

Identity and Role Challenges for Academic Teams Engaging with a First-Year Transition Program

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Abstract

The Commencing Student Success Project (CSSP) was initiated in July 2020 to address on-going issues relating to the experiences of commencing students. The quality of the transition experience into higher education studies is associated with student retention and attrition. The project aimed to develop and enact a set of principles focused on the teaching academic: student relationship, that would positively enhance the student experience, and improve student retention in their first year of study. This article examines academics' perceptions of the benefits of involvement in the CSSP project, and identifies challenges they experienced relating to changes in their role as a Unit Coordinator (UC) of a commencing unit. A number of strategies on how to efficaciously train and support academics who may be involved in such a project are proposed.

Keywords

Higher Education, Student Retention, Student Attrition, First Year Experience

1. Introduction

Many regional Australian universities are challenged by high attrition rates, particularly in the first year of study (Naylor, Chi, & Arkoudis, 2018; Seidel & Kutieleh, 2017). An examination of first-year units in the School of Education (SoE) at the University of New England, a regional university in Australia, between 2016 to 2020 identified early withdrawal in first-year units ranged between 5.2% to 41.1%. 'Early withdrawal' is defined as students that withdraw from a unit before the

official census date—this entitles them to withdraw without incurring any financial penalty. Units of study can be offered across all three trimesters, and higher attrition levels in T3 are most likely due to the festive season holidays and January typically taken as annual leave. A high proportion of first-year students in the SoE exhibit demographic factors that are considered to place them at a high risk of attrition (Naylor et al., 2018; Stone & O’Shea, 2013), with approximately 94% of students studying online with an average age at commencement of 32+ years. This demographic situation implies that many students had concurrent family and work commitments competing with their higher education study engagement, resulting in the decision to study part-time.

Previous attempts to address first-year attrition at UNE had led to two key conclusions by the university’s management team. The first conclusion was that many of the demographic factors associated with a high risk of attrition e.g. mature age, studying by distance and part-time, work and family commitments, and indigeneity, were demonstrated by a high proportion of the student cohort, indicated that using these as a basis for targeted intervention was not appropriate (Cherastidtham & Norton, 2018). The university team recognised that it was beyond the capacity of the institution to directly address these factors successfully, because many of them related to social conditions such as Socio-Economic Status, health concerns or geographical location, beyond the reach of the University and the SoE.

The second conclusion recognised that despite the university already investing substantial funds and personnel for many years into its student support processes outside the course units, and therefore outside the interface where teaching and learning took place (Kift, 2015), limited success in reducing early attrition statistics had been achieved. In an attempt to address early attrition in first-year units, the CSSP commenced in June 2020. Consequently, the focus of the CSSP was to develop a signature pedagogical approach that could be used in first-year units to foster enhanced engagement between teaching staff and students, and to create a high level of support for students within their course units as they transitioned into higher education study. This article reports on the initial training of Unit Coordinators (UCs) involved in the CSSP, their involvement in the development of the signature pedagogy and the benefits and challenges they described in relation to their role as an academic in coordinating first year units.

2. Background

Kift (2015) argued that “it is now 10 years since the term transition pedagogy (TP) entered the first-year lexicon” and that “enormous gains have been made in how we theorise and impact our students’ experiences of their determinative first year in higher education” (p. 51). Kift (2015: p. 51) defines a ‘Transition Pedagogy’ by three distinctive features: “i) a foundational and intentional curriculum; ii) a whole-of-institution and whole of-student approach that emphasizes support and a sense of belonging; and iii) collaborative relationships between academic and professional staff in cross-institutional partnerships”.

However, while it may be the case that enormous gains have been made to positively impact students' first-year experiences, despite attempts to address the issue, commencing student attrition has been relatively stable in many institutions over the past decade, and shows a trend of increasing attrition rates especially in recent COVID times (Kift, 2015; Naylor et al., 2018). The lack of impact on attrition levels is evidenced at UNE in more recent statistics.

At UNE, students who withdraw from a unit prior to the university census date, typically at the end of week 5 of a trimester, do not appear in university statistics. Those who withdraw from a unit after the census date, but before the end of the unit, are awarded a grade of 'W—Withdrawn' or 'WN—Withdrawn Fail'. The percentage of early withdrawal from all units delivered by the SoE for the period from 2016 to 2020 ranged from 14.73% to 21.99%. These statistics do not include withdrawals prior to the census date and are for all year levels and would therefore, be expected to be higher for first-year units (Baik et al., 2015; Cherastidtham & Norton, 2018; Harvey et al., 2016). As such, early student withdrawal from commencing units is a substantial problem.

Stone and Springer (2019) support the view that more students are opting to study off campus, made even more common due to responses to the COVID pandemic. The support students require should be provided within the delivery of their academic units. They argue that there is a "crucial role of the online teacher or tutor in enhancing online student engagement" (p. 152) and that "teacher-presence, combined with engaging, inclusive and interactive design, content and delivery" (p. 146) is described by students as being a key to supporting their engagement. Farr-Wharton, et al. (2017) also demonstrated first and second year students' levels of engagement and course satisfaction were fully mediated by the relationship between the lecturer and student, when demographic and socio-economic factors were controlled.

The initial transition period into university has been identified as a time of high challenge and often associated with students' decisions to attrit (Grebennikov & Shah, 2012; Naylor et al., 2018), particularly for non-traditional students (Whannell & Whannell, 2013). This period of challenge together with the view of in-unit support and the importance of the academic: student relationship, contrasts somewhat with the institutional approach taken over many years in an attempt to reduce attrition. The institution maintains a separate organisational unit, Learning and Teaching Transformation (LaTT), which is a resource rich team of professional staff supported by a number of academic specialists. Following enrolment, students are supported through an online, and for those living locally, on-campus orientation process, delivered by LaTT to the point where they commence their study in up to four units. The support is there for students to access throughout the year if needed. In 2020, all new students at the institution were automatically enrolled in a new online orientation unit delivered by the LaTT team. The unit includes content that is applicable to all students at the institution with a focus on student support options outside the academic units, university and UNE

essentials, IT and technology, and a comprehensive introduction to UNE's learning management system, Moodle. Following completion of the orientation process that is expected to. Last no longer than one week prior to beginning formal study, students enter their academic units delivered by academic staff in the Faculties who tend to have very limited, if any, prior engagement with either the students in their units or the LaTT personnel involved in the students' orientation process. This lack of engagement between academic staff and students often continues well into the transition of commencement units, resulting in an ongoing disconnection of support during this important transitional time.

2.1. The Commencing Student Success Project (CSSP)

The CSSP was conceived to address the continuing high attrition rate by focusing on the interface between students and the academic teaching and learning environment. An Ethics research number was received to protect the identity of the Unit Coordinators, for the data collection and dissemination of findings. The paradigm of thought underpinning the CSSP was that student retention, attrition and outcomes were not the result of external, objective, student-relevant forces over which academics had no control e.g. financial issues, family challenges, but could be directly influenced by the development of high-quality teaching academic-student relationships, and pedagogy-related actions of academics that supported student success. A two-stage process was used to develop the signature pedagogy for the CSSP. Seven academics who were the coordinators of commencing units in education volunteered to be involved in the project during the initial development of the signature pedagogy and its trialing. The project commenced with these staff engaging with a number of online resources followed by an asynchronous Zoom training session delivered by the project leaders. Following the training period, the academics collaboratively developed the signature pedagogy comprising central concepts and evidence-based practices, that would be implemented across first-year units commencing with a pilot in T3, 2020, and full implementation in T1, 2021. The key principles of the signature pedagogy will be reported elsewhere.

2.2. Intervention Training

The half day intervention training was intended to provide the CSSP participants with a common theoretical understanding, allowing them a common basis for interpreting their experiences and a common language for communication. Additionally, the project provided a collegial safe space for UCs to work with each other and share ideas. The focus of the CSSP was on enhancing engagement between academics and students, and to substantially increase the visibility and 'presence' of academics in their units.

Identity theory (Stryker & Burke, 2000; Whannell & Whannell, 2015) was presented as a means of understanding the student experience in transitioning into university, but also as a way for academics to understand their own transition experience arising from their involvement in the project. The theory provided a

scaffold for academics to understand the basis for their actions and involvement as an academic and Unit Coordinator, and how this may help or hinder the building of an effective relationship with their students. The identity model used has previously been used to model identity development in transitions within a higher education context (Bolton, 2016; Fraser, Beswick, Penson, Seen, & Whannell, 2019; Whannell & Whannell, 2015) and is shown in **Figure 1** below.

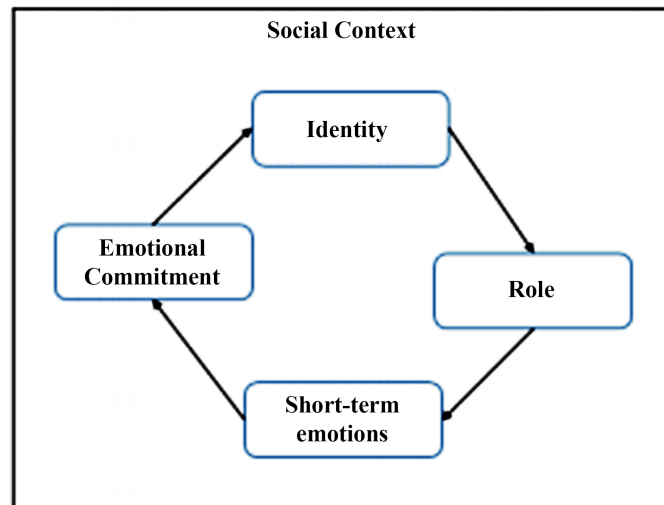


Figure 1. Model of the relationship between identity, role, and emotions (Fraser et al., 2019: p. 71).

It was expected that involvement in the project might give rise to challenges for academic staff, as they generally already have a well-developed sense of academic identity and role developed over many years: initially as a student, and then as an academic and educator (Stryker & Burke, 2000). One characteristic that was considered relevant to the CSSP was that identity and associated role change are often associated with varying degrees of angst and emotion. Burke (2006) argues that “insofar as an identity cannot change the situation... it adapts slowly, gaining control where it can, and adapting where it must” (p. 93). It was expected that any changes in identity and role in respect of the nature of how academics worked to directly support students and develop relationships with them, would perhaps introduce identity challenges. Stryker and Burke (2000) argue that the emotions involved in the process of identity change are “due in part to the relationship between perceived self-meanings in the situation and the self-definitional meanings in the situation and the self-definitional meanings held in the identity standard” (p. 288). Cast and Welch (2015) propose that the emotions involved in identity change also act to promote identity change. Thus, one focus for the project, particularly in relation to preparing for the roll-out of the CSSP university-wide, was to understand what changes in identity and role were experienced by academics, the extent of the emotions generated as a result, and how these experiences might be appropriately managed during the training and implementation of the signature pedagogy involved.

The next two foci of the training were to provide participants with an idea for them to self-reflect and potentially understand how their attitudes and beliefs in their role as a UC may be understood when communicating with students. A second focus of the training addressed Attribution theory (Kelley & Michaela, 1980). This focused on how student success or failure was interpreted by UCs, and how the causes of and control over these events were attributed. The focus was to promote the association of student success with Unit Coordinators' personal efforts and the nature of the educational experience students created within their units. This was also considered to be a potential source of challenge to academics, as adopting this view of causality attribution meant that the outcomes achieved within a unit were attributable to the teaching staff, particularly the Unit Coordinator, and not to factors external to the institution. Ultimately, the UC became the focus to explain the levels of success their students experienced in their units.

The third focus for training was the use of Transactional Distance theory (Moore, 1993) as a means of understanding the appropriateness of what level academics presented and pitched their unit information, to how effectively students were able to grasp and access this information. The signature pedagogy developed was examined through a lens of how the pedagogy and related actions of academics, influenced the transactional distance between student understanding and academic presumption of their ability.

The three theories of student learning were key in providing guidance for UCs to reflect on their current academic identity and professional actions as UCs, and how they currently developed relationships with their students. Shifts towards more student-centered pedagogies in UC thoughts and actions were captured in surveys where they reflected upon their current units and actions and identified differences in the ways they could respond to student queries, present more scaffolded instructions for students to follow, and bring a more facilitative rather than gatekeeping approach when dealing with students.

3. Research Methodology

The research questions that guided the CSSP project were:

- How did involvement in the CSSP influence first-year unit coordinators' perceptions of their academic identity and associated role?
- What identity and role challenges arose for academics involved in the CSSP, and how might these challenges be appropriately managed to ensure project success?

Participants

The seven academic participants in the CSSP were chosen for the following reasons. They were unit coordinators of first trimester units, and as commencing units, these units had large student numbers e.g. 300+. Although these units included enrolments from students in later years of study, they are primarily intended for first year students. Two academics had been teaching at the university

for more than 10 years, four had been at the university for no more than 5 years, and one was new to the university. Finally, they agreed and were willing to be a part of the research. In early July 2020 and prior to the intervention training, all participants completed an initial survey using Qualtrics. Items relevant to the research questions addressed here were:

- Who do you consider is primarily responsible for responding to a request for assistance from a commencing student? Why? (Q6)
- Based on your experience as a UC, in your opinion what could UCs do to improve the experience of commencing students that would positively impact upon retention? (Q7)
- What opportunities and barriers do you see for this research project to have an impact on changing the experience of commencing students in the School of Education at UNE? (Q8)

In February 2021, five of UCs involved in the CSSP from its inception, were provided with a survey delivered using Qualtrics. The items in the survey included:

- How has involvement in the CSSP influenced your understanding of your role as a coordinator of a first-year unit in the School of Education? (Q1)
- Involvement in a project such as the CSSP can create some challenge/s for academics as they change their understanding of how they will perform their role. What challenges, if any, has involvement in the CSSP created for you as an academic?
- What aspects, if any, of your involvement in the CSSP has prompted an emotional response? Please explain why you think this has occurred.

The responses to the survey items were downloaded and a thematic analysis (Braun & Clarke, 2012) completed. Each of the participants' responses to the survey prompts were uploaded into NVivo, where the text was coded to identify common topics and/or ideas. The codes were then examined for commonality and grouped into themes that have been used to summarise and report participant experiences.

4. Findings and Discussion

Initial survey—July 2020

Seven participants described a team approach to the support services that should be available within first-year units, with one identifying the UC and one identifying the support services provided by the university. However, five of the seven participants explicitly referred to the UC as having the primary responsibility for support.

Depends... if it's about my unit then me! (UC01)

In the first instance it is the unit coordinator (UC03)

If the student is in my unit I need to make sure they understand the expectations and the Moodle environment. So primarily myself... (UC02)

If a student is enrolled in my unit, then I think I, as unit coordinator, have the

key responsibility to support this student, especially with academic requests (UC05)

UCs because it is their unit that they have typically written and are personally and professionally invested in (UC04)

Participants offered a range of potential support options to enhance student retention. Six described aspects relating to enhancing the support available to students within the units or school-based academics. One key aspect appeared to be the need for academics to know their students better.

I like the idea of having students placed into a group with an academic who sees them through their degree—like a ‘care’ group. Something the students participate in throughout their degree—an opportunity to develop strong relationships with a cohort of students and an academic (UC01)

Ensure there are support mechanisms built into the unit. Perhaps we need to gather better data on students prior to the teaching of each unit, as we do for students in schools (UC04)

Knowledge about the cohort, where they are from and be patience (sic) to their questions. Avoid pre-conceptions and assumptions about students—they should have known or learned this in school (UC03)

Encouraging contact, providing resources and guidelines for study, effective, directive and realistic feedback on assignments. Be there all the time, in their face – like a pesky Mum, wipe faces and check all is ok (UC02)

Exchange with colleagues strategies/ideas that work and try them in their units. Sharing is essential but trying is even more important (UC5)

These comments indicate that UCs reported a sense of responsibility for the support of their students within units, but still identified a need within first-year units for additional unit-based support to be provided and for academics to know their students.

When asked about the opportunities and challenges that were perceived in relation to academics’ involvement in the CSSP, four described aspects relating to aspects relating to academic identity and role and how this would reduce the capacity to be involved in the project.

I think if the project really wants to see change then it will only be the limitations of peoples’ willingness to engage with that that will impact the work. We are only limited by ourselves! (UC01)

Opportunities—Staff who want to learn and improve their learning will benefit from the findings. resistance to changes (UC05)

Buy in from academics to change their approach from being what works for me, to being what works for my students. It is not just a shift in attitudes. We need to know we will have the resources and technical support to enact changes. In many ways, academics will be “commencing students” themselves either in pedagogical shifts, attitude change or in building the technological skills to enact those changes (UC04)

Rigid UC mindsets—laziness and ‘can’t be bothered’ attitude to change, fear

that others may judge them (UC02)

The initial data collection indicated that UCs felt a sense of responsibility for supporting their commencing students and reported a need for additional data in relation to their learning needs to facilitate that support. Identity and role challenges were described at the commencement of the project.

Final survey—February 2021

Of the initial seven respondents to the first survey, five also responded to the final survey just prior to the commencement of teaching in Trimester 1, 2021. In response to the question asking UCs about their understanding of their role as a coordinator of first-year units, all respondents identified positive outcomes in terms of the learning and opportunity to collaborate with colleagues. No negative responses were made in relation to this survey item. All respondents identified specific strategies about how they would change their pedagogy to support the learning needs of first year students, particularly from the collaborative opportunities that were available.

I understand and need to accommodate students that bring variety of learning and life experiences in my unit—my scaffolds need to be supportive and accessible to accommodate all degrees of learning my students present with (UC02)

It has made me more aware of the need for consistency and evidence-based delivery of unit resources (UC01)

Involvement in the project has allowed me to consider and implement efficacious approaches for unit design in the online environment (UC05)

I must say I benefited from hearing everyone's else descriptions of the challenges they faced with first year students, and this opened my eyes to potential issues that I haven't experienced yet. Another benefit from my involvement in this project is that it offered me access to what others are doing in their units as well as their rationales for and experiences with implementing those practices. This has saved me a lot of time that I didn't have to move my teaching to the next level (UC04)

I learn more about the needs of first year students and how other colleagues addressed those needs. Listening to other UCs experience in their work and challenges is also a good way to understand my role. They helped me reflect on my work and role as a UC (UC03)

Four participants made reference to the first-year Unit Coordinator role.

My role as a UC is to facilitate learning so students can experience success and enjoy a positive learning experience (UC02)

I guess my perception of my role hasn't essentially changed (UC05)

I also like the theory-based materials provided by the project leaders. They gave me a framework to make sense of my role and how to improve my units (UC01)

Participation in the CSSP project, including the intervention training, promoted enhancement of the UCs role as a coordinator of first year units (UC04)

The final two items allowed the respondents to describe the challenges involvement in the CSSP had presented and what emotional responses occurred as a

consequence of involvement. While three respondents identified a lack of time as an issue, there were a number of comments indicating that the identity of the academics involved was involved as the source of the challenge that was being perceived, even though the respondent may not have identified this as such.

Getting my head around being a facilitator rather than a gatekeeper (UC03)

Has the process changed me? Only time will tell. Proof is in the pudding—the eating rather than the baking (UC02)

The final decision of the 14 elements was undertaken by a core group and though we had the opportunity for feedback, many felt that the elements there they were not keen on, were still included despite that feedback (UC05)

workload considerations impact how much you can/will want to engage with students... I think once evidence has been collected to support the success of this initiative, then perhaps this fear can be alleviated and trust in the project can be established (UC01)

These comments give rise to a number of precautionary considerations that managers of a project such as the CSSP should consider to ensure successful engagement by academic staff. Of particular interest, considering the participants are highly educated individuals whose training and work life involves research and evidence-based decision making, was the reference to decisions being made that were not appropriately collegial, and the need for evidence to back up the efficacy of such a project.

The emotional consequences of the perception of non-collaborative decision making were described by two participants.

Honestly—I don't like being told how to do stuff from people who have no experience—and are usually self-promoting BS artists—I don't value that type of advice—it makes me angry! (UC02)

Probably that there were elements that were dictated rather than negotiated and the impact of the amount of time it took to get the unit into the CSSP format. This cut into research time and took longer than many might have expected. It caused some stress (UC04)

One participant identified a negative emotional response based upon what was considered the rather parlous state of their unit and its, perhaps, lack of suitability for first-year students. This comment, though, identifies how important the opportunity for supported engagement in a collaborative improvement program is for staff delivering first-year units.

I'm a tad horrified at the amount of additional work required to bring up my unit to meet the 15 BE. It makes me think of how 'unscaffolded' my unit was, and the expectation I had for students to simply work things out themselves and accurately understand what my expectations of them are (UC01).

The challenges faced by academics working collaboratively have been described in the academic literature. A study by [Bush et al. \(2008\)](#) that investigated the experience of discipline education specialists employed within science faculties at the University of California reported that 95% of the specialists were considering

leaving the institution due to their education efforts not being valued or understood. [Freeth and Caniglia \(2020\)](#) argue that interdisciplinary collaboration has become a mainstream practice, but “interdisciplinary research teams encounter numerous challenges for which they may find themselves under-prepared”. They challenge the often-held assumption that academics know how to collaborate when entering such a team and argue that the challenges involved need to be taken seriously. [Bryant, Hiewolny, Clark, and Watson \(2014: p. 83\)](#) argue that these challenges also exist in teaching contexts, where “collaborative teaching experiences are emerging as teaching innovation and [while] potentially beneficial to students, they are institutionally challenging and often incongruent to the dominant culture of the research university”.

The participants in the CSSP described a range of benefits from involvement in the project, particularly in relation to their pedagogical approaches to supporting first-year students. However, identity challenges were identified for the participants. The identity model ([Whannell & Whannell, 2015](#)) describes the negative outcomes that may arise for such a project, should these identity challenges not be managed appropriately, despite the benefits to participants, school and institution. In situations where challenges to one’s academic identity and professional role occur, the short-term negative emotional responses experienced may reduce the overall emotional commitment to the project. Should this challenge continue or be exacerbated by additional different identity/role challenges, their continued genuine participation will be challenged.

Limitations

The study does present a number of limitations. Firstly, the low number of participants may not accurately predict how academic staff manage their identity and role transitions as outlined in the literature. Every tertiary institution creates its own unique culture, hence to generalize the impact of academic roles and identity, the findings may not be easily transferrable to other tertiary institutions without further validation. Institutional change that is advocated in this article will vary between institutions and will be invariably complex and unique to that institution. As this study focusses on only one institution, the reliability and validity of the findings may not be as strong as desired.

5. Conclusion

The primary conclusion presented in this article is that the leaders of a collaborative project involving academic staff, such as the CSSP, must have in place strategies to manage identity/role challenges from the commencement of the project. They also need to educate staff in this area so they can recognise the source of potentially negative emotions and attitudes as, perhaps, being from the challenge to existing identity and role structures, rather than from the project and its requirements. A final proposal is that any project that involves academics involved in unit delivery and non-academic support staff outside the unit will have even

greater identity/role challenges.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Baik, C., Naylor, R., & Arkoudis, S. (2015). *The First-Year Experience in Australian Universities: Findings from Two Decades 1994-2014*. University of Melbourne/Centre for the Study of Higher Education.
- Bolton, E. (2016). *Ideas, Concerns and Expectations—A “Whole of Institution” Approach to Navigating Transitions and Mapping the Student Journey*. <http://ubir.bolton.ac.uk/1053/1/McIntosh%2C%20Dr.%20Emily%20Ideas%20concerns%20expectations%20STARS%20CONF%202016.pdf>
- Braun, V., & Clarke, V. (2012). Thematic Analysis. In H. Cooper (Ed.), *APA Handbook of Research Methods in Psychology, Vol 2: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological* (pp. 57-71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Bryant, L., Hiewolny, K., Clark, S., & Watson, C. (2014). Complicated Spaces: Negotiating Collaborative Teaching and Interdisciplinarity in Higher Education. *Journal of Effective Teaching, 14*, 83-101.
- Burke, P. J. (2006). Identity Change. *Social Psychology Quarterly, 69*, 81-96. <https://doi.org/10.1177/019027250606900106>
- Bush, S. D., Pelaez, N. J., Rudd, J. A., Stevens, M. T., Tanner, K. D., & Williams, K. S. (2008). Science Faculty with Education Specialties. *Science, 322*, 1795-1796. <https://doi.org/10.1126/science.1162072>
- Cast, A. D., & Welch, B. K. (2015). Emotions and the Self: Depression and Identity Change. *The Sociological Quarterly, 56*, 237-266. <https://doi.org/10.1111/tsq.12085>
- Cherastidham, I., & Norton, A. (2018). *Submission on Redevelopment and Audit of the Higher Education Data Collection*. Grattan Institute.
- Farr-Wharton, B., Charles, M. B., Keast, R., Woolcott, G., & Chamberlain, D. (2017). Why Lecturers Still Matter: The Impact of Lecturer-Student Exchange on Student Engagement and Intention to Leave University Prematurely. *Higher Education, 75*, 167-185. <https://doi.org/10.1007/s10734-017-0190-5>
- Fraser, S., Beswick, K., Penson, M., Seen, A., & Whannell, R. (2019). Cross Faculty Collaboration in the Development of an Integrated Mathematics and Science Initial Teacher Education Program. *Australian Journal of Teacher Education, 44*, 68-83. <https://doi.org/10.14221/ajte.2019v44n7.5>
- Freeth, R., & Caniglia, G. (2020). Learning to Collaborate While Collaborating: Advancing Interdisciplinary Sustainability Research. *Sustainability Science, 15*, 247-261. <https://doi.org/10.1007/s11625-019-00701-z>
- Grebennikov, L., & Shah, M. (2012). Investigating Attrition Trends in Order to Improve Student Retention. *Quality Assurance in Education, 20*, 223-236. <https://doi.org/10.1108/09684881211240295>
- Harvey, A., Brett, M., Cardak, B., Sheridan, A., Stratford, J., Tootell, N., McAllister, R., & Spicer, R. (2016). *The Adaptation of Tertiary Admissions Practices to Growth and Diversity*. La Trobe University/UNE.
- Kelley, H. H., & Michela, J. L. (1980). Attribution Theory and Research. *Annual Review of*

- Psychology*, 31, 457-501. <https://doi.org/10.1146/annurev.ps.31.020180.002325>
- Kift, S. (2015). A Decade of Transition Pedagogy: A Quantum Leap in Conceptualising the First Year Experience. *HERDSA Review of Higher Education*, 2, 51-86.
- Moore, M. (1993). Theory of Transactional Distance. *Theoretical Principles of Distance Education*, 1, 22-38.
- Naylor, R., Baik, C., & Arkoudis, S. (2018). Identifying Attrition Risk Based on the First Year Experience. *Higher Education Research & Development*, 37, 328-342. <https://doi.org/10.1080/07294360.2017.1370438>
- Seidel, E., & Kutieleh, S. (2017). Using Predictive Analytics to Target and Improve First Year Student Attrition. *Australian Journal of Education*, 61, 200-218. <https://doi.org/10.1177/0004944117712310>
- Stone, C., & O'Shea, S. (2013). Time, Money, Leisure and Guilt—The Gendered Challenges of Higher Education for Mature-Age Students. *Australian Journal of Adult Learning*, 53, 95-116.
- Stone, C., & Springer, M. (2019). Interactivity, Connectedness and 'Teacher-Presence': Engaging and Retaining Students Online. *Australian Journal of Adult Learning*, 59, 146-169.
- Stryker, S., & Burke, P. J. (2000). The Past, Present, and Future of an Identity Theory. *Social Psychology Quarterly*, 63, 284-297. <https://doi.org/10.2307/2695840>
- Whannell, P., & Whannell, R. (2013). Reducing the Attrition of Tertiary Bridging Students Studying by Distance: A Practice Report. In *1st Foundation and Bridging Educators New Zealand Conference (FABENA 2012)* (pp. 26-37). The National Centre for Tertiary Teaching Excellence.
- Whannell, R., & Whannell, P. (2015). Identity Theory as a Theoretical Framework to Understand Attrition for University Students in Transition. *Student Success*, 6, 43-52. <https://doi.org/10.5204/ssj.v6i2.286>