ASCILITE 2023

People, Partnerships and Pedagogies

Mentoring as complementary support for learner engagement: Student perspectives on onboarding interventions

Lalitha Jonnavithula¹ and John Y. H. Bai²

¹Open Polytechnic Te Pūkenga, ²Carl von Ossietzky University of Oldenburg

Student engagement is linked to student success and shaped by the availability of student support through their academic journeys. Improving engagement with adequate support strategies is a continuous challenge for open and distance learning (ODL) institutions. However, there is limited understanding of how student engagement experience can be influenced by a support team outside the instructional context of faculty presence. In 2020, the Open Polytechnic (OP) Te Pūkenga, a specialist provider of open distance education in New Zealand, implemented a three-tiered framework for student support. This system includes technology-supported mentoring interventions that are aligned to, and separate from, academic faculty support; the mentoring system gives students access to consistent engagement opportunities during their course journeys. The current project examines how students perceived these mentoring interventions, and this paper specifically examines the perceptions of newly enrolled online students on their experiences of the mentoring interventions during onboarding. Students in two introductory level block courses participated in an online, qualitative survey and their responses were thematically analysed following a deductive approach. Key themes in the data were related to the concepts of transactional presence and emotional engagement. These findings demonstrate the value of complementary non-academic support during student onboarding.

Keywords: online student, intervention, support, mentor, student onboarding, student engagement

Introduction

Student success does not arise by chance. It is the result of an intentional, structured, and proactive set of strategies that are coherent and systematic in nature and carefully aligned to the same goal (Tinto, 2009, p. 10).

Open and distance learning (ODL) institutions often implement flexible learner-centric approaches to facilitate a diverse range of learners to balance their studies with other commitments (Seelig et al., 2019). Especially for many part-time and adult learners, ODL offers a convenient and flexible education model that enriches students' independent-learning experiences by placing them at the centre (Fredricks & McColskey, 2012). However, ODL can impose additional demands on students to be self-directed, motivated, and independent learners (Fotiadou et al., 2017; Simpson, 2008). While some students can manage on their own, others may find it difficult and need support alongside their study journeys. The wide range of different needs may suggest that the students' study background determines student persistence or dropout; however, the ODL literature (e.g., Delnoij et al., 2020; Rotar, 2022) has identified several individual, environmental, and institutional barriers for online students' commitment to their studies. Indeed, as Woodley (2004) stated "dropout rate is likely to be determined by both the nature of the student intake and the characteristics of the host course/institution" (p. 53). Furthermore, while Simpson (2004) noted that "some dropout is beyond the power of any institution to influence" (p. 81), an institution's proactive, timely, and supportive actions can assist those who would otherwise dropout (Simpson, 2013). There is a large literature on learner support and several ways in which learner support can be understood and practised. (e.g., Crawley & Fetzner, 2013; Hutton & Robson, 2019; Ludwig-hardman & Dunlap, 2003; Maijo, 2018; Nichols, 2010). Shin (2003) provides a useful way of thinking about learner support as a means to enhance "Transactional Presence", defined as "the degree to which a distance student perceives the availability of, and connectedness with, people in his/her educational setting" (p. 71). Shin argued that learning outcomes improve when students know that support services are available and when they feel more connected with others in the learning environment (i.e., teachers, student peers, and the institution itself). Another useful perspective on learner support is provided by Simpson's (2015) distance student model, which suggests that learner support can take two forms: academic (e.g., developing the intellectual ability and learning skills) and non-academic (e.g., dealing with time management and emotional challenges). While much research has been done on academic support, the present paper focuses on non-academic support at the Open Polytechnic (OP) Te

Pūkenga, a specialist provider of ODL.

Karp (2011) defined non-academic support "as services, interventions, and informal activities that help students address the social, cultural, and otherwise implicit demands of college" (p. 3). The importance of non-academic support is highlighted by research in the behavioural sciences that suggest success depends critically on many aspects other than the learner's cognitive (i.e., academic) ability (Duckworth & Yeager, 2015). Indeed, in her review of factors influencing adult learners' experiences in tertiary education, Rotar (2020) concluded that students expect institutions to be involved in both the social and academic dimensions of their learning. Findings like this challenge the assumptions underlying the 'independent learner' concept in ODL and highlight the importance of taking a holistic approach to student support, which incorporates complementary, non-academic support strategies.

Non-academic support can also be understood using the concept of engagement, which allows for a wide range of social and cognitive interventions, inside and outside the instructional context, and at various points of the student's journey. Bond and Bergdahl (2023) note that engagement is a meta-construct that unifies different literatures and that can provide a richer picture of how students think, act, and feel. For example, interventions that emphasise human connections are psychological and can be effective in influencing student engagement when used within the context of existing structures (Yeager & Walton, 2011). Fredricks et al. (2004) discuss engagement as a multifaceted concept that encompasses a range of interrelated behavioural, social, emotional, and cognitive factors; they note that emotional engagement likely leads to increases in behavioural and cognitive engagement, both of which affect subsequent achievement. While much research exists on the beneficial outcomes of the connection between faculty and students in the instructional context, there is a limited understanding of how students experience institutional support outside of the instructional context (Lemoine et al., 2019; Sánchez-Elvira Paniagua & Ormond, 2018). Therefore, more research is needed to understand how complementary support interventions can influence students' course engagement at various points of their student journeys.

Student mentoring programs are a form of support that aims to strengthen student engagement and relationship building in the educational context (Nora & Crisp, 2007). Research shows that implementing a mentoring system as an intervention strategy conveys the implicit message to learners that they are valued (Maharaj et al., 2021) and that someone on the other end is paying attention (Martin & Bolliger, 2018). Therefore, to assess the effectiveness of mentoring interventions, it is important to understand how the implemented support strategies influence the experience of students and what they perceive to be effective, or high-quality support. The present study explores the insights that student perceptions reveal about a complementary, technology-supported mentoring intervention system offered at the Open Polytechnic (OP) Te Pūkenga. The following section describes the context and the study.

Context

The Open Polytechnic (OP) Te Pūkenga offers various fully online programs and courses to over 35,000 students ranging from foundation through certificates and diplomas to degree level. Many of its students are adults (86%), aged 25 years or over, study part-time (88%), and are in employment (77%; Open Polytechnic Annual Report, 2021). As part of its ongoing commitment to ensure student success, OP has taken a holistic approach to student support by implementing a technology-supported, three-tiered model of Learner Engagement and Success Services (LESS) in 2020. Underpinned by the institution's professional practice standards, the design and development of LESS are informed by prior research on student engagement, including Tinto's theory (2009) of early intervention and Simpson's (2013) proactive approach to supporting students. Together, the three tiers of support address self-help, 24/7 support resources and services (Tier-1); targeted "just-in-time" personal intervention (Tier-2); and long term, individual mentoring services (Tier-3). The current qualitative study is situated within the Tier-2 context of the LESS framework.

The student support at Tier-2 is a complementary mentoring system that operates outside of iQualify, the OP's in-house Learning Management System. At the time of conducting this research, the mentoring system is based upon five Success Criteria (SC) and assumes that exceptions to the SCs (e.g., deviations or distractions) can occur because of temporary problems that can be resolved via timely interventions. Thus, the five SCs serve as the basis for automated identification of learners that may benefit from mentor engagement (e.g., onboarding, course progress, assignment due date reminders). Each intervention involves sending a personalised email to their preferred email address inviting students to make a booking with a mentor using an attached calendar link.

This is then followed by sending a text message as an alert to their phone. This exception-based learner engagement allows a designated mentor team to intervene for both general and targeted support.

The mentoring system is aligned with the core faculty's teaching and learning support and other standard support services of the institution (e.g., technical and library support). The mentor team work across the OP portfolio of programs to provide a link between the student and the institution from when the student is enrolled to the end of the course. There are two types of mentors:

- 1. On-boarding mentors, who are responsible for calling new students to OP who have booked an appointment and also provide back-up support to the second group of in–course mentors.
- 2. In-course mentors, who are responsible for following up with students' engagement and achievement activities (e.g., students with low engagement or late assignment submission). They support students by giving advice, advocating for, or referring students to other staff within OP.

In the present project, the overall aim is to examine the perceptions and experiences of both students and the mentor staff on all SCs at Tier-2 across the span of a course. This present paper narrows the focus and examines the perceptions of newly enrolled students on how the SC-1 mentoring interventions influenced their onboarding experiences. Specifically, students new to OP receive a welcome email introducing onboarding services two weeks before and after the course start date. The email is followed by a text to their phones, both of which allow students to book a phone call with a mentor through an attached calendar link. After a phone call, students receive a follow-up email with the information discussed during the call. This intervention is designed to assist students in understanding how to navigate the resources and services in their online course.

Method

The study employed a qualitative survey to investigate the perceptions of newly enrolled students on the mentoring support during their onboarding experience. Ethics approval to conduct the study was granted by the OP's Human Research Ethics Committee.

Recruitment and participants

The study population comprised of a total of 736 students from two 20-week block entry-level courses that spanned from May to July of 2022. From the total, 375 students were newly enrolled to online study at OP, with 173 enrolled in a Real Estate course and 202 enrolled in a Business Administration course. Participation in the study was anonymous and advertised by the course lecturers on the course forums. Students were offered an option to enter a prize draw for one of ten \$50 supermarket gift cards. A total of 146 students responded to the survey, 120 of whom were newly enrolled.

Survey

The survey was hosted by Survey Monkey and open to students for six weeks (Sep-Oct, 2022). The survey comprised of four sections containing four questions with sub-questions within. The survey asked respondents to describe aspects of the interventions that were particularly helpful or not helpful for their course engagement and covered: SC-1 (for newly enrolled students' onboarding), SC-2 and SC-3 (for any students with low or no engagement throughout the course progress), and SC-5 (for assignment reminders). The present paper reports the results of the SC-1 mentoring intervention, which runs from two weeks before to two weeks after the course start date.

As the mentoring interventions were targeted to students at selected SC levels on their course journey, the survey was purposefully designed using a combination of close-ended and open-ended questions. The close-ended questions provided basic descriptive data for each intervention and the open-ended questions allowed students to provide detailed responses. An example of a pair of close-ended and open-ended questions is:

- Did you receive a welcome email from the Open Polytechnic inviting you to book a call with a student mentor? Please select: Yes | No | Don't remember | Does not apply (not a new student)
- If yes, what are your thoughts on receiving the welcome email to help you begin your online course? Describe any aspects you found helpful or unhelpful.'

The present paper presents a thematic analysis of SC-1 data from students new to online study at OP.

Data analysis

A deductive thematic analysis of the data was conducted, guided by Braun and Clarke's (2006) six-phase thematic framework for identifying codes and patterns. A deductive approach was chosen based on the objectives of the SC-1 onboarding mentoring intervention; that was to proactively reach out and connect with new students and set them up for their online study. Therefore, related literature on student support in ODL served to inform the coding and grouping of data. Data were analysed manually in Excel. Respondent answers to the open-ended questions were numbered and labelled with the course initials (e.g., #R for Real Estate and #B for Business Administration).

Results and discussion

Responses to close-ended questions

Table 1: Responses from students newly enrolled at Open Polytechnic

Course	Total survey responses	Welcome email received	e-text received	On-boarding call booked	On-boarding call not booked
Real Estate	60	47	16	18	23
Business Administration	86	73	25	28	37
Total	146	120	41	46	60

As shown in Table 1, a total of 146 students responded to the survey; of these, most (120; 82%) were new students to OP. Of the 120 new students who indicated that they received the welcome email, only 41 (34%) indicated that they received the follow-up text message and 46 (38%) booked an appointment with the onboarding mentor. This may suggest that many students were prepared for their online course or the welcome email contained sufficient information to address their needs to start the course. Overall, the numbers may be taken as indicative of the responses rather than as a measure of intervention outcome because mentor contact was optional. In addition, students also had the alternative to reach out to an in-course mentor by making an appointment or by emailing them at any time throughout their course. Once the onboarding process was complete, the mentoring intervention system would move on to the next SC, which follows up on any student who has little or no engagement after the first two weeks.

The effectiveness of support

The responses overall suggest that the mentoring intervention during onboarding was effective as an aid to orienting newly enrolled students. In particular, the welcome email and subsequent phone call with mentors were evaluated as an effective way to help students find necessary information and understand the expectations of online learning:

Sometimes it's a quicker way to get help if you need it. (34B)

It was very helpful as talking to someone over the phone made it easier and understand the expectations and where to find info etc. (68B).

Similar to other ODL contexts, OP serves a diversity of learner demographics with different needs. As new online learners, some respondents also drew attention to their lack of initial knowledge of how online learning or the New Zealand education system worked:

Yes. I appreciated the email especially as I hadn't studied for a number of years. (64B)

I really liked receiving the welcome email. I do not know the New Zealand educational system and I think it is a good start. (18B)

The quality of services that support students often shapes students' learning experience (LaPadula, 2003) and, as one of the first learner-support services they encounter, orientating new students to ODL plays an important role in enhancing their learning (Lemoine et al., 2019). While self-help services may be available 24/7 on ODL institution websites, it can be challenging for students to use them when they are new to online learning. The present data confirm previous findings that new online students may struggle with, and require support for, adjusting to the ODL environment (e.g., Stone & Springer, 2019). Specifically, a well-known challenge of ODL is the feeling of anxiety for those new to the delivery mode as they negotiate both the content and the learning experience through technology-mediated communication (Tyler-Smith, 2006). Thus, in addition to direct academic support, providers of ODL need to design complementary interventions that match student needs. In the present case, the mentoring interventions during onboarding were designed to support new online learners to navigate the online systems. In the context of ODL, respondents also linked the design of the intervention with one of the key benefits of ODL; that is, the flexibility it allows students to manage study with their other commitments (Seelig et al., 2019). An important component to the effectiveness of the mentoring intervention is its convenience, as students were free to book the phone call to suit their own schedules:

I knew exactly when it was going to happen, was able to choose time that suited me best and was able to prepare for the phone call. (67B).

In this regard, the technology, including the automated welcome email, follow-up text, and calendar link played an important role in allowing students to schedule and prepare for the phone call.

However, the responses were not unanimously positive. One respondent who booked a phone call found it to be unhelpful and redundant:

The call wasn't very helpful to be honest. The person I talked to just told me to log into the online portal and go from there. (4B)

Other respondents who did not book a phone call with a mentor noted that they did not feel a need to do so. However, rather than bringing the purpose of the mentoring intervention into question, these responses often reflected the students' confidence in finding and accessing the information by themselves:

I am competent in my learning that additional assistance is not required, only for assessing my assessment material. (22R)

Yes.it was a good idea. It was useless for me because I figured out the online course myself. (58R)

Such responses may partly explain the low (38%) uptake of students who did book a phone call. As Dzakiria (2005) highlighted, students may share broad demographic and situational similarities but each student experiences the learning situation differently. Thus, the feedback demonstrates the importance of giving students agency (Bandura, 1982, 2018) in the choice to access mentoring and other support services if and when they feel like they need it:

I didn't feel the need. I did however reach out to the library staff who helped talk me through the iQualify site - this was extremely helpful. (31R)

Indeed, the reason for the mentoring intervention is to offer complementary support, in addition to and aligned with academic support.

The availability of support

Apart from the effectiveness of the mentoring intervention, many of the responses highlighted the importance of just knowing that 'there's support if needed' (17B). These responses illustrate the importance of "availability", a key component of transactional presence (Shin, 2003). That is, the invitation to book a phone call with a mentor contributed towards making the study environment feel more supportive:

Felt comfortable to begin the course with the knowledge that I had the contact info for help if I required it (46B).

Being an online course it was nice to know that there are real people available to help. (64B)

Similarly, respondents who received a call from an onboarding mentor also expressed enthusiasm for being able to talk with another human when they needed to:

Was great to have a real person to talk to, also to know that there will be real people available to help if you need it during the course (62B)

The availability of support, and particularly support from a human mentor, was highlighted by a number of respondents; for some, it served to distinguish the feeling of studying online alone with the feeling of being supported:

Yes. It is a great way to kick off the journey. Listening to a voice and getting that email makes the distinction between only being online and still being taken care of. (46R)

Thus, for some students, the ability to connect, to talk with another human voice, and to seek help from another human, enhanced a sense of connectedness and served to reassure them that their needs would be addressed.

Emotional engagement

Many of the responses also related to the "affective dimensions of the learning environment" (Tait, 2003, p. 4). The value of the mentoring intervention as social and emotional support is made clear from the perspective of newly enrolled learners who initially felt overwhelmed. This is highlighted in:

This helped me so much as im of a older generation and i was completely out of my depth. The lady i spoke to was extremely helpful taking me step by step thru downloading ect. Definitely if your new to online learning as i was this phone call makes all the difference. (82B).

Previous ODL reviews (Lee & Choi, 2011; Rotar, 2020) have identified inadequate preparation, among other factors, as a contributor to feeling anxious or fearful, and suggested that students should be holistically supported (Jacklin & Le Riche, 2009). Indeed, emotional and psychological support can play an important role in student success (Andersen & West, 2021) and facets of students' emotional engagement has been linked with achievement-related outcomes via cognitive and behavioural engagement (Fredricks et al., 2004). Thus, it is important that ODL providers also attend to the affective experiences of students.

In addition to reflecting on their own feelings, some respondents also expressed empathy for other students in the courses:

It made me feel very welcome, that if other people struggle around the internet that they are taken care of, that it covers a wide range of people. I loved it. (72B)

This suggests that the respondent felt a sense of community or transactional presence with their peers (Shin, 2003) in the course. Such a sentiment was echoed in other reflections:

It established the feeling that I was actually now part of the course (35R).

Overall, the responses in this study suggest that the provision of a proactive, interventional mentoring system is effective in reaching out to students in a timely manner to address their informational and emotional needs in preparation for their online study:

They gives contact details, they also explain me everything about the course and how to used it before I start my course online. (7B)

It was very welcoming and informative and made me feel very supported on this journey. (70B)

This explicit acknowledgement of the mentoring intervention is noteworthy as previous case studies have found students to be "sensitive to a lack of support services but not to the presence of support services" (Nichols, 2010, p. 106). In the data from the current study, students expressed trust in getting their needs addressed 'when

needed' and reflected on how the mentoring intervention addressed their needs 'on time' and 'in time'. Thus, for many students, the availability of the onboarding mentors worked to enhance their sense of transactional presence and reduce the 'distance' between students and the institution. In addition, the data also reflected a level of emotional engagement that can be related to "a sense of belonging", which Goodenow (1993) defines as the "students' sense of being accepted, valued, included, and encouraged by others" (p. 25). Similarly, the expressions of emotion and the connection that students feel to the institution can be viewed as factors in the psychosocial process of engagement that mediates student outcomes (Kahu, 2013). Student engagement is multi-faceted and can be targeted with different forms of academic and non-academic interventions (Bowden et al, 2019; Fredricks et al., 2004). Therefore, in line with Roberts's (2018) suggestion that student support systems should comprise of a broader range of support mechanisms, OP has taken a holistic approach to student support. The design of the support system is based on OP's professional standard, and underpinned by Tinto's (2009) theory of integration and Simpson's (2013) proactive approach. In addition to teaching and other standard support services, this support system involves a designated team focused on responding to students' non-academic needs and providing a crucial link between students and the institution. While the present data reflects positively on the effects of this non-academic support on the affective dimension of student engagement, this form of mentoring should not be interpreted as a 'silver bullet' for student engagement in ODL. As Yeager and Walton (2011) note, "psychological interventions operate within the context of existing structures to make them more effective [... and] change students' mind-sets to help them take greater advantage of available learning opportunities" (p. 274). In the present study, data collection took place during the courses and within the context of OP's holistic support system. Therefore, although this paper focuses on only student perceptions of mentoring interventions during onboarding, it is possible that its positive reception also reflects, in part, students' experiences with other forms of support. Lastly, it is also possible that the data reflect some selfselection bias as students were not randomly sampled.

Conclusion

This paper sought to gain insights on how newly enrolled students perceived the onboarding mentoring support at OP and is one part of a larger project to study the experiences of both students and mentoring staff. The descriptive data indicate differences in students' level of engagement with the mentoring support, as around 50% of students did not book a call but indicated they did not need help at that point. However, the qualitative data show student responses were overall positive towards the welcome email, the phone call, and the interactions with the onboarding mentor. A deductive thematic analysis showed that respondents felt the intervention provided effective support. Furthermore, knowing that there was a human available to assist helped students feel more present and engaged in their learning. This study gives a snapshot of SC interventional mentoring support at Tier-2 of OP's LESS model of student support. Further research will explore the effectiveness of the remaining SCs (2, 3, and 5) to examine student perceptions of the mentoring interventions throughout the course and provide a comprehensive view of the mentoring system.

References

- Andersen, C. L., & West, R. E. (2021). "We Overwhelm Them with Hope": How Online Mentors Can Support Online Learners. *Online Learning*, 25(4), 388-415. https://doi.org/10.24059/olj.v25i4.2440
- Bandura, A. (1982). Self-Efficacy Mechanism in Human Agency. *American Psychologist*, *37*(2), 122–147. https://doi.org/10.1037/0003-066x.37.2.122
- Bandura, A. (2018). Toward a Psychology of Human Agency: Pathways and Reflections. *Perspectives on Psychological Science*, *13*(2), 130-136. https://doi.org/10.1177/1745691617699280
- Bond, M., & Bergdahl, N. (2023). Student Engagement in Open, Distance, and Digital Education. In *Handbook of Open, Distance and Digital Education* (pp. 1309–1324). https://doi.org/10.1007/978-981-19-2080-6 79
- Bowden, J. L.-H., Tickle, L., & Naumann, K. (2019). The four pillars of tertiary student engagement and success: A holistic measurement approach. *Studies in Higher Education*, 46(2), 1207-1224. https://doi.org/10.1080/03075079.2019.1672647
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp0630a
- Crawley, A., & Fetzner, M. (2013). Providing Service Innovations to Students inside and outside of the Online Classroom: Focusing on Student Success. *Journal of Asynchronous Learning Networks*, 17(1), 7-12. https://doi.org/10.24059/olj.v17i1.322

- Duckworth, A. L., & Yeager, D. S. (2015). Measurement Matters: Assessing Personal Qualities Other Than Cognitive Ability for Educational Purposes. *Educational Researcher*, 44(4), 237–251. https://doi.org/10.3102/0013189X15584327
- Delnoij, L. E. C., Dirkx, K. J. H., Janssen, J. P. W., & Martens, R. L. (2020). Predicting and resolving non-completion in higher (online) education A literature review. *Educational Research Review*, 29, 100313. https://doi.org/10.1016/j.edurev.2020.100313
- Dzakiria, H. (2005). The Role of Learning Support in Open & Distance Learning: Learners' Experiences and perspectives. *Turkish Online Journal of Distance Education*, 6(2), 95-109.
- Fotiadou, A., Angelaki, C., & Mavroidis, I. (2017). Learner Autonomy as a Factor of the Learning Process in Distance Education. *European Journal of Open, Distance and E-Learning*, 20(1), 95--110. https://doi.org/10.1515/eurodl-2017-0006
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*, 74(1), 59-109. https://doi.org/10.3102/00346543074001059
- Fredricks, J. A., & McColskey, W. (2012). The Measurement of Student Engagement: A Comparative Analysis of Various Methods and Student Self-report Instruments. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of Research on Student Engagement* (pp. 763–782). Springer US. https://doi.org/10.1007/978-1-4614-2018-7 37
- Goodenow, C. (1993). Classroom Belonging among Early Adolescent Students: Relationships to Motivation and Achievement. *The Journal of Early Adolescence*, *13*(1), 21–43. https://doi.org/10.1177/0272431693013001002
- Hutton, C., & Robson, J. (2019). Breaking barriers, building community: Improving student engagement with preparation for studying online multidisciplinary science by distance learning a case study. *New Directions in the Teaching of Physical Sciences*, 14(1). https://doi.org/10.29311/ndtps.v0i14.3217
- Jacklin, A., & Le Riche, P. (2009). Reconceptualising student support: From 'support' to 'supportive.' *Studies in Higher Education*, 34(7), 735-749. https://doi.org/10.1080/03075070802666807
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, *38*(5), 758-773. https://doi.org/10.1080/03075079.2011.598505
- Karp, M. M. (2011). Toward a New Understanding of Non-Academic Student Support: Four Mechanisms Encouraging Positive Student Outcomes in the Community College. CCRC Working Paper No. 28. Assessment of Evidence Series. In Community College Research Center, Columbia University. Community College Research Center. https://eric.ed.gov/?id=ED516148
- LaPadula, M. (2003). A Comprehensive Look at Online Student Support Services for Distance Learners. American Journal of Distance Education, 17(2), 119-128. https://doi.org/10.1207/S15389286AJDE1702 4
- Lee, Y., & Choi, J. (2011). A review of online course dropout research: Implications for practice and future research. *Education Technology Research Development*, *59*, 593–618. https://doi.org/10.1007/s11423-010-9177-y
- Lemoine, P. A., Sheeks, G., Waller, R. E., & Richardson, M. D. (2019). Retention of Online Learners: The Importance of Support Services. *International Journal of Technology-Enabled Student Support Services* (IJTESSS), 9(2), 28-38. https://doi.org/10.4018/IJTESSS.2019070103
- Ludwig-hardman, S., & Dunlap, J. C. (2003). Learner Support Services for Online Students: Scaffolding for success. *The International Review of Research in Open and Distributed Learning*, 4(1), 1-5Article 1. https://doi.org/10.19173/irrodl.v4i1.131
- Maijo, S. (2018). Learner Support Services as a Factor of Students' Performance in Open and Distance Learning Centres at Institute of Adult Education. *International Journal of Science and Research (IJSR)*, 1548–1553.
- Maharaj, C., Blair, E., & Burns, M. (2021). Reviewing the effect of student mentoring on the academic performance of undergraduate students identified as 'at risk.' *Journal of Learning Development in Higher Education*, 20, 1-24. https://doi.org/10.47408/jldhe.vi20.605
- Martin, F., & Bolliger, D. U. (2018). Engagement Matters: Student Perceptions on the Importance of Engagement Strategies in the Online Learning Environment. *Online Learning*, 22(1), 205-222. https://doi.org/10.24059/olj.v22i1.1092
- Nichols, M. (2010). Student perceptions of support services and the influence of targeted interventions on retention in distance education. *Distance Education*, *31*(1), 93-113. https://doi.org/10.1080/01587911003725048
- Nora, A., & Crisp, G. (2007). Mentoring Students: Conceptualizing and Validating the Multi-Dimensions of a Support System. *Journal of College Student Retention: Research, Theory & Practice*, 9(3), 337-356. https://doi.org/10.2190/CS.9.3.e

- Open Polytechnic–Kuratini Tuwhera. (2021). *Pūrongo-ā-tau–Annual report*. https://www.openpolytechnic.ac.nz/assets/Uploads/OP-AnnualReport-2021-FINAL-compressed.pdf
- Roberts, J. (2018). Professional staff contributions to student retention and success in higher education. *Journal of Higher Education Policy and Management*, 40(2), 140-153. https://doi.org/10.1080/1360080X.2018.1428409
- Rotar, O. (2020). A missing element of online higher education students' attrition, retention and success: An analysis through a systematic literature review [Working Paper No. 3].
- Rotar, O. (2022). Online student support: A framework for embedding support interventions into the online learning cycle. *Research and Practice in Technology Enhanced Learning*, *17*(1), 1-23. https://doi.org/10.1186/s41039-021-00178-4
- Sánchez-Elvira Paniagua, Á., & Ormond, S. (2018). Developing Student Support for Open and Distance Learning: The EMPOWER Project. *Journal of Interactive Media in Education*, 1(9), 1–10. https://doi.org/10.5334/jime.470
- Seelig, C., Cadwallader, A., & Standring, D. (2019). Transformational Change in Delivery at Open Polytechnic, New Zealand. *Journal of Learning for Development*, 6(1), 37-48. https://doi.org/10.56059/jl4d.v6i1.328
- Shin, N. (2003). Transactional Presence as a Critical Predictor of Success in Distance Learning. *Distance Education*, 24(1), 69-86. https://doi.org/10.1080/01587910303048
- Simpson, O. (2004). The impact on retention of interventions to support distance learning students. *Open Learning: The Journal of Open, Distance and e-Learning*, 19(1), 79-95. https://doi.org/10.1080/0268051042000177863
- Simpson, O. (2008). Motivating learners in open and distance learning: Do we need a new theory of learner support? *Open Learning: The Journal of Open, Distance and e-Learning*, 23(3), 159-170. https://doi.org/10.1080/02680510802419979
- Simpson, O. (2013). Student Support in Online and Distance Education- Definitions and Practices. In Supporting Students for Success in Online and Distance Education (3rd ed.). Routledge. https://doi.org/10.4324/9780203095737-17 https://doi.org/10.4324/9780203095737-12
- Simpson, O. (2015). Student support services for success in open and distance learning. *CEMCA EdTech Notes*. https://empower.eadtu.eu/images/fields-of-expertise/StudentSupport/Student_Support_Services_for_Success_in_OED_SIMPSON.pdf
- Stone, C., & Springer, M. (2019). Interactivity, connectedness and 'teacher-presence': Engaging and retaining students online. *Australian Journal of Adult Learning*, 59(2), 146-169.
- Tait, A. (2003). Guest Editorial—Reflections on Student Support in Open and Distance Learning. The International Review of Research in Open and Distributed Learning, 4(1), 1-9. <u>https://doi.org/10.19173/irrodl.v4i1.134</u>
- Tinto, V. (2009, February). *Taking Student Retention Seriously: Rethinking the First Year of University*. http://www.yorku.ca/retentn/rdata/Takingretentionseriously.pdf
- Tinto, V. (2010). From Theory to Action: Exploring the Institutional Conditions for Student Retention. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (Vol. 25, pp. 51–89). Springer Netherlands. https://doi.org/10.1007/978-90-481-8598-6 2
- Tyler-Smith, K. (2006). Early Attrition among First Time eLearners: A Review of Factors that Contribute to Drop-out, Withdrawal and Non-completion Rates of Adult Learners undertaking eLearning Programmes. *Journal of Online Learning and Teaching*, 2(2), 73-85.
- Yeager, D., & Walton, G. (2011). Social-Psychological Interventions in Education: They're Not Magic. *Review of Educational Research*, 81, 267–301. https://doi.org/10.3102/0034654311405999
- Woodley, A. (2004). Conceptualizing student dropout in part-time distance education: Pathologizing the normal? *Open Learning: The Journal of Open, Distance and e-Learning, 19*(1), 47–63. https://doi.org/10.1080/0268051042000177845

Jonnavithula, L. & Bai, J. Y. H.. (2023). Mentoring as complementary support for learner engagement: Student perspectives on onboarding interventions. In T. Cochrane, V. Narayan, C. Brown, K. MacCallum, E. Bone, C. Deneen, R. Vanderburg, & B. Hurren (Eds.), *People, partnerships and pedagogies*. Proceedings ASCILITE 2023. Christchurch (pp. 148 - 156). https://doi.org/10.14742/apubs.2023.668

Note: All published papers are refereed, having undergone a double-blind peer-review process. The author(s) assign a Creative Commons by attribution licence enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.