that could be used to reconnect new generations of students in HEIs, support learning networks, and enhance learning through social interaction using formal and informal learning modes (Manca, 2020; Ye & Pennisi, 2022). The majority of participants indicated that the commonly used SNSs in formal learning were Facebook and WhatsApp. Some participants shared their experiences in the use of SNSs in the learning setting. For instance, Charles indicated, "My English language teacher uses WhatsApp and Facebook for teaching and we enjoy the class." Also, Eric, who is a second-year student from the faculty of NAS, indicated that "I use WhatsApp for personal interactions with my lecturers, especially when I need clarification from them." On her part, Mukami, who is a fourth-year human biology student, explained:

> We often interact in groups, mostly four students in a group, with a group leader who communicates directly with our lecturers through WhatsApp if there is the need for any discussion to be set up. However, we are also encouraged to contact the program director in internal medicine if there is an urgent need to do so.

A similar view was shared by Dimpo: "We use WhatsApp for sharing knowledge with our colleagues. The class representative is the person who communicates via phone calls and WhatsApp with the lecturer." On his part, Boitumelo, who is a second-year student at the faculty of humanities, indicated that "we use Facebook and WhatsApp for interacting among ourselves and for our [students] group discussions." The feedback from the participants points to the consistent use of WhatsApp and Facebook for personal and group discussions between both teachers and students and among students. The use of SNSs enhances collaborative learning, student engagement, and group discussions (Al-Rahmi et al., 2018; Ansari & Khan, 2020).

### *Students' Expectations of Lecturers' Support in the SNS Environment*

Social network sites afford students the opportunity to access, create, edit, and share course contents in textual, video, or audio forms, while they also build communities of learning (Ansari & Khan, 2020). However, students' ability to use the SNSs is partly dependent on how lecturers engage learners in the SNS environment. Friedrich, who is a first-generation and a fourth-year natural sciences student, explained, "Although I expect my teachers to be friendly and polite when they are teaching online, I also expect them to maintain the boundaries between us [students and lecturers]." On his part, Teboho explained, "First, I will expect my teacher to know my strengths and weaknesses in terms of my academics and provide me with very useful feedback when they give me assignment." Other participants indicated that they expected their lecturers to communicate clearly to them. For instance, Thobeka, who is a second-year health sciences student, noted, "I expect my teachers to communicate well with us [students] during the online sessions," while Azelle, a third-year student at HUM, stated, "I must commend

my tutors for the support they provide, mostly through WhatsApp. So far it has been very good. My only worry is that some of the teachers do not engage us on the social network sites." Findings of the current study show that students expect their lecturers to be open and polite, maintain their professional boundaries, and identify the strength and weaknesses of students in the SNS learning environment. Again, they expect their teachers to offer regular feedback and communicate clearly with them in the learning environment in order to enhance the lecturer-student relationship in the social network environment. Findings of a previous study have revealed that students and teachers interact according to reciprocal expectations that determine discourses and actions based on asymmetric relations of power (Manca & Ranieri, 2017).

*The Outcomes of Good Social Relationships Between Teachers and Learners within SNSs*

Participants shared their opinions concerning the outcomes of good social relationships between teachers and learners in the social network environment. First, Qiniso explained that "any good social relationship that is developed between a teacher and student should lead to students building their self-esteem, confidence, and ability to interact with other students and the lecturer, either face-to-face or through the SNS." On her part, Amizwa touched on the mutual benefits of a good social relationship between lecturers and students in the learning environment: "To the lecturer, he or she will have more knowledge about the students and how to help them understand the different topics so that they can pass their examinations. To the students, we will always want to learn in an atmosphere that is not hostile so that we can ask more questions and contribute to the discussions online." The feedback from Amizwa is consistent with a prior study that shows that it is important for teachers to know about their students—their history, background, identity, and sense of self—to be able to teach them effectively (Biesta, 2012). However, some participants did not believe that developing a good social relationship through SNSs will result in any significant outcome. Such was the view of Thabo:

> I do not think that maintaining a good social relationship with a lecturer in a social network space would necessarily lead to quality teaching and learning. I think that, as students, we have a role to play. There are times that our teachers share online content with us via YouTube, but as individuals, we need to watch the videos and read additional resources on our own to understand the content better.

Although some participants did not believe that there could be any positive outcomes of good social relationships between teachers and learners, the majority of participants, including Qiniso and Amizwa, believed that there are positive outcomes of good social relationships between teachers and learners in the social network environment.

*The Link Between Participation in SNSs and the Promotion of Digital Relational Pedagogies*

While scholarly studies abound in findings concerning how SNSs could enhance teaching and learning (Manca, 2020; Sobaih et al., 2020), very little is known about how SNSs could promote digital social pedagogies, which is explained in the current study as the social relationships between teachers and learners that is mediated by technology. Participants shared their views about how SNSs enhance their social relationships with their lecturers. First, Segal stated, "I think that the WhatsApp chats are very effective. The lecturers willingly offer us their cell numbers but are very strict about the time we can contact them." A similar view was shared by Thulani, who said, "Personally, I think that the WhatsApp communication with my lecturers is enough to build a good social relationship with them. It is what has helped us during the COVID-19 period, and I think that it has been effective so far." On her part, Busiswe explained that "WhatsApp helps us to improve our relationships with lecturers and even our peers. It is also a safe space for interaction where we freely ask questions without thinking of what other students would say or comment about." Contrastingly, Wandile explained, "As far as WhatsApp is concerned, I do not think it enhances the relationship between lecturers and students because our lecturers do not allow us to ask questions on WhatsApp. They prefer that we send them emails." In contrast to the submission by Wandile, another participant, Siphosethu, submitted, "For us, WhatsApp is really good because as we get to ask questions and receive immediate responses compared to emails that take longer for them to respond." While a

previous study has shown that it is not clear how mutually formed relationships with anticipated outcomes could enhance teaching and learning (Ye & Pennisi, 2022), the feedback from the majority of participants reveals that SNSs could promote the social relationships between teachers and learners.

*Challenges Associated with the Use of SNSs*

Although the majority of students were upbeat about the importance of SNSs to the teaching and learning processes, others decried the technical challenges associated with the use of SNSs. Thabo touched on some of the technical challenges students face, especially at the Qwaqwa Campus, with respect to technology and how they are able to switch between these SNSs:

> With WhatsApp, it helps us to access our lecturers in ways that the Blackboard collaborate may not do in terms of internet connectivity and ease of use. Internet connectivity is a major problem here at Qwaqwa, so when there are issues with Blackboard, we sometimes use WhatsApp to communicate with our lecturers. In all ways, the social network systems help up to maintain a continuous chain of interaction with our lecturers.

Some participants touched on how delays in the provision of feedback could affect the teaching and learning processes. For instance, Busiswe explained, "I think that when teachers delay in providing us with feedback in the discussion forum, it leads to frustration." However, Nokwazi touched on the importance of culture and commitment on the part of lecturers in maintaining good social relationships, commenting, "I think that a lot depends on the lecturers and the culture in the department. In my department, communication has been very effective…. See, I have not sent an email to a lecturer and never received a response." In relation to culture, previous scholarly work has shown that although the important technological features of SNSs are consistent, the cultures that develop around SNSs are diverse (Boyd & Ellison, 2007). The feedback from participants shows that the challenges associated with the use of SNSs in the learning environment include breaks in internet connectivity and teachers' delays in providing students with feedback.

## DISCUSSION

The findings of the current study illustrate how the dynamic interplay between four main themes: the context of SNSs, which include structures, cultures, policies, and resources; teachers' and learners' anticipated outcomes of the use of SNSs; the challenges associated with the use of SNSs; and how students' expectations of lecturers' support in the SNS environment contribute to our understanding of how learner-centred approaches to the use of social network sites could lead to quality social relationships in the university. First, the context of SNSs shows how institutional resources, policies that include control mechanisms and teachers' inclination to promote quality social relationships with their learners and how students from diverse socio-economic backgrounds, could be supported through continuous engagement and a learner-centered approach to teaching and learning. The learning context that supports effective learning, the availability of technology, and the skills required for the effective use of technology are important to the effective use of SNSs (Beaunoyer et al., 2020; Händel et al., 2022).

The current study reveals that the use of SNSs by teachers affords them the ease of performing formative assessments and providing students with real-time feedback. This further demonstrates how scaffolding could be performed through technology-mediated processes and in real time. Also, institutional structures and culture play a major role in the adoption and use of SNSs in higher education. In particular, because some departments prescribe the SNSs that should be used, it results in the controlled use of SNSs across different courses. However, as shown by the narrative data, while institutional control in the use of SNSs may be experienced, some academics and students also use other SNSs to enhance teaching and learning. A prior study by Iglesias-Pradas et al. (2021) reveals that institutional readiness, flexible arrangements that enable decision-making and empower instructors, enables that the availability of informal communication channels and the support given to academics to enhance their digital skills are important to sustaining the delivery of high-quality education. Consistent with the findings of a previous study (Boyd & Ellison, 2007), the

weak cultures that develop around SNSs in the various departments could hinder the effective use of SNSs.

The current study also contributes to the literature on the rationale for teachers' adoption of SNSs in higher education and for promoting good social relationships between teachers and learners. The findings of this study show that teachers' choice of SNS usage depends on the class size, the objective of the interaction (for example, sharing information and resources) between teachers and learners, teachers' intention of making teaching and learning relational, and the expediency of the subject matter to students' learning outcomes. Although there are numerous benefits associated with the use of SNSs, features such as the lack of user privacy on social media, issues associated with the use of different SNSs, and weak internet connectivity, especially where the university is geographically dispersed with other campuses, serve as some of the challenges using SNSs. A study conducted in Malaysia revealed that privacy concerns represent one of the undesirable effects of the use of SNSs (Mirabolghasemi et al., 2016). These concerns increase the need to establish strong rules that govern the use of SNSs in the university. Another way of creating such professional boundaries is through the behavioral transformation of students that could be done through sensitization and interactive sessions at the departmental and faculty levels. This is against the backdrop that within the network of actors, the transformation of student behaviors is important to achieving the goals of education (Dusdal et al., 2021). Again, while power differential between teachers and learners may exist in the learning setting (Dusdal et al., 2021), it is also important that students respect the private spaces of teachers when using SNSs. In complementary ways, the expectations of students in the SNSs are that their teachers would be open and polite, maintain their professional boundaries, identify their strengths and weaknesses, offer them regular feedback, and communicate clearly with them in order to enhance teacher-student relationships in the social network environment.

The outcomes of good social relationships between teachers and learners in the SNS environment, as gathered from findings of the current study, include enhancing students' academic and social knowledge and skills through role modeling; supporting students to develop requisite knowledge and skills for their future jobs; and enhancing students' learning through continuous interaction and feedback systems. Although students and teachers may demonstrate different attitudes towards the use of SNSs for academic communication (Manca & Ranieri, 2017), the role of teachers in promoting interaction and communication through digital technology as well as avoiding social distance could enhance effective teaching and learning. Furthermore, when teachers maintain what the current study refers to as *digital relational pedagogies* within the SNSs, it could enhance students' motivation to achieve their academic goals and to work hard, particularly because they would feel heard and empowered. While the effect of globalization continues to be seen across countries of the world, good social relationships between teachers and students would enable students to receive support from teachers to help them shape their future professional roles, which includes the development of requisite skills and attributes needed for the twenty-first century. The findings of the current study also suggest that quality social relationships between teachers and students within SNSs could engender respect and appreciation of the effort of teachers. To students, the outcomes of good social relationships between teachers and students in the digital learning environment include building their self-esteem, developing their confidence, and enhancing their ability to interact with other students and teachers. In particular, when teachers acknowledge the social backgrounds of students (e.g., first-generation students and students from low socio-economic backgrounds) and their learning needs, they are able to create an open digital learning environment that allows students to ask questions and contribute to the discussion on the SNSs.

The findings of the current study show that SNSs can promote good social relationships through frequent interaction between teachers and learners. As a consequence, students could seek clarification to challenging learning contents while the SNS could also serve as a safe space for students to freely ask questions, without thinking about the reactions of other students. Concerning teachers, the findings reveal that digital relational pedagogies are also linked to innovation in the digital learning environment, because teachers who wish to create a good learning environment

would invest their time and effort into exploring new ways of engaging students. Innovation has been identified as one of the important outcomes of the use of SNSs (Das et al., 2022). Again, when teachers use communication tools, such as videos, in the SNSs in synchronous learning settings, it allows them to observe the body language of their students, their orientation to the delivery methods of teachers, and their responses to questions. The development of digital relational pedagogies can be done through continuous activities, such as interacting with students via the discussion forum, chat room, and posting information on announcement boards. Findings of the current study also show that when teachers identify the unique learning needs of students, as well as any technological challenges, they are able to make provisions for them through inventive approaches, regular communication flow, and effective delivery methods. Therefore, teachers' deliberate and continuous use of SNSs in their teaching could lead to new approaches to teaching and learning, allow for some flexibility in students' SNS preferences, and enable students to meet their learning needs.

## LIMITATIONS AND FUTURE DIRECTIONS

The findings of this article should be interpreted in light of some limitations. First, while the study setting, a multicampus university, provides a unique context and unique experiences of teachers and students about their use of SNSs to enhance relational teaching, comparison of the data across dissimilar universities could have deepened the findings of this study. Future studies could examine how social relationships between teachers and learners enhance the use of SNSs in diverse universities. Secondly, using only interviews as the source of gathering data from teachers and students is a limitation of the study, particularly because other data collection methods could have presented the study with different features of findings, including relationships between variables that are not recorded in the current research. Future studies could examine the phenomena using different data collection methods. Thirdly, the findings of the current study must be interpreted with caution because of the differences in the academic culture and practices of the various departments in the university concerning the use of SNSs. In particular, the views of some of the participants do not necessarily reflect the university's policy regarding the use of different SNSs.

## CONCLUSION

Social network sites have emerged as important resources that are used for facilitating teaching and learning in educational settings. However, what is often discounted in the literature of SNSs in higher education settings is how the relational aims of these social network sites could be fully achieved, especially through the mutually formed social relationships between teachers and learners. Again, the findings highlight how the development of good social relationships between teachers and learners could serve as a learner-centered approach to effective teaching and learning—especially when facilitated by SNSs. If teachers build good social relationships with students through the use of SNSs and learner-centered approaches, it could enhance students' development of the requisite knowledge, skills, and attributes required for the twenty-first century.

Also, while students engage with their teachers through SNSs, they prepare themselves for future job roles that require the application of web technology, the development of good social skills, teamwork, individual self-esteem, and confidence. Findings of the current study also showed that the outcomes of good social relationships between teachers and learning via the use of SNSs include satisfying students' learning needs through scaffolding, continuous interaction, and timeous feedback; motivating students to achieve their academic goals; empowering students through their scholarly voices in the learning setting; and acknowledging and serving the learning needs of all students, including those from low socio-economic backgrounds and first-generation students. Given the findings of the current study, the role of teachers in promoting social relationships through SNSs is very important. In practice, teachers should be able to negotiate the rules about SNSs with their students in order to make teaching and learning effective. However, while different academic departments may have rules for engaging students via SNSs, there is a need for teachers to rethink how they communicate with students, convey their ideas, and how they overcome the social, psychological, and material difficulties associated with learning, through good social relationships and learner-centered approaches that are embedded in what we term as quality digital relational pedagogies.

# References


Aaen, J., & Dalsgaard, C. (2016). Student Facebook groups as a third space: Between social life and schoolwork. Learning, Media, and Technology, 41, 160–186. https://doi.org/10.1080/17439884.2015.1111241

Afzal, I., & Abdullah, N. A. (2022). Role of WhatsApp in teaching and learning process in schools in Pakistan. Journal of Educators Online, 19(3): 1–11. https://doi.org/10.9743/JEO.2022.19.3.1

Akçayır, M., Dündar, H., & Akçayır, G. (2016). What makes you a digital native? Is it enough to be born after 1980? Computers in Human Behavior, 60, 435–440. https://doi.org/10.1016/j.chb.2016.02.089

Al-Rahmi, W. M., Alias, N., Othman, M. S., Marin, V. I., & Tur, G. (2018). A model of factors affecting learning performance through the use of social media in Malaysian higher education. Computers & Education, 121, 59–72. https://doi.org/10.1016/j.compedu.2018.02.010

Ansari, J. A. N., & Khan, N. A. (2020). Exploring the role of social media in collaborative learning the new domain of learning. Smart Learning Environments, 7(1), 1–16. https://doi.org/10.1186/s40561-020-00118-7

Arquero, J. L., & Romero-Frías, E. (2013). Using social network sites in higher education: An experience in business studies. Innovations in Education and Teaching International, 50(3). https://doi:10.1080/14703297.2012.760772

Asterhan, C. S. C., & Bouton, E. (2017). Teenage peer-to-peer knowledge sharing through social network sites in schools. Computers & Education, 110, 16–34. https://doi.org/10.1016/j.compedu.2017.03.007

Beaunoyer, E., Dupere, S., & Guitton, M. J. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. Computers in Human Behavior, 111, 106424. https://doi.org/10.1016/j.chb.2020.106424

Biesta, G. (2012). No education without hesitation: Exploring the limits of educational relations. Philosophy of Education Presidential essay (Ruitenberg, Ed.), Philosophy of Education Society, Urbana, Illinois, pp. 1–13.

Bouton, E., Tal, S. B., & Asterhan, C. S. (2021). Students, social network technology, and learning in higher education: Visions of collaborative knowledge construction vs. the reality of knowledge sharing. The Internet and Higher Education, 49, 100787. https://doi.org/10.1016/j.iheduc.2020.100787

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. Journal of Computer-Mediated Communication, 13(1), 210–230. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Camas, L., Valero, A., & Vendrell, M. (2021). The teacher-student relationship in the use of social network sites for educational purposes: A systematic review. Journal of New Approaches in Educational Research, 10(1), 137–156. https://doi.org/10.7821/naer.2021.1.591

Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? Currents in Pharmacy Teaching and Learning, 10(6), 807–815. https://doi.org/10.1016/j.cptl.2018.03.019

Chai, H. Y., Niu, G. F., Lian, S. L., Chu, X. W., Liu, S., & Sun, X. J. (2019). Why social network site use fails to promote well-being? The roles of social overload and fear of missing out. Computers in Human Behavior, 100, 85–92. https://doi.org/10.1016/j.chb.2019.05.005

Civitillo, S., Juang, L. P., & Schachner, M. K. (2018). Challenging beliefs about cultural diversity in education: A synthesis and critical review of trainings with pre-service teachers. Educational Research Review, 24, 67–83. https://doi.org/10.1016/j.edurev.2018.01.003

Clark, J. L., Algoe, S. B., & Green, M. C. (2018). Social network sites and well-being: The role of social connection. Current Directions in Psychological Science, 27(1), 32–37. https://doi.org/10.1177/0963721417730833

Das, A. C., Gomes, M., Patidar, I. L., & Thomas, R. (2022). Social media as a service differentiator: How to win. McKinsey & Company (website). Retrieved October 17, 2022 from https://www.mckinsey.com/capabilities/operations/our-insights/social-media-as-a-service-differentiator-how-to-win

DHET (Department of Higher Education and Training). (2019). Statistics on post-school education and Training in South Africa: 2019 (website). Retrieved September 5, 2020 from https://www.dhet.gov.za/SiteAssets/Post-School%20Education%20and%20Training%20Monitor%20Report_March%202019.pdf

Dusdal, J., Zapp, M., Marques, M., & Powell, J. J. W. (2021). Higher education organizations as strategic actors in networks: Institutional and relational perspectives meet social network analysis. Theory and Method in Higher Education Research, 7 (Huisman, J., & Tight, M., Eds.). Emerald Publishing Limited: Bingley, pp. 55–73. https://doi.org/10.1108/S2056-375220210000007004

Fischer, F. (2019). Knowledge politics and post-truth in climate denial: On the social construction of alternative facts. Critical Policy Studies, 13(2), 133–152. https://doi.org/10.1080/19460171.2019.1602067

García, F. A. M., Salguero, F. L., Fernández-Sánchez, M. R., &

Carrión del Campo, J. L. (2022). Disconnected university students? Knowledge and use of digital technologies among university students. Journal of Educators Online, 19(2), n2. https://doi.org/10.9743/JEO.2022.19.2.10

Greenhow, C., & Askari, E. (2017). Learning and teaching with social network sites: A decade of research in K-12 related education. Education and Information Technologies, 22(2), 623–645. https://doi.org/10.1007/s10639-015-9446-9

Händel, M., Stephan, M., Gläser-Zikuda, M., Kopp, B., Bedenlier, S., & Ziegler, A. (2022). Digital readiness and its effects on higher education students' socio-emotional perceptions in the context of the COVID-19 pandemic. Journal of Research on Technology in Education, 54(2), 267–280. https://doi.org/10.1080/15391523.2020.1846147

Heher, J. (2017). Report of the commission of inquiry into higher education and training to the president of the Republic of South Africa. The Presidency Republic of South Africa (website). Retrieved September 5, 2020 from www.thepresidency.gov.za/download/file/fid/1075

Iglesias-Pradas, S., Hernández-García, Á., Chaparro-Peláez, J., & Prieto, J. L. (2021). Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case study. Computers in Human Behavior, 119, 106713. https://doi.org/10.1016/j.chb.2021.106713

Jan, S. K., & Vlachopoulos, P. (2019). Social network analysis: A framework for identifying communities in higher education online learning. Technology, Knowledge, and Learning, 24(4), 621–639. https://doi.org/10.1007/s10758-018-9375-y

Junco, R., & Cotten, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. Computers and Education, 59, 505–514. https://doi.org/10.1016/j.compedu.2011.12.023

Kompen, R. T., Edirisingha, P., Canaleta, X., Alsina, M., & Monguet, J. M. (2019). Personal learning environments based on Web 2.0 services in higher education. Telematics and Informatics, 38, 194–206. https://doi.org/10.1016/j.tele.2018.10.003

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. European Journal of General Practice, 24(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Krahenbuhl, K. S. (2016) Student-centered education and constructivism: Challenges, concerns, and clarity for teachers. The Clearing House: A Journal of Educational Strategies, Issues, and Ideas, 89(3): 97–105. https://doi.org/10.1080/00098655.2016.1191311

Kyngäs, H., Kääriäinen, M., & Elo, S. (2020). The trustworthiness of content analysis. Application of Content Analysis in Nursing Science Research (Kyngäs, H., Kääriäinen, M., & Elo, S., Eds.). Springer: Cham., pp. 41–48.

Legg-Jack, D. W., & Ndebele, C. (2023). Exploring technology education students' perception on the use of emergency remote learning amid COVID-19 pandemic. Journal of Educators Online, 20(2), 1–13. https://doi.org/10.9743/JEO.2023.20.2.5

Ljungblad, A. L. (2021). Pedagogical relational teachership (PeRT)–A multi-relational perspective. International Journal of Inclusive Education, 25(7), 860–876. https://doi.org/10.1080/13603116.2019.1581280

Locke, K., Feldman, M., & Golden-Biddle, K. (2022). Coding practices and iterativity: Beyond templates for analyzing qualitative data. Organizational Research Methods, 25(2), 262–284. https://doi.org/10.1177/1094428120948600

Lourenco, O. (2012). Piaget and Vygotsky: Many resemblances, and a crucial difference. New Ideas in Psychology, 30, 281–295. https://doi.org/10.1016/j.newideapsych.2011.12.006

Manca, S. (2020). Snapping, pinning, liking, or texting: Investigating social media in higher education beyond Facebook. The Internet and Higher Education, 44, 100707. https://doi.org/10.1016/j.iheduc.2019.100707

Manca, S., & Ranieri, M. (2017). Implications of social network sites for teaching and learning. Where we are and where we want to go. Education and Information Technologies, 22(2), 605–622. https://doi.org/10.1007/s10639-015-9429-x

Marksteiner, T., Janke, S., & Dickhäuser, O. (2019). Effects of a brief psychological intervention on students' sense of belonging and educational outcomes: The role of students' migration and educational background. Journal of School Psychology, 75, 41–57. https://doi.org/10.1016/j.jsp.2019.06.002

McGhie, V. (2017). Entering university studies: Identifying enabling factors for a successful transition from school to university. Higher Education, 73(3), 407–422. https://doi.org/10.1007/s10734-016-0100-2

Mirabolghasemi, M., Iahad, N. A., & Rahim, N. Z. A. (2016). Students' perception towards the potential and barriers of social network sites in higher education. Social Networking and Education. Springer, Cham., pp. 41–49.

Mpungose, C. B. (2020). Is Moodle or WhatsApp the preferred e-learning platform at a South African university? First-year students' experiences. Education and Information Technologies, 25(2), 927–941. https://doi.org/10.1007/s10639-019-10005-5

Neuendorf, K. A. (2019). Content analysis and thematic analysis: Introducing content analysis and thematic analysis. Advanced Research Methods for Applied Psychology (Brough, P., Ed.). Oxon: Routledge, pp. 211–223.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. International Journal of Qualitative Methods, 16(1), 1609406917733847. https://doi.org/10.1177/1609406917733847

Putnik, G., Costa, E., Alves, C., Castro, H., Varela, L., & Shah, V. (2016). Analyzing the correlation between social network analysis measures and performance of students in social network based engineering education. International Journal of Technology and Design Education, 26(3), 413–437. https://doi.org/10.1007/s10798-015-9318-z

Schick, K. (2020). Pedagogical micro-communities: Sites of relationality, sites of transformation. Pedagogical Journeys Through World Politics. Palgrave Macmillan, Cham., pp. 27–39. https://doi.org/10.1007/978-3-030-20305-4_3

Schreiber, L. M., & Valle, B. E. (2013). Social constructivist teaching strategies in the small group classroom. Small Group Research, 44(4), 395–411. https://doi.org/10.1177/1046496413488422

Scott, K. S., Sorokti, K. H., & Merrell, J. D. (2016). Learning "beyond the classroom" within an enterprise social network system. The Internet and Higher Education, 29, 75–90. https://doi.org/10.1016/j.iheduc.2015.12.005

Sobaih, A. E. E., Hasanein, A. M., & Abu Elnasr, A. E. (2020). Responses to COVID-19 in higher education: Social media usage for sustaining formal academic communication in developing countries. Sustainability, 12(16), 6520. https://doi.org/10.3390/su12166520

Suciu, L. (2014). The role of communication in building the pedagogical relationship. Procedia-Social and Behavioral Sciences, 116, 4000–4004. https://doi.org/10.1016/j.sbspro.2014.01.880

Taber, K. S. (2018). Scaffolding learning: Principles for effective teaching and the design of classroom resources. Effective Teaching and Learning: Perspectives, Strategies and Implementation (Abend, M., Ed.). New York: Nova Science Publishers, pp. 1–43.

Taber, K. S. (2020). Mediated learning leading development: The social development theory of Lev Vygotsky. Science Education in Theory and Practice: An Introductory Guide to Learning Theory (Akpan, B., & Kennedy, T., Eds.). Springer.

Taylor, E. W. (2019). Student–teacher relationships: The elephant in the classroom. Connecting Adult Learning and Knowledge Management (Fedeli, M., & Bierema, L. L., Eds.). Springer, Cham., pp. 69–83.

Thomas, L., Orme, E., & Kerrigan, F. (2020). Student loneliness: The role of social media through life transitions. Computers & Education, 146, 103754. https://doi.org/10.1016/j.compedu.2019.103754

Tratnik, A., Urh, M., & Jereb, E. (2019). Student satisfaction with an online and a face-to-face business English course in a higher education context. Innovations in Education and Teaching International, 56(1), 36–45. https://doi.org/10.1080/14703297.2017.1374875

Viruru, R., & Rios, A. (2021). Needed methodological emancipation: Qualitative coding and the institutionalization of the master's voice. Qualitative Inquiry, 27(10), 1146–1158. https://doi.org/10.1177/10778004211021814

Walker, C., & Gleaves, A. (2016). Constructing the caring higher education teacher: A theoretical framework. Teaching and Teacher Education, 54, 65–76. https://doi.org/10.1016/j.tate.2015.11.013

Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. International Management Review, 15(1), 45–55. Retrieved from http://www.imrjournal.org/uploads/1/4/2/8/14286482/imr-v15n1art4.pdf

Wilson, N. (2020). Sociotechnical and pedagogical barriers to technology integration. Wealth Creation and Poverty Reduction: Breakthroughs in Research and Practice (Khosrow-Pour, M., Ed.). IGI Global, pp. 80–98. https://doi.org/10.4018/978-1-7998-1207-4.ch005

Xerri, M. J., Radford, K., & Shacklock, K. (2018). Student engagement in academic activities: A social support perspective. Higher Education, 75(4), 589–605. https://doi.org/10.1007/s10734-017-0162-9

Ye, D., & Pennisi, S. (2022). Analyzing interactions in online discussions through social network analysis. Journal of Computer Assisted Learning, 38(3), 784–796. https://doi.org/10.1111/jcal.12648