

# Meeting Students' Expectations of Blended Learning

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**ABSTRACT:** Blended learning as a mode of delivery is widespread in universities. It has gained even more prominence during the Covid-19 pandemic. Most educational programs in many countries had to be adapted abruptly to remote teaching or an online mode, sometimes halfway through the course. This resulted in parts of the courses that have been presented face-to-face being offered online. This situation underscores the importance of research into developing and refining blended learning courses and gaining insight into students' expectations of blended modes of learning. In the course reported on in this paper, self-directed learning was a key learning goal. Students, therefore, had to be at the core of the learning process. Although considerable research has been conducted on the development and structuring of blended learning courses, research about students' preconceived and informed expectations of blended learning is limited. The current study compared students' expectations at the start of a blended learning course to their informed expectations at its conclusion using purposely designed qualitative questionnaires as well as interviews. Comparison and thematic analysis of the data clarified to what extent the expectations of students was met in this blended learning course. The findings showed that students' preconceived expectations were mostly positive and frequently matched their informed expectations. Recommendations are made for the structuring of subsequent blended learning programs in higher education settings in order to meet students' positive expectations and to lower their negative expectations whilst adhering to the goal of developing self-directed learning in students.

**KEYWORDS:** blended learning, course design, preconceived and informed expectations, self-directed learning, student expectations

## Introduction and background

The Covid-19 pandemic has brought about abrupt changes to the global landscape in 2020, including extreme transformations to the way education is approached. In many countries, educational programs and university courses that are normally presented through a face-to-face mode had to be adapted unexpectedly to enable teaching and learning to continue without students and lecturers sharing physical space. The educational landscape now often consists of the blending of physical and virtual environments to support learning in most educational programs, including university courses (Blaine 2019; Eagleton 2017). Blended learning (BL) is defined as the thoughtful fusion of face-to-face and online learning experiences (Van Niekerk and Webb 2016) so that the strengths of each are blended into a unique learning experience (Vaughan 2007).

In South Africa, the use of BL is viewed positively by the Department of Higher Education and Training and universities are encouraged to use this approach to increase students' access to higher education (Swinnerton et al. 2020). Even though BL has been used in universities for some time, the Covid-19 pandemic underscores the need to investigate and develop BL to ensure its structuring and implementation in practice would contribute to effective learning for students. Deepwell and Malik (2008) emphasise the need for universities to understand their students' learning needs in order to develop suitable strategies that would not only meet program learning outcomes but also students' needs. According to Abrahams and Witbooi (2016), and Moodley, Singh, and Cloete (2015), students should be placed at the center of the BL process. In line with this, Porter, Graham, Bodily and Sandberg (2016) recommend that research should be conducted on students' experiences with BL.

Clarifying students' expectations is important to assess students' experiences of and satisfaction with BL courses. Such a clarification can also be used to develop mutual understandings between lecturers and students who are not in the same physical space (Blaine 2019; Pinto and Anderson 2013). In addition, clarifying students' expectations can contribute to

dissipating misconceptions. For example, Vaughn (2007) refers to students new to BL assuming that fewer contact sessions equal reduced coursework. It is important for instructors of BL courses to bear in mind the expectations of students working in a BL environment and to critically reflect on the design of such courses in order to address such expectations. Literature distinguishes between two categories of expectations (i.e., preconceived versus informed expectations) of students participating in a BL environment (Pinto and Anderson 2013).

The term *preconceived* refers to the forming of ‘an opinion prior to actual knowledge or experience’ (Merriam-Webster’s Online Dictionary 2020). The expectations students bring to the learning environment are often preconceived expectations formed prior to actual knowledge or experience (Pinto and Anderson 2013). These preconceived expectations often change through receiving new information or updated experiences and consequently become informed expectations. The preconceived expectations of students may vary, depending on factors such as rumours, personal experiences, peer experiences, and the reputation of the instructor.

Students participating in BL courses frequently have expectations of learning flexibility, interaction or communication with peers and the lecturer, course content, difficulty level, and the integration of technology (Paechter, Mauer, and Macher 2010; Pinto and Anderson 2013). Similar to the current study, Pinto and Anderson (2013) found that students expect to communicate more with each other in BL courses. Other expectations identified by Paechter et al. (2010) revolve around ease of and speed in the exchange of information and knowledge among peers and the support provided to facilitate cooperative learning and group work with other course participants. Expectations identified from the literature (e.g., flexibility regarding time and space, as well as teaching strategies; the use and integration of technologies, interaction and communication with peers and the instructor; and immediacy and support with cooperative learning and group work) served as guidelines to inform the structuring of the empirical investigation discussed in this article.

The problem identified for this investigation was the lack of research on and rich descriptions of what students expect before attending BL courses (i.e., ‘preconceived expectations’) and how their expectations are shaped during the course of a BL module (i.e., ‘informed expectations’). It was unclear whether higher education institutions were meeting the expectations of the present generation of learners. Thus, the objective of this investigation was to answer the following research question:

What are students’ preconceived and informed expectations of blended learning as a mode of delivery in a university module/course?

The purpose of the research was to develop insight into students’ expectations that would inform the planning and development of subsequent BL courses and the aspects related thereto such as access to technology, or preferred ways to communicate. Despite the many promising features of BL, it may have a limited capability to engage students in learning experiences, unless students are self-motivated, active learners that demonstrate strong organizational skills in their learning habits. Therefore, students’ expectations of their own roles and self-directed learning in BL modules were a core focus within the investigation. This paper contributes to the body of knowledge on BL by shedding light on what students, who are at the center of the teaching-learning process, expect in BL courses. Clarifying students’ expectations is an important way for researchers and lecturers to plan for and assess students’ satisfaction with BL.

Learning theories, as they apply to teaching-learning and BL, are often considered a ‘socially constructivist experience’, and the social aspect of both face-to-face and online education is important to consider when designing blended environments. Therefore, a social constructivist approach was utilized in this investigation. In BL environments, students can interact and experience a variety of media from online resources and computer simulations. These resources, as well as the interaction and collaboration with other students and the lecturer, support students in scaffolding new knowledge with prior knowledge (Blaine 2019). In addition, a suitable framework must ultimately inform the thoughtful integration – based on educational merit – of face-to-face and online learning in BL. The community of inquiry (CoI) framework

(Garrison, Anderson, and Archer 2000) is a valid and trustworthy instrument to measure the quality of online learning through its focus on three important presences (cognitive-, teaching- and social presence) that contribute to the quality of courses (Blaine 2019) and can be used by lecturers to support the design and evaluation of effective learning environments. The CoI conceptual model of Garrison et al. was, therefore, used to design and develop the BL module under investigation. The study aimed to investigate students' preconceived and informed expectations of BL as a mode of delivery in a university module. Although the model was originally developed for online courses, Garrison et al. (2000) indicate that this model can be applied to all educational experiences. This model was thus regarded as a suitable point of departure in this regard.

### **Empirical investigation**

A social constructivist approach was used to conduct this **exploratory qualitative case study**. Case studies are frequently used in educational research, as they provide deeper insight into diverse contexts and can offer a variety of participant perspectives (Ebersöhn 2016; Harrison, Birks, Franklin and Mills 2017). Case studies are often exploratory and methods such as observations, interviews, focus groups, questionnaires, or document analysis are used (Harrison et al. 2017). Case study research is conducted in a particular setting within a bound system; thus, limits or boundaries are set as to what is considered relevant (or not) in a particular study. Elements such as time, location, activities and processes can outline boundaries for cases (Harrison et al. 2017). In this study, module specification and time were boundaries.

As regards access to participants, **convenience sampling** is often used in case studies (Ebersöhn 2016), as was also the case for this study. The study population included all students who were enrolled for a fourth-year Technology teacher-preparation module during the first semester (February to June) of the year when the study was conducted. The population comprised of 58 students (38 females and 20 males). All of the participants were invited to participate in the study. Thirty-seven (37) students completed the pre-test, and thirty-four (34) students completed the post-test, as participation in the study did not contribute in any way to their module grades. Ethical approval was obtained from the Ethics Committee of the university where the study was conducted. Participation in the study was voluntary, and all of the participants signed an informed consent letter which set out the general aims and details of the intended research. All responses were handled confidentially, and participants remained anonymous during the investigation as well as in the research report.

Multiple sources of evidence were used for **data collection** in this case study, as recommended by Harris et al. (2017). Data were first collected by means of two purposely designed questionnaires (pre-test, post-test) with open-ended questions. These questionnaires were completed and submitted anonymously by participants. In addition, focus group sessions and field notes from observations during face-to-face contact sessions were used to collect deep, rich data.

Six broad categories regarding students' experiences and perceptions of BL were developed from the literature review. These categories were used to formulate the questions for both questionnaires. The questions dealt with general expectations; challenges; support needed and provided; gains associated with BL; roles of different persons in the BL process; and how BL is perceived to differ from face-to-face teaching and learning. Researchers specializing in the field of BL reviewed the questionnaire to check its suitability and reliability. The first questionnaire (pre-test), containing six questions formulated from the above-mentioned categories (Table 1), was designed to collect data on participants' preconceived expectations of BL before starting the module. Since students in the module had no previous experience of BL at the time of the study, the dataset was intended to provide a suitable point of departure for the investigation. A follow-up questionnaire (post-test), with similar questions covering the same six categories (Table 1),

was used to collect information about participants' informed expectations and perceptions of BL in the module after its conclusion.

Table 1. Open-ended questions used to collect data

Questions used prior to onset of the module (pre-test)	Questions used after completion of the module (post-test)
1. What are your expectations of this blended learning experience? Please provide a detailed description.	1. Did this blended learning module match your expectations of blended learning? If 'yes', how? If 'no', why do you think this was the case? Please provide details.
2. What challenges do you think you might encounter during this blended learning module? Please provide a detailed description.	2. What challenges did you encounter during this blended learning module? Please provide a detailed answer.
3. What support (lecturer, peer, technical etc.) do you expect to receive during the course of this blended learning module? Please list all.	3. What support did you receive during this blended learning course? Please provide a detailed answer.
4. What positive experiences do you expect to gain from participating in a blended learning module? Please provide details.	4. What positive experiences did you gain from participating in a blended learning module? Please provide a detailed answer.
5. In your opinion, what should a lecturer's role be in facilitating a blended learning module as opposed to a traditional face-to-face mode? Please provide as much detail as possible.	5. In your own opinion, how did the lecturer's role change in facilitating this blended learning module compared to a traditional face-to-face mode? Please provide a detailed answer.
6. How do you think your role as student will change when you are participating in a blended mode of delivery as opposed to a traditional face-to-face mode? Please provide as much detail as possible.	6. How did your role as student change while participating in the blended mode of delivery compared to a traditional face-to-face mode? Please provide as much detail as possible.

*Source: Compiled by the authors*

Random sampling was used to select 16 students from the participant group, who were then invited to participate in a scheduled, informal focus group interview at the conclusion of the module. Open-ended questions were asked to gain deeper insights into details that emerged from the analysis of the two questionnaires. The interview was transcribed verbatim for the purpose of thematic analysis.

Field notes made by the researcher of her observations during face-to-face contact sessions were a third data-collection strategy. She was impartial and uninvolved in the teaching-learning process, fulfilling only an observatory role, which was an effort to reduce subjectivity. These field notes were checked by the lecturer for accuracy and to clarify misapprehensions before they were analysed.

Inductive data analysis included a detailed description of the participants' real-life setting, as required for case studies (Harris et al. 2017), followed by memoing, coding and thematic

analysis of the data from transcriptions of focus group sessions and interviews, field notes from face-to-face class observations and completed questionnaires. The data from the pre-module questionnaires were compared to the data from the post-module questionnaires. The six categories that recurred in both of the questionnaires – i.e., ‘positive gains’, ‘challenges’ and ‘lecturer’s role’ – were used to structure the analysis. A-posteriori codes that emerged from the data (e.g., self-discovery, help required, and personal responsibility) were also employed in the analysis. The lecturer presenting the module conducted the memoing, which was corroborated by a research assistant as well as a researcher specializing in BL in order to limit subjectivity, which, according to Harris et al. (2017), could pose a threat to the credibility of case studies. Member checking, reflection and peer debriefing were employed to add to the reliability and validity of the research. Generalizability was not deemed an issue in this case study, as the findings were pertinent to the specific context in which the study was conducted.

## **Findings and discussion**

First, the real-life setting in which the case study was undertaken is described to provide context for the subsequent findings and discussion about participants’ preconceived expectations of BL prior to the start of the module as well as their informed experiences of BL after the completion of the module. The findings are discussed to correspond to the order of the questions used in the two questionnaires (see Table 1).

### ***The real life-setting or context of the case study***

The module that was the focus of the investigation forms part of a four-year-long Bachelor of Education teacher-preparation qualification. The single module was adapted from a full-time face-to-face module to a blended mode of delivery. Guidelines for establishing a CoI were adhered to. The fourth year is the exit-level for these student teachers. At the time of the investigation, the students in this module had no prior experience of BL; this module was thus their first exposure to BL. The module is compulsory for Technology Education- as well as Computer Applications Technology student teachers to prepare them for teaching practice in the subject Technology, which forms part of the South African secondary school curriculum.

The BL in the module was scaffolded around group work, and the lecturer assigned members to groups using the alphabetical class list. To facilitate the online components of the module, an e-guide that detailed the resources, requirements and assignments for each study unit was developed. The e-guide was hosted on the Sakai learning-teaching platform called *eFundi*, which is the preferred platform of the university where the study was conducted. A private (i.e., only open to invited members) Facebook group was created to facilitate online interaction between the students and between the module lecturer and students. In addition, online office hours were established for the module, and students were given the lecturer’s cellular phone number to stay in touch with her through WhatsApp Messenger (a free messaging application). It emerged that the participants also created their own smaller WhatsApp groups to stay in touch with each other within and across pre-determined groups.

Accessibility to the Internet (for eFundi and Facebook) on the university campus is stable and free for students. Furthermore, several computer laboratories, libraries and study centers provide students with opportunities to utilise the Internet and other online resources if they do not have their own devices. Based on the assumption that the students would be on campus regularly for their face-to-face sessions in other modules, access to the online resources for the BL module was therefore deemed to be available for all participants. The findings show that students preferred WhatsApp to Facebook and other online contact (such as online office hours). This can probably be attributed to WhatsApp being a free mobile phone (rather than a computer) application, which all students reported to have had on their devices and which uses little mobile data. A small number of male students reported that they did not have Facebook accounts and that they did not want to get involved on this social media platform, even if for educational purposes (as was planned for the module).

These few students recounted that they ‘piggybacked’ on peers’ Facebook exchanges to obtain information and to stay involved in the required processes for the module.

The subsequent sections discuss the findings that emerged from the six categories that were used in the two sets of questionnaires, augmented by pertinent details and quotes that emerged from the focus group interview and classroom observation field notes.

### ***General expectations of participants***

Participants held more positive than negative expectations of BL, both before and after their exposure to the blended module, with informed general expectations mostly matching students’ preconceived expectations. Participants in the focus group interview mentioned that they ‘liked’ the BL module and that they found it ‘interesting’ and also that they appreciated ‘not being spoon-fed by the lecturer’. This finding correlates with findings of Paechter et al. (2010), who reported that students’ expectations of the flexibility in the choice of learning strategies and the exchange of knowledge were positively related to learning achievements. It emerged that several of the participants expected to implement BL in their profession as teachers in the future, which was substantial and underlined the usefulness of BL as a mode of instruction for pre-service student teachers. Current trends of expansions in online teaching, especially following the Covid-19 pandemic, underscore the value of the stated planned enactment of BL learning.

### ***Challenges in blended learning***

Uncertainty about the scope of the work and ‘what to do’ were the main challenges that participants expected and experienced of BL (Q2). This finding is contradictory to the questionnaire findings that clear instructions were given about the work (Q3) and that information in the module was clear and accessible (Q1). A possible explanation for the contradictory findings might be that the novelty of the BL approach (it was participating students’ first experience of BL) left participants feeling insecure. When establishing a CoI, direction is vital for the group to remain productive and engaged in the course. Therefore, clearly structured guidance is necessary (Abrahams and Witbooi 2016; Eagleton 2017) to reinforce collaboration and to ensure a cohesive CoI (Garrison 2006).

The expectation that group work would pose a challenge also realized in the BL module when it emerged that some group members simply did not get along with others (Q2) and that scheduling meeting times for group members was difficult (Q2). This finding is, however, inconsistent with other findings that the group work was experienced as constructive (Q1), that participants learned from their peers (Q3), and that participants experienced better communication (Q6) and social skills development (Q4) with their peers. The discrepancy might be attributed to the fact that the lecturer assembled groups; consequently, participants had to work with students with whom they were unfamiliar. In future endeavours, it would be wise to apply the suggestion of Van Niekerk and Webb (2016) that students should be allowed to swap groups to better meet their personal needs. Although a CoI depends on collaboration between participants where they share experiences and insights, tension and conflict are likely to surface during certain stages (Garrison and Vaughan 2008). In such instances, it is important that the lecturer addresses the situation directly and resolve conflicts where necessary without becoming too involved (Garrison and Vaughan 2008).

### ***Support in blended learning***

Support from the lecturer emerged as the most prevalent form of support the participants expected and experienced. The ‘many ways of communication’ with the lecturer through WhatsApp and Facebook for (quick) feedback and providing help, were supportive. The online office hours established for the module were, however, underutilized, which may be attributed to students being unfamiliar with this protocol. Peer support included clarification, dividing tasks and sharing of resources for assignments, as well as gaining new insights and perspectives from others. The learning management system (eFundi) was also mentioned several times with regard to the support it provided in structuring and providing information in the BL module.

The immediate and ample technical support that students expected in BL did not realize. No additional technical support was provided for this module, as students were expected to function in a 'normal' technical environment specifically to help identify possible areas that would need attention in future BL courses. Almost all participants experienced these technologies and communication channels (WhatsApp, Facebook and eFundi) as useful (Q3). This is in line with the findings of Moodley et al. (2015 p. 71) that 'social networks such as Facebook enhance collaboration and information sharing'. Some participants even mentioned that their 'computer skills had improved' (Q4) because they were 'forced to spend more time online'. Like the finding by Abrahams and Witbooi (2016), the students in this module realized the importance of using technology as a support mechanism to access resources. Eagleton (2017) recommends that, when planning BL, consideration should be given to students' preferences with regard to communication (both synchronous and asynchronous) as well as their technology needs and contexts.

The findings of the current study concur with findings of other South African studies that reported internet access as a challenge of BL (Abrahams and Witbooi 2016; Moodley et al. 2015). Despite the initial assumption that the students would be on campus regularly and that they would have access to the Internet and the online resources included for the BL module, it emerged that students did not plan well enough to complete the BL requirements while on campus. Some participants in the focus group mentioned that when they were 'at home' and wanted to continue with the online aspects of the module, but the cost of data or internet access hampered their efforts. This finding is consistent with Deepwell and Malik's (2008 p. 13) conclusion that students need 'more direct guidance on what and how to use technology for learning more independently', which should also contribute to developing their self-directed learning skills.

### ***Gains associated with blended learning***

Participants expected and experienced several gains from their participation in BL, with independent and self-directed learning mentioned as the foremost gain after the module's completion (Q4). This finding supports the assumption that the absence of face-to-face conventions may cause uncertainty, implying that more attention should be paid to supporting student self-regulation in the online component of blended learning (Eagleton 2017). This also parallels the finding of Van Niekerk and Webb (2016) that students appreciate that they can work at their own pace in BL.

Participants expected and experienced improved communication with their peers as well as the lecturer. In addition, it was found that participants also experienced that their social skills had improved (Q4) and that they had learned to value others' opinions as part of learning (Q4). Establishing a CoI, and more specifically social presence, is associated with such an elevated degree of interaction among students (Garrison and Vaughan 2008). Some participants valued the opportunities that BL offered them to voice their own opinions (Q4). It is important in a CoI for students in a course to feel unrestricted to express themselves openly in a risk-free manner (Garrison and Vaughan 2008).

Several participants mentioned 'better time management' as a positive aspect of the BL mode of delivery. Other gains they experienced in the BL module included that it involved 'thinking outside the box', they 'liked doing the online activities', their 'computer skills improved' and their knowledge expanded. These are all positive gains that would be useful in their professional teaching careers.

### ***The lecturer's role in blended learning***

Participants' expectations of the support they expected from the lecturer were met and, in some instances, exceeded (Q5). Participants expected the lecturer to fulfil the roles of facilitator, support-provider, motivator and someone who could explain details where needed. None of these differ from expectations of non-blended modules. A number of participants, however, mentioned in their informed expectations that the 'responsibility for learning moved from the lecturer to the students', indicating their understanding that more self-directed learning is required in BL modules. This aligns with the statement by Deepwell and Malik (2008) that, in BL, students must take responsibility and

initiative for their learning processes, especially learning processes that are not face-to-face but where lecturers contribute greatly to steering students in the right direction.

### ***Students' role in blended learning***

Participants expected to be more involved in the BL process than in 'standard face-to-face contact sessions' in order to be more self-directed, more responsible for their own learning and able to manage their own time in relation to the module and the learning process. A few participants mentioned that their communication with their peers was better and their informed expectations reflected that they realized the important role that learning from peers could play in their education. Two participants held preconceived expectations that the 'workload is going to increase exponentially to near crippling weight, seeing as nothing is explicitly provided in a "this is the content – this is the assessment" way'. Four participants experienced the taking of responsibility for their own learning and 'to think for [themselves]' as challenging. These findings emphasise the conclusion drawn by Blaine (2019) that structures and practices need to be planned and implemented to meet the expectations of students and to clarify their expected roles in order to limit the negative impact on their learning.

### **Conclusions**

Despite the limited research that is available on the expectations of students in blended modes of delivery, the findings from this study are encouraging. Though these students had never been exposed to BL before the onset of this module, they held positive preconceived expectations and were excited about the new or different approach to their learning. The predominant positive feedback of the participants after their informed expectations of the BL module supports the suitability of such an approach to learning in teacher preparation modules. Designing the BL module based on the CoI framework provided a suitable scaffold for addressing students' expectations of BL, including flexibility in time, space and teaching strategies; integration of technologies; interaction and communication with peers and the instructor; immediacy and support through cooperative learning; and group work. Several gains were associated with BL – specifically, improved communication with peers and enabling the sharing of their own opinions to strengthen the learning experience. In addition, participants appreciated the opportunity to become more involved, more independent and more self-directed in their learning process. The improved ability and responsibility to manage their time were also experienced as a benefit associated with the BL approach.

There are still some challenges associated with BL, however. The importance of clear and detailed structuring within BL modules emerged repeatedly from the findings. In South Africa, with its unpredictable (and sometimes expensive) internet connections, electronic communication is not as smooth and problem-free as would be preferred in a blended module, and lecturers designing BL modules should keep this in mind. Group dynamics is the other main challenge that was experienced in this BL module. Since teaching students have to learn to communicate effectively with their peers (and others) to enable them to employ such skills in practice in their profession one day, it is imperative that effective communication skills are fostered and intentionally built into BL modules.

### **Recommendations**

The following recommendations are made to address the challenges that were identified in this investigation as well as to improve the experiences of students in BL modules:

- Internet connectivity should be more accessible on- and off campus to improve interactivity and to ensure that learning can be a rewarding experience.
- Group dynamics should be carefully considered and managed when designing BL modules to create opportunities for students to engage and rely on one another to reach the goals. Students might be allowed to choose their own group members or swap groups.

- The use and advantages of online rather than face-to-face interaction in BL should be emphasised. Introducing students to different technologies used for collaboration and communication would negate the need of students to have to meet in person.
- The self-directed learning required of students in a BL module necessitates that it is well structured with clear instructions. This should support students in the attainment of learning outcomes and should relieve some of the apprehension students experience in BL modules, especially when they are first introduced to this mode of delivery.

## References

- Abrahams, M.A., and Witbooi, S. 2016. "A realist assessment of the implementation of blended learning in a South African higher education context." *South African Journal of Higher Education* 30(2): 13–30.
- Blaine, A.M. 2019. "Interaction and presence in the virtual classroom: An analysis of the perceptions of students and teachers in online and blended Advanced Placement courses." *Computers & Education* 132: 31–43.
- Deepwell, F. and Malik, S. 2008. "On campus, but out of class: an investigation into students' experiences of learning technologies in their self-directed study." *ALT-J: Research in Learning Technology* 16(1): 5–14.
- Eagleton, S. 2017. "Designing blended learning interventions for the 21st century student." *Advances in Physiology Education* 41: 203–211.
- Ebersöhn, L. 2016. "Enabling spaces in education research: an agenda for impactful, collective evidence to support all to be first among un-equals." *South African Journal of Education* 36(4): 1–12.
- Garrison, D.R., Anderson, T., and Archer, W. 2000. "Critical inquiry in a text-based environment: Computer referencing in higher education." *Internet and Higher Education* 2(2–3): 1–19.
- Garrison, D.R., and Vaughan, N.D. 2008. *Blended learning in Higher Education: Framework, principles, and guidelines*. San Francisco: Jossey-Bass.
- Harrison, H., Birks, M., Franklin, R., and Mills, J. 2017. "Case study research: Foundations and methodological orientations." *Forum: Qualitative Social Research (Sozialforschung)* 18(1): Article 19.
- Merriam-Webster's Online Dictionary. 2020. Preconceived. An Encyclopedia Britannica Company. Accessed July 9, 2020. <http://www.websters-online-dictionary.org/dictionary/preconceived>.
- Moodley, P., Singh, R.J., and Cloete, J. 2015. "Exploring student perceptions of using the learning management system and social media for blended learning at a rural university." *Progressio* 37(1): 68–82.
- Paechter, M., Mauer, B., and Macher, D. 2010. "Students' expectation of, and experiences in e-learning: Their relation to learning achievements and course satisfaction." *Computers & Education* 54: 222–229.
- Pinto, M.B., and Anderson, A. 2013. "A little knowledge goes a long way: Student expectations and satisfaction with hybrid learning." *Journal of Instructional Pedagogies* 10: 1–12.
- Porter, W.W., Graham, C.R., Bodily, R.G., and Sandberg, D.S. 2016. "A qualitative analysis of institutional drivers and barriers to blended learning adoption in higher education." *Internet and Higher Education* 28: 17–27.
- Swinnerton, B., Coop, T., Ivancheva, M., Czerniewicz, L., Morris, N.P., Swartz, R., Walji, S., and Cliff, A. 2020. "The Unbundled University: Researching emerging models in an unequal landscape." In *Mobility, Data and Learning Agency in Networked Learning*, edited by D.N. Bonderup, P. Jandric, T. Ryberg, and M. de Laat, 19–34. Springer, Cham.
- Van Niekerk, J., and Webb, P. 2016. "The effectiveness of brain-compatible blended learning material in the teaching of programming logic." *Computers & Education* 103: 16–27.
- Vaughan, N.D. 2007. "Perspectives on blended learning in higher education." *International Journal on E-Learning* 6(1): 81–94.