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The influence of involvement in a widening participation outreach program on student ambassadors' retention and success

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Abstract*

This article examines university student involvement in programs aimed at widening higher education participation. Studies have demonstrated that prospective students from low-socioeconomic backgrounds benefit from interaction with tertiary role models, while university student benefits include graduate capability development. This article contributes to understanding the benefits of university student involvement in widening participation programs by exploring their influence on retention and success. This is timely as the Australian higher education sector is increasingly focused on improving student outcomes. A survey of student ambassadors, based on Kahu and Nelson's (2018) conceptual framework of 'mediating mechanisms' that influence student outcomes, indicates that the role positively influences students' retention and success. This article also increases institutional understanding of university students' perspectives and demonstrates the potential usefulness of Kahu and Nelson's framework when examining the extent to which specific initiatives influence student outcomes.

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Widening participation in Australian higher education

Following the Australian *Bradley Review of Higher Education* (Bradley, Noonan, Nugent & Scales, 2008) the Higher Education Participation and Partnership Program (HEPPP) was introduced in 2010 to improve higher education participation among people from low socio-economic (SES) backgrounds. HEPPP funding, provided to all Australian public universities, has led to an expansion in outreach programs for prospective students and retention and support programs for low SES university students. Outreach activities include on-campus visits to demystify university life, peer mentoring programs, academic skill development, and encouragement awards. Programs are also provided for specific cohorts, such as Aboriginal and Torres Strait Islanders and refugees. Retention and support activities include first year transition programs, language and learning support, and peer mentoring. Enrolled students are also frequently involved in program delivery, especially for programs targeted at school students (Gale, et al., 2010).

This article focuses on university students involved in widening participation (WP) outreach programs delivered to prospective students¹. These students are variously referred to as student mentors, student ambassadors and peer mentors. Throughout this article the term 'student ambassador' is used to refer to current university students engaged in WP programs.

Studies examining university student involvement in WP outreach programs have primarily focused on the benefits to future students. It is well recognised that student ambassadors, particularly those from equity

backgrounds, play a pivotal role in student engagement (Cupitt, Costello & Mitchell, 2015; Sanders & Higham, 2012). Student ambassadors act as aspirational role models and trusted sources of 'hot' (informal) knowledge (Gartland & Paczuska, 2007 cited in Ylonen, 2010), effectively debunking myths surrounding higher education.

Some research has also been undertaken into the benefits of involvement in WP programs for the ambassadors themselves. Studies from the United Kingdom (UK) have identified a range of benefits including the acquisition of transferable skills valued by employers (Ylonen, 2013); increased personal confidence (Copley, 2010 cited in Sanders & Higham, 2010); the satisfaction associated with doing something worthwhile (Thompson, 2010 cited in Sanders & Higham, 2010); and gaining a useful source of income (Ylonen, 2010). An Australian study (Cupitt et al., 2015) which synthesised the outcomes of student ambassador investigations at five Queensland universities (including Queensland University of Technology [QUT]) reported that the ambassadors developed skills and knowledge, increased their self-confidence, and felt more connected to the university and fellow students.

There has been little research into the role acting as an ambassador has on students' own retention and success. The few published studies focus on ambassadors who supported other students to persist and succeed. For example, peer mentors at a research-intensive UK university reported improvements in degree attainment and graduate outcomes (Andrews, Clark & Thomas, 2012). These improvements were attributed to the flow-on effect when mentors focus on improving the mentees' academic skills, self-efficacy and graduate capabilities. The current article builds on and extends existing student ambassador research

¹ Student involvement in retention and support programs and in marketing or recruitment activities aimed at promoting the specific attributes of one institution is outside the scope of this article.

by researching the potential influence the outreach student ambassador role has on their own retention and success.

Improving low SES students' retention, completion and success rates

This study is timely as the Australian higher education sector is increasingly focused on improving students' retention, completion and success rates. In fact, in 2017 the Australian Government commissioned the Higher Education Standards Panel (HESP) to examine the factors contributing to attrition and to suggest strategies universities can implement to improve student success and course completion rates.

Particular attention is focused on the retention of students from equity backgrounds as their outcomes are lower than the overall student rates (Krause & Armitage, 2014). In Australia, the completion rates after nine years for students commencing in 2005 were 69% for low SES students compared with 78% for high SES students, and 47% for Aboriginal and Torres Strait Islander students compared to 75% for non-Indigenous students (Edwards & McMillan, 2015). The HESP (2017) discussion paper also noted the relationship between attrition rates and socio-economic status. However, it concluded that student characteristics were potentially less important than attitudinal factors such as motivation and resilience.

Tinto (2017), a leading theorist in the field of the student experience, believes universities would be more successful at reducing attrition if they conceptualised retention from the student perspective. While the institutional focus is on student retention, students focus on *persistence* with their studies. Accordingly, Tinto urges universities to learn more about student views regarding the factors that encourage students to persist so that they can

address the issues more effectively. He considers it is particularly important for institutions to understand the perceptions of students from under-represented groups as these may differ from those of more privileged students.

Tinto (1993, cited in Krause & Armitage, 2014) has also noted that being able to connect in either the social or academic domain is a key retention factor. Krause and Armitage supported this view and emphasised the relational nature of student belonging, noting that feeling supported by the institution to belong can be highly influential in a decision to persist.

Student engagement as a pathway to success

There is a considerable body of literature which indicates that student engagement influences student outcomes (Trowler & Trowler, 2010). Some prominent student engagement researchers primarily focus on the academic domain. For example, Kuh and colleagues, who developed the National Survey of Student Engagement in the United States, consider student learning and the engagement between students and teachers is central to student engagement (Kuh, 2009). However, other researchers view engagement more broadly. For example, Krause and colleagues, who conducted and analysed four nation-wide Australian studies of the first-year experience of higher education (James, Krause & Jennings, 2010), link student engagement with a student's sense of belonging and advocate multi-dimensional approaches which focus on social, learning and teaching, and administrative domains.

Zepke and Leach's (2010) synthesis of the literature supported this broader approach and identified four student engagement perspectives: student motivation; engagement between teachers and students; the provision of institutional support; and active citizenship.

Zepke and Leach made ten suggestions for improving student engagement. These include enhancing students' self-belief; fostering learning relationships; ensuring institutional cultures are welcoming to students from diverse backgrounds; encouraging students to become active citizens; and encouraging students to build social and cultural capital by fostering a sense of belonging and active relationships with others.

The focus on student engagement has developed in parallel with efforts to widen participation in higher education (Krause & Armitage, 2014). A potential mismatch between non-traditional students' backgrounds and university culture may result in students feeling they do not fit in. Rather than this student deficit approach which 'blames' the student or requires them to change, equity-focused researchers consider institutional transformation is a prerequisite for genuine student engagement for success (Kift, 2009; Thomas, 2012). Researchers also suggest that it cannot be assumed that the first-year experience is the only focus area (Krause & Armitage, 2014). Ideally, efforts to foster a sense of belonging will start early and continue across the student life cycle (Thomas, 2012).

Kahu and Nelson (2018) have provided a useful conceptual framework for investigating student engagement. They argue that in order to improve student success it is necessary to understand how the various factors that impact student engagement interact. The framework focuses on the 'educational interface' where institutional and student factors align, and identifies four psychosocial constructs that influence student outcomes:

- Academic self-efficacy – students' perception of their capabilities for the task at hand;
- Emotions resulting from the student's appraisal of their situation;

- Sense of belonging – the connections students feel to the institution, discipline and people; and
- Wellbeing and its opposite - stress.

Kahu and Nelson argue that these four constructs are the 'mediating mechanisms' for engaging students, particularly those from non-traditional backgrounds, which will assist educators to develop initiatives aimed at enhancing student success and retention. They consider that the framework helps explain why some students with demographic characteristics associated with lower completion rates persist and complete their studies while other students from similar backgrounds do not. As yet, there are no published papers on the application of Kahu and Nelson's conceptual framework.

Kahu and Nelson's approach to factors influencing student outcomes was chosen as the conceptual framework for the current study because of its practical focus; its Australian context; and focus on students from non-traditional backgrounds. It was deemed more appropriate than models that focus on the first year transition (such as that developed by Lizzio, 2006) as (1) WP ambassadors are from a range of year levels; and (2) the issues students face with respect to persistence are not limited to the first year of study.

This article extends existing research by addressing three gaps in the literature. Firstly, it explores the influence participation in WP outreach programs has on student ambassadors' engagement and success. Secondly, it contributes to institutional understanding of student's (particularly low SES students') views on factors influencing persistence and success, and this will assist universities to align their approaches to these issues. Thirdly, it contributes to assessing the usefulness of Kahu and Nelson's conceptual

framework of the factors influencing student engagement and success.

Background to QUT's student ambassador program

QUT's WP outreach program engages with approximately 25,000 people annually through partnerships with approximately 50 schools in low SES areas and works with community groups and low SES adults. Activities include on-campus experience days; camps; discipline-based, hands-on, curriculum-connected workshops; community outreach; career development; and activities specifically targeted at Aboriginal and Torres Strait Islanders, Pasifika peoples, and adult learners. These activities are almost exclusively led by current QUT student ambassadors who deliver powerful personal narratives, embed career information, facilitate hands-on workshops, lead campus tours, assist school students to navigate post-school pathways, and engage in one-to-one discussions with prospective students.

There are two main ambassador cohorts. Low SES undergraduate students who attended

participating schools or are equity scholarship holders are recruited to lead the majority of activities including on-campus days and camps. These ambassadors are selected on the basis of their motives and attitudes towards the role. Academic performance is not considered as part of the recruitment process. The second cohort comprises undergraduate and graduate discipline specialists from all six faculties who facilitate the curriculum-connected activities. They are recruited on the basis of equity background and content knowledge. Efforts are made to ensure that Aboriginal and Torres Strait Islander students are well represented. The Indigenous support unit also recruits its own ambassadors and some students undertake multiple roles. Ambassador skills² and leadership development, through a combination of formal training, ongoing mentoring and support, is a key aspect of the program.

QUT has tracked WP ambassadors' outcomes for a number of years. As indicated in Table 1, there is a consistent pattern over time demonstrating that ambassadors' retention rates³ are considerably higher than the Institution's overall retention rates.

Table 1

QUT WP ambassadors' retention & success rates (expressed in percentages)

Student outcomes	2012		2013		2014		2015		2016	
	WP	All QUT	WP	All QUT	WP	All QUT	WP	All QUT	WP	All QUT
Retention	95.9	83.9	91.9	83.7	97.5	83.8	94.2	85.1	93.8	84.9
Success	90.1	88.3	89.5	87.7	89.4	87.9	92.4	88.8	94.7	88.9

² These include training in narrative/story-telling presentation skills; cultural competence; working with diversity; and career development.

³ The retention rate is the proportion of students commencing in given year who re-enrol at the institution in the following year.

While the gap between success rates⁴ is not as marked, ambassadors' rates are still consistently higher. These data are particularly noteworthy as nearly 50% of ambassadors are from low SES backgrounds.

The 2017 Student Ambassador Study, described below, set out to explore the factors influencing these retention and success rates.

Description of the Student Ambassador Study

The study involved an online survey, in October 2017, of WP student ambassadors who had worked in the role for at least ten hours. This followed two previous surveys in 2012 and 2013 which explored the students' motivations for becoming ambassadors; what they considered school students gained from interaction with ambassadors; and the benefits of the role for the ambassadors themselves, particularly in relation to graduate capabilities.

The 2017 survey was designed to address two research questions:

RQ1: Does QUT's widening participation student ambassador program contribute to ambassadors' retention and success?

RQ2: If so, what aspects of the program contribute to these positive outcomes and why?

Survey questions utilised a combination of response types including five-point Likert scales and open-ended responses regarding how and why the ambassador role had influenced students' retention and success.

The questions about retention and success were closely aligned to Kahu and Nelson's four psychosocial constructs:

- *This role has enhanced my self-belief in my ability to perform academically* [academic self-efficacy]
- *This role has enhanced my interest and enthusiasm for university* [emotions resulting from the student's appraisal of their situation]
- *Through this role I've developed a greater sense of belonging to QUT* [sense of belonging]
- *This role has given me a greater sense of fulfilment* [wellbeing]

After QUT Human Research Ethics Committee approval was obtained, the Information Sheet and survey link were distributed by the WP coordinators via email to 154 equity, discipline-based, and Indigenous unit ambassadors. Seventy-four ambassadors completed the survey; a 48% response rate.

Ambassadors' Likert scale responses were calculated and open-ended comments analysed for themes. The remainder of this article focuses on ambassadors' views of the role's effect on retention and success.

Results of student ambassador study

As evident in Table 2, ambassadors' responses to questions aligned with Kahu and Nelson's conceptual framework of factors that enhance student engagement were highly positive. This was particularly evident with respect to the role's influence on ambassadors' sense of wellbeing/fulfilment (95%), sense of belonging (92%), and interest and enthusiasm (91%). Responses which related to the role's influence on academic self-efficacy and university studies were also positive with more than three out of four respondents agreeing with these statements.

⁴ The Success Rate is EFTSL (equivalent full-time student load) of units passed as a percentage of all EFTSL of units attempted. Attempted EFTSL comprises units passed, failed and withdrawn.

Table 2

Influence of the student ambassador role on the ambassadors (expressed as a percentage of strongly agree/agree responses)

Responses relate to student engagement (Kahu & Nelson, 2018)	Percentage
Being a Student Ambassador has enhanced my self confidence	99%
This role has given me a greater sense of fulfilment	95%
Through this role I've developed a greater sense of belonging to QUT	92%
This role has enhanced my interest and enthusiasm for university	91%
This role has enhanced my self-belief in my ability to perform academically	78%
Being a student ambassador has helped with my uni studies	77%

Ambassadors were also asked to respond to a list of potential ways the role might have assisted with their studies. As indicated in Table 3 below, nearly all respondents considered that their oral presentation skills had been enhanced as a result of acting in the role, while nine out of ten considered it increased their confidence levels. Improved communication skills; more time for study; and greater sense of belonging were also attributed to the ambassador role.

Next, the survey explored the ambassador role's retention effect. Ambassadors were asked if the role had influenced them to persist and complete their studies. Fifty-eight percent considered that they were more likely to persist and complete their studies as a result of being an ambassador while 38% indicated that they would have persisted anyway.

Themes from open-ended questions

As well as Likert scale questions, the ambassadors were asked open-ended survey questions relating to interest and enthusiasm; sense of fulfilment; extent to which the ambassador role contributed to their success; and the most beneficial aspects of the

ambassador program for them personally. As Kahu and Nelson's framework is made-up of overlapping concepts (Kahu, Nelson & Picton, 2017) ambassadors' responses to the open-ended questions were analysed holistically to develop a well-rounded sense of how and why the ambassadors considered the role had influenced their retention and success. A number of themes emerged and these are outlined below. Quotes illustrating these themes are also provided to enable the reader to gain a greater understanding of student perspectives regarding how the ambassador role influenced their retention and success.

1. Greater appreciation of the opportunity to undertake university studies

Ambassadors indicated that interaction with school students facing barriers to higher education participation had given them a greater appreciation of the opportunities their studies provided, as illustrated by the quote below. For this ambassador, frequent reminders about their benefits of being a university student motivated them to make the most of the experience.

Table 3

How the ambassador role has helped with university studies (expressed as a percentage of strongly agree/agree responses)

How the role has helped with university studies	Percentage
Enhanced public speaking/oral presentation skills	96%
Increased confidence	89%
Improved communication skills e.g. ability to communicate with people from diverse backgrounds	78%
Money/flexible hours which fit around study commitments i.e. more time for study/less stress	72%
Greater sense of belonging/stronger peer & staff networks	71%

Being a student ambassador constantly reminds me of why I came to university and how much of a privilege it is to be able to study and work towards a career I'm truly passionate about. It reminds me to take advantage of every opportunity I can.

2. Increased motivation to succeed with studies

Increased motivation to succeed was linked with two further factors. Firstly, the desire to be a good *role model* to pre-tertiary students. This is illustrated in the quote below with the ambassador striving to live up to their role model status by ensuring they are a high achiever.

You have to walk the talk. You can't preach a pathway unless you yourself are following that pathway ... and not just achieving but doing well. Drives you to do better and be accountable.

Secondly, discipline-specific ambassadors reported that the school students' enthusiasm for the discipline-related activities had *reinforced their career goals* (see below). This is in keeping with research findings (Thomas, 2012; Tinto, 1987) which indicate a correlation

between having clear career goals and persistence with studies.

Part of the experience for [school] students is seeing where the science and engineering concepts examined can take them in their future. Seeing others get so excited about what the future holds in these areas feeds into and reinforces my own excitement, motivating me to pursue excellence in my own studies.

3. Enhanced sense of belonging

Ambassadors frequently noted that friendships with positive, like-minded students gave them an enhanced sense of belonging and encouraged them to persist with their studies.

Developing a supportive network with other ambassadors has been a fantastic way to develop a sense of belonging both within the context of the role and also the wider QUT environment. This is hugely beneficial and can be a deciding factor for students considering abandoning their studies.

4. Fulfilment associated with making a difference

Ambassadors reported that the sense of fulfilment they experienced in relation to

making a difference in the school students' lives motivated them to strive for their goals.

That moment of "wow" you sometimes get from school students is not only a priceless and validating experience but also a huge inspiration for me personally.

5. *Giving back to the community*

Ambassadors from low SES backgrounds who had benefitted from widening participation activities as school students commented on the satisfaction associated with 'giving back' to the communities they identified with.

As a similar program influenced me to attend university and study science, helping other people to have the same opportunity as me is fulfilling.

6. *Development of communication skills*

Many ambassadors considered the role had enabled them to develop their public speaking skills in a nurturing environment. This was linked in students' minds to increased self-confidence which many believed contributed to their success at university.

All of the public speaking helps people without much confidence in that area to gain experience in a safe environment.

The role has made me more confident in my abilities as a presenter/communicator ... this has influenced my academic success.

The ambassadors also commented that the ambassador role enhanced other aspects of their communication skills including teamwork skills, the ability to communicate complex concepts simply and clearly, and the ability to interact with people from diverse backgrounds. Many ambassadors noted that these were valuable skills which would assist them when they graduated.

Discussion of the findings

This small-scale study provides insights into three under-researched areas associated with student retention and success: (1) the potential influence of involvement in a widening participation outreach program on student ambassadors' engagement and success; (2) institutional understanding of low SES students' perspectives on factors which encourage them to persist; and (3) the usefulness of Kahu and Nelson's 'mediating mechanisms' for student engagement.

Firstly, the surveyed ambassadors held very positive views about the role's value and these views relate to factors which researchers have identified as influencing retention and success. The ambassadors believed that their sense of belonging, fulfilment, interest and enthusiasm for university and academic self-efficacy had been enhanced by the role. These findings align with those of Krause and Armitage (2014) who considered a sense of belonging is a key component of student engagement and success, and Zepke and Leach (2010) who argued that student motivation is a key aspect of student engagement. Academic self-efficacy aligns with Kahu and Nelson's (2018) conceptual model discussed below. Taken together, these findings support Krause's view that action to support student engagement should not just focus on the academic domain. Instead, multidimensional approaches to student engagement, including social as well as academic domains, are key to fostering student success. When the survey findings are coupled with the WP student ambassador retention and success rates, reported earlier in this article, these student self-reports suggest that acting in the role has a positive influence on their retention and success.

Secondly, analysis of the students' perspectives on factors that positively influenced them to persist with their studies has generated recurring themes. These include an enhanced appreciation of the opportunities provided by

tertiary study; increased motivation due to the desire to be a good role model; a sense of belonging; and the fulfilment associated with making a difference in pre-tertiary students' lives. Taken together these themes indicate that the ambassadors derived considerable satisfaction from helping others. This supports Zepke and Leach's (2010) view that activities which foster active citizenship increase student engagement and suggests that student engagement activities aimed at making a contribution are likely to have a greater influence on students' sense of belonging, persistence and success than those with a social purpose. This insight may assist institutions to prioritise engagement activities which have the greatest impact.

Thirdly, the study suggests that Kahu and Nelson's (2018) conceptual model of factors influencing student outcomes can be effectively applied to specific initiatives. The four psychosocial constructs identified by Kahu and Nelson resonated with the ambassadors and their feedback to open-ended questions suggested that wellbeing, sense of belonging, positive emotions and self-efficacy are indeed 'mediating mechanisms' for student engagement which positively influence their desire to persist and succeed. As Kahu and Nelson suggested, initiatives aimed at improving retention and success appear to be more effective if based on these constructs as opposed to demographic factors such as socioeconomic status or cultural background.

Limitations and future research

The current study was limited in its scale and scope. It canvassed the views of a relatively small number of self-selected ambassadors at just one university and did not include a control group. It is also unclear if the respondents' views, from 48% of the cohort, are representative of the entire cohort. While the survey methodology was appropriate as it provided both quantitative and qualitative data in a resource-

efficient way, there was no mechanism for researchers to deepen their understanding of respondents' views.

Further research utilising focus groups would build on the current study's findings and provide a richer understanding of student perspectives on the factors influencing their persistence and success. It would also be helpful to survey WP ambassadors fulfilling similar roles at other Australian institutions to determine if the identified trends are generalisable. As universities differ in their approaches to student involvement in their WP programs this would enable researchers to compare different aspects of ambassador programs for their influence on retention and success. It would also be useful to test Kahu and Nelson's concepts with students employed in leadership roles associated with enrolled students. Studies which compared the influence of student engagement activities with altruistic aims and those with social aims would also deepen understanding.

It must be noted, that while capacity-building involving comprehensive training, ongoing mentoring and support assists a relatively small number of ambassadors to develop personally and professionally, this approach is not scalable to the wider student population because of its resource and time-intensive nature. It would, therefore, be useful to explore how the 'mediating mechanisms' identified in Kahu and Nelson's conceptual framework could be applied (1) at scale; and (2) to a range of programs.

Conclusion

This article has extended existing research by addressing three gaps in the literature. Firstly, it suggests that as well as the previously identified benefits, acting as a WP outreach ambassador has the potential to positively influence the students' own retention and success. Secondly, this article has contributed to our

understanding of student perspectives on issues of persistence and success. Lastly, it has demonstrated that Kahu and Nelson's conceptual framework of the factors influencing student engagement provides a useful lens to assess the extent to which specific initiatives influence student retention and success.

Taken together, the study's findings suggest that university staff can learn from the students' views regarding factors which encourage them to persist and influence their success by continuing to support student ambassador involvement in WP outreach programs. Unlike other programs that focus on either low SES participation or retention, employing current students from low SES backgrounds as ambassadors influences low SES students across the educational lifecycle. The survey results suggest the involvement of university students is beneficial for all three parties: the school students benefit from interaction with role models who debunk myths about university study and are trusted sources of information; the university students benefit with respect to their sense of belonging, well-being, interest, enthusiasm, persistence with and success in university studies; while the institutions benefit through improved retention and success outcomes for the (mostly low SES) student ambassadors.

This study's findings suggest it might be useful to consciously focus on Kahu and Nelson's mediating mechanisms to promote persistence and success when designing a range of student leadership and capacity-building roles, not just those directly focused on retention and success.

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