https://studentsuccessjournal.org/
Volume **14** (1) 2023 https://doi.org/10.5204/ssj.2659

Cultivating a Digital Promise: Promoting Reflective and Reflexive Activities to Enhance Self-Directed Learning for the 21st Century. *A Practice Report*

Heather Morris-Eyton and Erica Pretorius
University of Johannesburg, South Africa

Abstract

Self-directed learning skills are known to influence successful learning outcomes in a higher education environment. Moreover, first year students entering higher education lack self-directed learning skills, as these are not always developed at school level. A digital promise tool was used for a first-year student cohort to reflect on their personal learning experiences and behaviour over a period of two semesters. The researchers used the augmented community of inquiry as the theoretical framework in this study, focusing on the student learning presence. Two cycles of data were collected using student reflective and reflexive responses. The first cycle included developing a digital promise, where students reflected on their typical learning behaviour and commitments during their journey. After this cycle, opportunities were given for students to adjust their digital promise for the second semester. The results from the student reflections indicated an increase in self-motivated and self-directed student learning during the second semester.

***Keywords**:* Digital promise; reflective; reflexive student learning.

Introducing Self-Directed Learning Skills for First-Year Students

First year university throughput rates are traditionally low, with research indicating that "more than the expected number of students lack an appropriate study attitude, failed" (Van Zyl et al., 2012 p. 1106). One reason for this, is that many students may not take responsibility for their own learning. Furthermore, research argues that self-regulated and self-directed student learning approaches contribute to higher levels of self-efficacy, scaffolding the notion of mastery linked to the student developing skills and achieving higher levels of self-directed independent and lifelong learning behaviours and actions (Eltham & Arvanitakis, 2018; Hanna et al., 2014; Kahn, 2014). Self-directed learning is often a challenge for first-year students as they are frequently overwhelmed by the substantial content load that they face alongside taking responsibility for their own learning behaviours and attitudes in a new unfamiliar environment (Ameri et al., 2016; Aulck et al., 2016; Costa et al., 2018; Gathoni et al., 2019; Kahn, 2014). Therefore, it is advised that higher education (HE) institutions could invest more time to develop the first-year students to take responsibility for their own learning, Hence, the digital promise proposed in this study, is one approach which could contribute towards developing self-directed learning skills.

In recent years, there has been a steady increase in the number of higher education (HE) institutions worldwide introducing student-centred teaching and learning styles and strategies where the responsibility for developing skills and competencies

resides with the student rather than the lecturer. This is a significant shift from the traditional teacher-centred approaches of delivering one-way instructions and content dissemination (Department of Higher Education and Training, 2020; Jamiu & Yakubu, 2020). First-year students from high school have poor student-centred experiences and study skills to promote active engagement and interaction with the content and with their peers. This is primarily due to many high schools engaging in teacher centred practices focusing mainly on content memorisation, and information regurgitation (Chapman et al., 2011; Morris, 2015).

This study affirms that self-regulated and self-directed learning is a fundamental requirement for student success in HE environments (Pavelea, & Moldovan, 2020). Self-directed learning is the process whereby students diagnose their learning needs, goals, and resources to develop a personal learning strategy. These self-regulated learning skills involve variables such as the cognitive, metacognitive, behavioural, motivational, and affective domains of students during the learning process. It is the lecturer's responsibility to providing opportunities for self-directed learning however, taking responsibility for decisions regarding their learning, actions and behaviours remains with the student as indicated in the community of inquiry framework used in this study. To ensure a self-regulated, self-directed learning and student-centred approach, "a comprehensive perspective of students, including an awareness of cognitive, motivational, affective, and social contextual factors' is a prerequisite for higher education" (Jones, 2019, p. 116).

Using the Digital Environment to Encourage Reflective and Self-Directed Learning

Many first-year students entering the realm of HE, use a wide range of technologies for in their daily lives for communication, entertainment, learning and staying connected with an active online social networking presence (Gallardo-Echenique et al., 2015; Kirschner & De Bruyckere, 2017). Consequently, the researchers opted to use the Blackboard journal tool for reflection as students could continuously ruminate and mediate their learning actions and behaviour during the first year. The reflective journal functionality in Blackboard as the official learning management system was used to motivate, develop, enhance self-discipline and self-regulation skills of a first-year cohort. This was done within a particular academic context for the development and implementation of a digital promise.

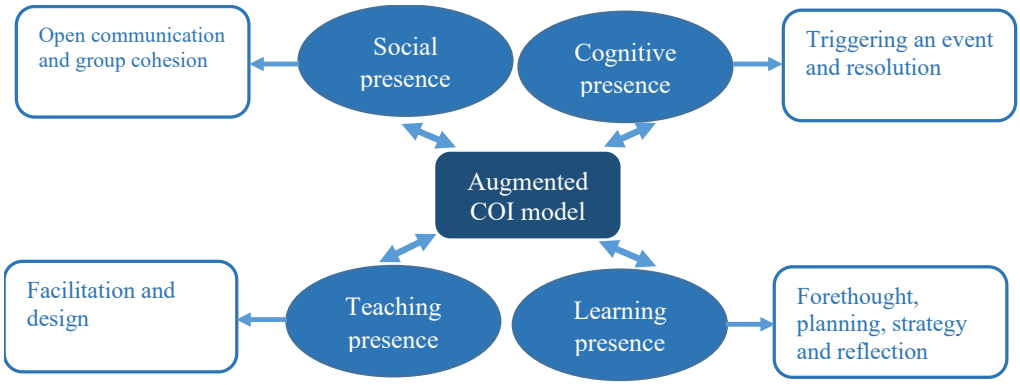
Self-regulation according to Zimmerman (2002), relates to the behaviours, thoughts and feelings that are orientated towards goal attainment. This is used alongside Wangi et al.'s (2018) identification of life and career skills for the 21st century, to develop an integrated framework specifically aimed at this project. Integrating these ensured that students developed technology and information media skills alongside the self-directed learning survival strategies not only for the HE environment, but also for the real world of work as a professional. This approach created an awareness among students regarding the way they were thinking and learning and what is required in the new digital society.

This study investigated the contribution of using a digital promise towards developing accountability in the learning process during the first year at a university, through the negotiated agreement between the student and lecturer. The agreement was utilised to promote accountability and give students a voice to relate their own learning experiences. The researchers argue that using a digital promise (which in this context is defined as a trilateral agreement between the student and themselves, the student, and their peers, as well as the student and the lecturer), provide guidelines and a support structure to guide the students' affective domain and accountability during the learning process. Student motivation has a substantial effect on performance and guidance is required from lecturers in developing self-discipline, time management and self-directed learning skills (Law et al., 2019). The Community of Inquiry (COI) framework is currently used to guide the design and facilitation of meaningful learning experiences for students (Shea et al., 2012). The COI framework accommodates the cognitive, teaching, and social presence concepts as part of the teaching and learning process. Research shows that the cognitive, teaching, and social presence has a substantial influence on the learning experiences of students and could drive successful student performance (Geng et al., 2019; Witthaus 2018). The COI framework now includes the fourth interrelated presence namely the learning presence (LP). This focuses on developing motivational and behavioural qualities that drive self-regulation (Shea et al., 2012).

A conceptual model adapted from Geng, et al (2019), alongside the augmented community of inquiry model served as the theoretical framework in guiding this notion of a digital promise (Figure 1).

Figure 1

Augmented Community of Inquiry Model Adapted from Witthaus (2018)



In the scenario of the digital promise, the cognitive presence was divided into four phases – 1) a trigger event which was the introduction to the digital promise; 2) the exploration, integration and resolution of the agreement and commitment; 3) students reflected on their initial promise; 4) adapted behaviour and actions which followed. These phases examined the acknowledgement of students' successes and shortcomings during the period of practical inquiry. The teaching presence highlights the lecturer's role as a facilitator during this process of implementing and reflecting on the digital promise. It also guided learners towards responsible behaviours. The social presence highlighted the student's affective behaviour and development, which included interpersonal relationship between students, lecturers and peers based on open communication and group cohesion (Garrison, 2017). The elements of the augmented community of inquiry are directly related to the notion of self-directed learning integrating the psychological processes that learners purposively direct themselves towards. The digital promise emphasised goal setting and choice making, which in turn triggered learning motivation. This is reflected in the student realising that personal investment in cognitive, emotional, and behavioural engagement through learning activities does support successful learning outcomes and achievements. Students acknowledged and adapted their attitudes and behaviour according to their digital promise during the learning experiences and processes (Geng et al., 2019).

Context

The project was completed at a higher education institution in Johannesburg, South Africa over a period of two semesters (ethical clearance number: 2017-110). The notion of a digital promise was entrenched in promoting reflective and reflexive student practices to improve self-motivated and self-directed learning. The students' digital promises became an explicit mediating tool promoting reflective and reflexive learning opportunities. First-year students were selected as participants in the study who were enrolled in a physical education module. They were requested to design, develop, and use a digital promise as a tool to reflect on their own learning processes during the year. This was introduced as a trilateral agreement: firstly, a personal commitment that students made for themselves. These included statements of intent that the learners identified would be important for their success in the module (not missing lectures or arriving on time). The second part of the promise was between themselves and their peers. These statements included acknowledgement of being part of a student community within a particular module and emphasising the importance of working together as a group. The last part of the promise was made between the students and the lecturer which does not form part of the focus of this paper. This was an acknowledgement of what the student expected from the lecturer and included statements such as focusing on feedback, the provision of assistance when required and the availability of the lecturer to the students. This part of the agreement was then agreed to by the lecturer, and both the lecturer and student signed the promise making it a binding commitment.

This practice report focuses on the students' personal commitment made to themselves over their first year of study for one module. Moreover, the data from the digital promise also informed the added value offered by using a range of innovative technologies and scenarios. A focus on reflexivity included the notion of peer support in achieving improved responsibility and learning outcomes across a diverse student body. A blended learning approach, where students were encouraged to reflect continuously, was the preferred as the mode of instruction.

Teaching and learning views scaffold this project in that it promulgates the notion that students should acquire real-world knowledge, skills, and attitudes. The digital promise specifically lends itself to this idea as it prepares students to develop the universal soft skills such as time management, successfully coping with individual tasks, taking responsibility for decisions, self-organisation, and self-education, alongside the promotion of intercultural interaction working in teams (Gruzdev et al., 2018; Hornsby & Osman, 2014; Hurrell, 2016).

Research Design and Method

A comparative case study design was used where the focus was on examining the improvement of learning experiences over a period of two semesters. The notion of a digital promise was premised on two factors: that the digital platform (Blackboard) was already in place for students to access allowing a safe repository to store confidential information and responses which was only shared with the lecturer. Secondly the notion of a promise is a binding "agreement" that nobody wanted to break. One of the ethical norms identified by Gert (1998) is that of keeping a promise. It invokes a sense of trust, accountability, and relationship development through its enforcement. For students being able to develop a trusting relationship with a lecturer is a cornerstone for student success, and for the lecturer it was a way of holding the student accountable for what they had identified for themselves they wanted to accomplish in the module across both semesters.

For the first semester, the lecturer engaged with the students regarding the notion of keeping a promise, and how they can craft their own promises related to their learning outcomes and personal goals for the module during the semester. This digital promise formed an agreement that was negotiated by the students themselves and agreed to by the lecturer. Both parties signed the agreement to add a sense of formal binding to the contents of the promise. At the beginning of the second semester, students had an opportunity to review their first semester promise, reflect on what they were able to achieve and determine barriers for not attaining what they had set out for themselves. After reflection, students were then given the opportunity to revise their promises for the second semester. The lecturer actively engaged with each student and offered guidance where necessary to ensure that the obstacles could be addressed with additional support. A final reflective process was done at the end of the second semester where students were asked to reflect on their agreements, what was useful for them and what did not really work for them during the process of reflective and inductive engagement of the promises they undertook.

Population

The sample of students recruited for the study were first-year education students completing a year course in physical education. Data was collected and analysed over two cycles (two semesters) during an academic year. Each semester was 14 weeks in duration. Prior to commencing each semester, students (n=80) were requested to compile a digital promise with two components. A promise made to themselves regarding their own studies and what they wanted to achieve as well as a component expressing their expectations for their own learning. This ensured a commitment to accountable learning. All students designed and developed their own promise which was posted online (using Blackboard) as an individual and a confidential pledge to the lecturer. The student data collected from the actual digital promises were used during class discussions and were only anonymised during the analysis phase. However, the student data from the personal reflections were anonymous from the initial research process.

At the end of each semester students were given an opportunity to reflect on their promises and explain why they did or did not accomplish the goals they had set for themselves. Prior to the second semester, students were reminded of their reflections at the end of the first semester and asked to adjust their promise to reflect their accomplishments during semester one and ensure that they set achievable goals based on the challenges they experienced during semester one. At the end of semester two, students were asked to reflect on their promises and give explanations to their accomplishments related to the promises they made to themselves. They were also required to reflect on the effectiveness of the promises they had made during the two semesters.

The notion of the digital promise was embedded throughout both semesters to promote reflective and reflexive student practice. This was an attempt to advance self-motivated and self-directed learning. Consequently, the student digital promises became an explicit mediating tool to promote reflective and reflexive learning opportunities. Blackboard was used as the preferred technology to accommodate the communication process of developing the digital promise between the lecturer and student. The qualitative data was analysed using Atlas.ti (ver.8) where categories and themes were developed for thick descriptions of the findings. A response rate of 64.5% was recorded.

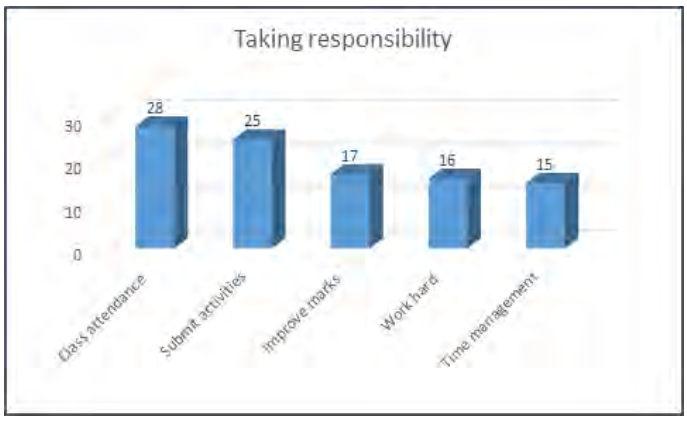
Self-Regulated Student Learning

In the literature, lecturers have raised concerns regarding first-year students not being able to take responsibility for their own learning (Hassel & Ridout, 2018; Porteous & Machin, 2018; Thibodeaux et al., 2017). Taking this into account, the authors attempted to find a means for first-year students to develop a sense of self-directed learning. The digital promise offered students the opportunity not only to consider input from the lecturer, but also to reflect on their own insights into taking responsibility as a first-year university student.

The data collected were coded into themes and aligned with the categories of self-regulated life and career skills (Figure 2). The raw data for each semester was analysed separately to compare the students' progress, related to taking responsibility for their own learning goals and processes. The results of the analysis for both semesters were aligned to the tenants of self-regulated learning (Zimmerman, 2002) and the life and career skills requirements for the 21st century (Wangi et al., 2018). The categories are sorted in sequential order as per the number of responses received from students during cycle one. Figure 2, referring to the integrated constructs from student responses, shows that students identified punctuality, class attendance and taking responsibility for their own learning as the most important constructs as success factors for learning at a HE institution.

Figure 2

The Constructs of Responsibility Coded from Students' Responses



The digital promise compiled at the beginning of the first semester by students indicated that they had the intention to take responsibility for their learning process. Students recognised that class attendance, working hard, submitting tasks and assignments on time, and getting good marks were intentions that required attention during the semester.

The constructs of punctuality and class attendance were identified as important aspects for developing initiative and self-regulating behaviour. Students were required to manage their time spent on class attendance, task completion and integrate their learning activities with their peers. Students' independence and self-regulation were indicated by *"*... need to ensure I attend all my classes', and 'arrive on time for class*"*. In terms of taking responsibility (productivity and accountability), students were aware of time management ("learn to manage my time" or "start my assignments early"). These intentions at the beginning of the semester were clearly constructed without the prior knowledge of the expectations for first-year university students.

The main concerns of taking responsibility related to class attendance, punctuality, submission of activities, the self-discipline to work hard to improve their marks and time management (Figure 2). The greatest concern of these first-year students was class attendance. This closely relates to taking responsibility alongside a time management life skill that is required to be productive and accountable for self-learning. These findings reveal that the digital promise evoked a process of reflection from students on their own conduct and behaviour in taking responsibility for their own learning.

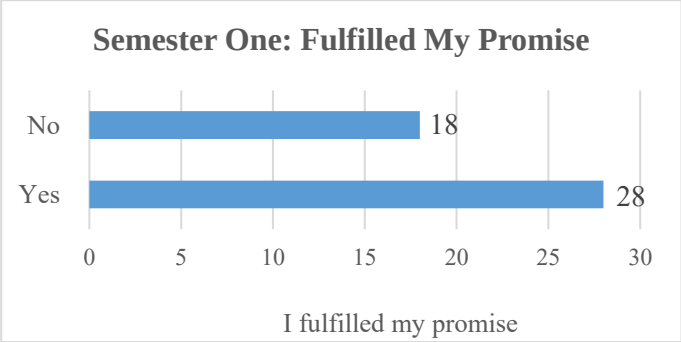
Results

Adherence to the Digital Promise After Cycle One

Before the start of the second semester, students were required to reflect on the digital promises they made to themselves. Most of the students (61%) indicated that they fulfilled their promise in taking responsibility for their learning process during semester one (Figure 3). Students who did not feel that they had met their promises to themselves, indicated that class attendance and the submissions of tasks presented the greatest challenges. Reviewing the students' responses to their promises set in semester one benefited the lecturer in that it provided an instant reflexive opportunity, as well as time for a deep reflection on how the teaching and learning could be improved in the second semester. This change was indicated through providing additional reminders and assistance to students who were struggling.

Figure 3

Student Adherence to Their Digital Promise for Semester 1



Student Responses

The responses selected from students indicate the real challenges students face during their first year of tertiary education. The non-adherence to their promises revealed in these reflections gave an opportunity to encourage improved actions from these students. Thomas indicated that:

> …during the beginning of semester one I made promise that I will attend all my classes … due to different circumstances such as financial and transport I was not able. I promise that I will come prepared for all my classes and practical's but that was not possible due to the course workload and other modules tasks. I also promised to submit all my in time due to ignorance and lack of dedication I ended up not submitting the group … assignment.

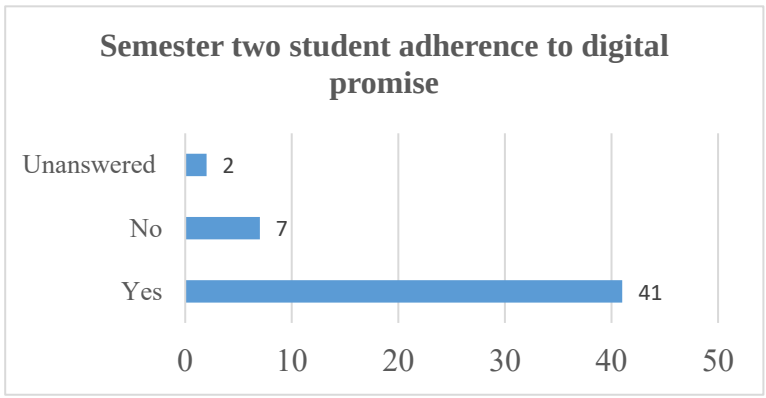
After students had reflected on their first semester promises, they were given an opportunity to revise their promises considering any of their under-performance areas identified during the reflection process. This allowed students to become active agents in regulating their own behaviour required for the learning outcomes they each set for themselves.

Adherence to the Digital Promise After Cycle Two

The reflection after cycle two (semester 2) showed that 82% of the students felt that they had adhered to the promise made for the second semester (Figure 4). The student responses showed a positive shift in taking responsibility for personal learning outcomes.

Figure 4

Student Adherence to Digital Promise for Semester 2



The semester two reflections yielded similar issues (as seen in semester one) for those students who were not able to fulfil their promises. These included class attendance, timeous submission of class tasks, punctuality, and transport for practical classes.

At the end of semester two, students were asked to give an in-depth reflection on the fulfillment and helpfulness of their promises over the year (semester one and two). The word cloud (Figure 5) shows that the promises helped to achieve their goals (which were student directed). It was important that students recognised that the setting of realistic goals was important for realising the promises they had set for themselves.

Figure 5

Word Cloud Showing the Importance of the Promise's Achievement of Student Learning Goals

Student Reflections

The student personal reflections give a perspective of the comparison between the achievement and helpfulness of the digital promises. They were examined using three categories: positive (promises assisted in achievement of learning goals), negative (promises were not achieved) and reflective, which could have been either positive or negative. No corrections were made to student postings.

Positive student views

These student responses showed how students were able to reflect on the usefulness of the digital promises made over two semesters. Themes that emerged from these responses dealt with motivation, realistic goal setting and achievement, improving class participation and attendance, serving as a guideline to navigate the challenges student faced during the two semesters and understanding that change may be required for success.

Motivation

The digital promise served as a motivational tool for students as it created a sense of commitment to adhere to the stated promise.

> Yes, they did helped me achieve my goals because even if you are thinking of bunking class then you will remember what you wrote on the digital promise and you will be motivated to go to school and a student knows what she or he wish to gain from the course and what she or he must he do to achieve it. (Sam)

> The promise did help me achieve my goals because I always reflected on the promise, I made to myself so that I would be able to stay on track with what I need to do and what I expect myself to do and achieve. (Annie)

The responses revealed the students' ability to reflect on their attitudes and learning actions.

Realistic goal setting and achievement

Students intended to fulfil their promises, however implementation was hampered by real life challenges, as highlighted by the results and findings The responses disclosed the fact that students are aware of their responsibilities and listed realistic goals:

> Yes, the promises were realistic. This is because they were in line with what was expected of me in this module. These promises helped me to achieve my goals, because they helped me to manage my time better and they helped me to improve my results, compared to the first semester. (Nkosi)

> The promises I made on the first and second semester are not that different although in the second semester I did things differently which was helpful, they were realistic for me to achieve my goals because I managed to pass, and I did very well…. I was always in class to make sure that I understand what is expected from me. (Adelaide)

> They were very realistic and helpful because as humans once you make a promise to yourself more especially you are bound to have a drive because you do your utmost best to make sure you don't disappoint yourself. (Nkosi)

> My promises were realistic because they were achievable and had more than enough time to achieve each goal. I think that my promises helped me achieve my goal … also helped me improve my work and myself. (Sbu)

The fact that students listed realistic goals also emphasised their sense of accountability and self-regulated learning. The concern, however, was the implementation, as students understood their responsibilities, but numerous factors influenced their decisions throughout the year.

Class attendance and participation

The level of independence at HE institutions affected the students' class attendance. School classes in South Africa are still regulated by scheduled learning periods, and managing their own schedules presents a challenge to first-year students. In addition to this, students now experience a sense of freedom, and their behaviours are no longer guided by teachers or parents. This newly found independence is a novel experience to students as they still need to develop their self-regulation and time management skills (Dignath & Büttner, 2018; Fernandez-Rio et al., 2017;).

As a result, of the student reflections, there was a tacit indication that the use of a digital promise assisted in developing time management skills and taking responsibility for class attendance.

Flexibility in change

The digital promise also guided the change in the students' behaviour. They realised that non-achievement during the first semester was not acceptable. This triggered a behaviour change during semester two and encouraged a stronger sense of accountability. Sandra indicated that:

> The promises I made in semesters one and two were realistic because they only required me to be alert, determined and positive minded. The promises in some way helped me realize my goals and change how I do things because some of my strategies do not help me realize my goals.

Negative student views

The negative views expressed by students did not reflect the inefficiencies of the digital promise. Rather the students were able to recognise their own shortcomings in terms of what was required to fulfil the promises they had made. It highlighted the lack of dedication, procrastination, unrealistic goal setting and being underprepared for the workload in the module:

> Yes, I feel as if some of the aspects I mention in semesters 1 and 2 were realistic and would have been attainable if I was dedicated enough because with enough dedication and hard work everything is possible. (Emmanuel)

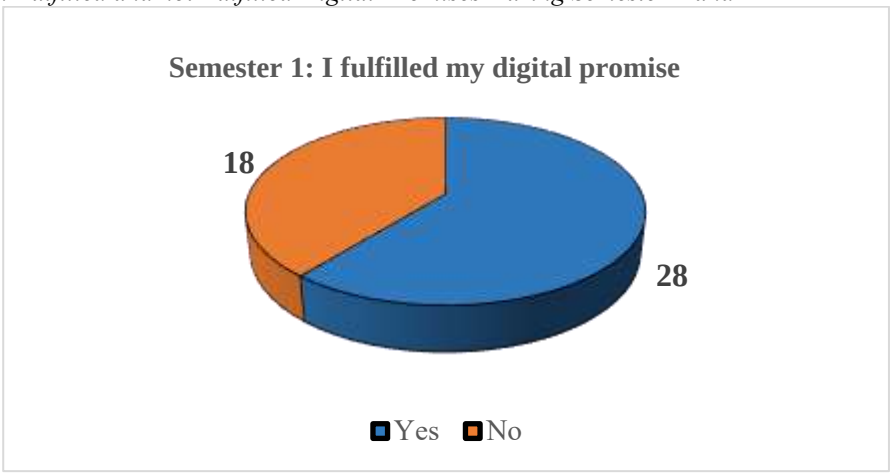
> Yes, they were realistic, however, laziness and procrastination I did not achieve as much as I would have loved to achieve my results. **(**Denver)

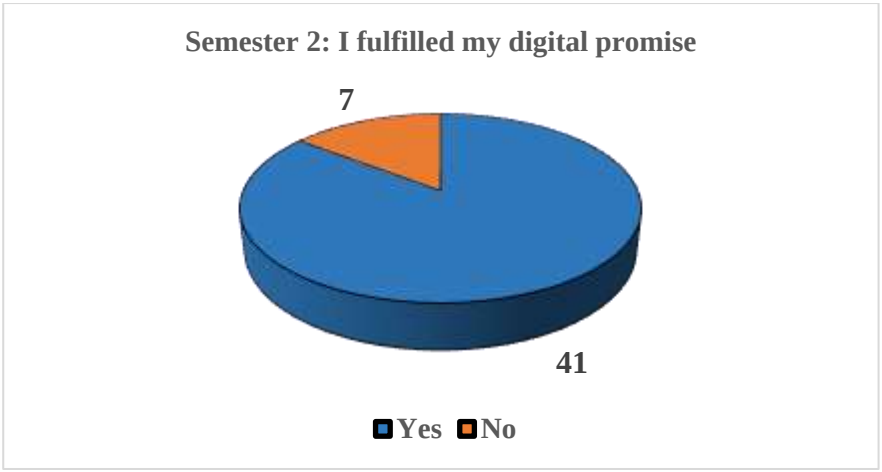
> Although I didn't fulfil all my promises, I tried my best in every task I was even though I wasn't fully prepared. (Hilton)

Examining adherence to the digital promise, a comparison between semester one and two is illustrated in Figure 6. There was a progressive shift towards students taking more responsibility for their own learning during the second semester after they have failed to adhere to their promise during the first semester. The reflection on personal behaviour yielded positive results, in that more students realised the need to take responsibility for their own learning.

Figure 6

Comparison Between Fulfilled and not Fulfilled Digital Promises During Semester 1 and 2





Concluding Remarks: A Digital Promise for First-Year Student Success

The project aimed to use the digital promise alongside innovative and virtual teaching and learning approaches to investigate whether this approach could not only motivate student learning, but also enhance student accountability during their studies. The finding from this research indicates that creating an awareness of taking personal responsibility for learning success, using a digital promise, could be a progressive tool to scaffold the first-year teaching and learning journey. This is one way of introducing students into what is required for successful learning in the HE environment. Taking responsibility and developing self-discipline is one of the major challenges which first-year university students face.

Limitations of this study include the lack of detailed data regarding the student responsibility for learning (punctuality, submission of tasks and class attendance). Determining the impact of the digital promise on student success rate for the module would add value for the implementation of a digital promise within a student cohort. This is recommended for future research. Creating a digital promise (or any student promise that can be developed using a variety of platforms) creates opportunities for students to reflect, adapt and make positive changes in their self-determined learning process. It also creates a unique opportunity for the lecturer to engage in reflexive teaching practice, which enhances opportunities for first-year student success. Further research could examine not only specific academic requirements for first-year students but should also investigate student work ethics. These studies could then gauge whether promises made in alignment with study requirements contribute towards an increase in academic success.

References

Ameri, S., Fard, M. J., Chinnam, R. B., & Reddy, C. K. (2016, October). Survival analysis based framework for early prediction of student dropouts. In *Proceedings of the 25th ACM International on Conference on Information and Knowledge Management* (903−912). https://doi.org/10.1145/2983323.2983351

Aulck, L., Velagapudi, N., Blumenstock, J., & West, J. (2016). *Predicting student dropout in HE*. arXiv preprint arXiv:1606.06364. https://arxiv.org/abs/1606.06364

Chapman, S., Garnett, S., & Jervis, A. (2011). *Improving classroom performance: Spoon feed no more, practical applications for effective teaching and learning*. Crown House Publishing.

Costa, F. J. D., Bispo, M. D. S., & Pereira, R. D. C. D. F. (2018). Dropout and retention of undergraduate students in management: A study at a Brazilian Federal University. *RAUSP Management Journal*, *53*(1), 74−85. https://doi.org/10.1016/j.rauspm.2017.12.007

Department of Higher Education and Training. (2020). Annual performance plan 2020/21. Pretoria, SA: Department of HE and Training. https://www.dhet.gov.za/SiteAssets/DHET%20Annual%20Performance%20Plan%202020.pdf

Dignath, C., & Büttner, G. (2018). Teachers' direct and indirect promotion of self-regulated learning in primary and secondary school mathematics classes: Insights from video-based classroom observations and teacher interviews. *Metacognition and Learning, 13*(2), 127−157. https://doi.org/10.1007/s11409-018-9181-x

Eltham, B., & Arvanitakis, J. (2018). Spoon-feeding and the massified university. *Kill Your Darlings*, *Jan−Jun*, 13. https://www.killyourdarlings.com.au/article/spoon-feeding-and-the-massified-university

Fernandez-Rio, J., Cecchini, J. A., Méndez-Gimenez, A., Mendez-Alonso, D., & Prieto, J. A. (2017). Self-regulation, cooperative learning, and academic self-efficacy: Interactions to prevent school failure. *Frontiers in Psychology*, *8*, 22. https://doi.org/10.3389/fpsyg.2017.00022

Garrison, R. (2017). *E-learning in the 21st century* (3rd ed.). Taylor and Francis. https://www.perlego.com/book/2192873/elearning-in-the-21st-century-a-community-of-inquiry-framework-for-research-and-practice-pdf

Gathoni, N. J., Sirera, M. A., & Olaly, W. (2019). Effectiveness of counselling services on retention rate of undergraduate students in selected universities in Kenya. *International Journal of Psychology and Counselling*, *11*(4), 30−38. https://doi.org/10.5897/IJPC2019.0558

Gert, B. (1998). *Morality: Its nature and justification*. Oxford University Press.

Geng, S., Law, K. M., & Niu, B. (2019). Investigating self-directed learning and technology readiness in blending learning environment. *International Journal of Educational Technology in Higher Education*, *16*(1), 1-22. https://doi.org/10.1186/s41239-019-0147-0

Gruzdev, M. V., Kuznetsova, I. V., Tarkhanova, I. Y., & Kazakova, E. I. (2018). University graduates' soft skills: The employers' opinion. *European Journal of Contemporary Education*, *7*(4), 690−698.

Gallardo-Echenique, E., Marqués-Molías , L., Bullen, M. & Strijbos,J. (2015). Let's talk about digital learners in the digital era. *International Review of Research in Open and Distributed Learning, 16*(3), 156-187. https://doi.org/10.19173/irrodl.v16i3.2196

Hanna, L. A., Hall, M., Smyth, P., & Daly, S. (2014). "I miss being spoon-fed". A comparison of transition from school to university education from the perspective of undergraduate pharmacy students. *Pharmacy Education*, *14*. https://pharmacyeducation.fip.org

Hassel, S., & Ridout, N. (2018). An investigation of first-year students' and lecturers' expectations of university education. *Frontiers in Psychology*, *8*, 2218. https://doi.org/10.3389/fpsyg.2017.02218

Hornsby, D. J., & Osman, R. (2014). Massification in higher education: Large classes and student learning. *Higher Education*, *67*(6), 711−719. https://doi.org/10.1007/s10734-014-9733-1

Hurrell, S. A. (2016). Rethinking the soft skills deficit blame game: Employers, skills withdrawal, and the reporting of soft skills gaps. *Human Relations*, *69*(3), 605−628. https://doi.org/10.1177/00187267155916

Jamiu, M., & Yakubu, M. (2020). Improving the quality of accounting education through student centred approach. *Nigerian Journal of Business Education*, *7*(1), 187−199. http://www.nigjbed.com.ng

Jones, J. A. (2019). Scaffolding self-regulated learning through student-generated quizzes. *Active Learning in Higher Education*, *20*(2), 115−126. https://doi.org/10.1177/146978741773561

Kahn, P. E. (2014). Theorising student engagement in higher education. *British Educational Research Journal*, *40*(6), 1005−1018. https://doi.org/10.1002/berj.3121

Kirschner, P. & De Bruyckere, P. (2017). The myths of the digital native and the multitasker. *Teaching and Teacher Education*, 67, 135-142. https://doi.org/10.1016/j.tate.2017.06.001

Law, K. M., Geng, S., & Li, T. (2019). Student enrolment, motivation and learning performance in a blended learning environment: The mediating effects of social, teaching, and cognitive presence. *Computers & Education*, *136*, 1-12. https://doi.org/10.1016/j.compedu.2019.02.021

Morris, S. L. (2015). Care: Whole teachers and whole students in writing classrooms. *Delta Kappa Gamma Bulletin, 82*(1), 42.

Pavelea, A. M., & Moldovan, O. (2020). Why some fail and others succeed? Explaining the academic performance of PA undergraduate students. *NISPAcee Journal of Public Administration and Policy, 13*(1), 109-133. http://dx.doi.org/10.2139/ssrn.3555766

Porteous, D. J., & Machin, A. (2018). The lived experience of first year undergraduate student nurses: A hermeneutic phenomenological study. *Nurse Education Today*, *60*, 56−61. https://doi.org/10.1016/j.nedt.2017.09.017

Shea, P., Hayes, S., Smith, S. U., Vickers, J., Bidjerano, T., Pickett, A. & Jian, S. (2012). Learning presence: Additional research on a new conceptual element within the Community of Inquiry (CoI) framework. *The Internet and Higher Education*, *15*(2), 89-95. https://doi.org/10.1016/j.iheduc.2011.08.002

Thibodeaux, J., Deutsch, A., Kitsantas, A., & Winsler, A. (2017). First-year college students' time use: Relations with self-regulation and GPA. *Journal of Advanced Academics*, *28*(1), 5−27. https://doi.org/10.1177/1932202X1667686

Van Zyl, A., Gravett, S., & De Bruin, G. P. (2012). To what extent do pre-entry attributes predict first year student academic performance in the South African context? *South African Journal of Higher Education*, *26*(5), 1095-1111. https://doi.org/10.20853/26-5-210

Wangi, N. B. S., Nashrullah, M. H., & Wajdi, M. B. N. (2018). Digital era's education and application in Higher Education. *EDUTEC: Journal of Education and Technology*, *1*(2), 119−128. http://ejournal.ijshs.org/index.php/edu/article/view/39

Witthaus, G. (2018). Findings from a case study on refugees using MOOCs to (re) enter Higher Education. *Open Praxis*, *10*(4), 343-357. https://www.learntechlib.org/p/207184/.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice*, *41*(2), 64-70. https://doi.org/10.1207/s15430421tip4102_2

Please cite this article as:

Morris-Eyton, H., & Pretorius, E. (2023). Cultivating a digital promise: Promoting reflective and reflexive activities to enhance self-directed learning for the 21st century. A practice report. *Student Success*, *14*(1), 89-100. https://doi.org/10.5204/ssj.2659

This practice report has been accepted for publication in *Student Success.* Please see the Editorial Policies under the 'About' section of the Journal website for further information

Student Success: ***A journal exploring the experiences of students in tertiary education.***