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# **Open Access Enabling Programs: Risking Academic Standards or Meeting Equity Aspirations**

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## Abstract

Open access enabling programs have experienced growth in Australia. The growth is evidenced in student enrolments and the number of public and private institutions offering such programs. Traditionally these programs have provided a second chance to many students from various equity groups who have been unable to access tertiary education due to poor academic achievement in high school or lack of post-secondary education. In recent years, open access enabling programs have attracted both young and mature age students from mid and high socio-economic backgrounds, and international students. Open access enabling programs are similar to final year of high schooling and enable students to access degree programs. These programs are not regulated and not of Australian Qualification Framework (AQF) and nor are they subject to any external accreditation or assessment. This paper argues that in the quest to achieve equity aspirations in the absence of appropriate regulation and accreditation in a rapidly expanding market, program providers are at risk of failing to monitor the academic quality and standards and the extent to which students are prepared for success in undergraduate study.

**Keywords:** enabling programs, open access, academic quality, academic standards, academic risk, and equity.

#### Introduction

Open access enabling programs are aimed at providing a second chance for many students to access higher education. These programs are undertaken by young and mature age students with low academic achievement in high school or lack of post-secondary education. Almost 80% of students who undertake these courses pathway into undergraduate degrees (Lane & Sharp, 2014) and approximately 70% choose nursing, teacher education (early childhood, primary and secondary), social work, and other health and sciences discipline (Sciffer & Shah, 2015). Many students undertake these courses to self-assess their confidence before undertaking undergraduate study (Boyle & Wallace, 2011; Shah, Goode, West & Clark, 2014). Historically, these courses were only offered by universities, and they were aimed to provide access and opportunity to students from underrepresented backgrounds. Unlike most undergraduate programs, open access enabling programs are free to Australian students with the government providing funding for enabling places to universities. Most recently, increased numbers of university and non-university providers are offering such courses to local and international students. Some universities and private providers are also offering open access courses on a full fee paying basis. Open access enabling programs do not require any admission requirements and generally do not provide academic credit towards undergraduate study. These programs are not part of the AQF and are not subject to quality assessment or accreditation by the Tertiary Education Quality and Standards Agency (TEQSA). Any organization could put together 3-4 modules or units of study and offer these programs to students in face to face or online mode. The recent federal government review, Demand Driven Funding System in Australia, has alluded to the risk of enabling programs (Kemp & Norton, 2014) due to lack of national accreditation and the gap in academic outcomes.

Enabling programs could be described as 'drive through' with no entry requirements, no prerequisites, no credits for further study, and students able to withdraw at any time without any fees or penalty. There are no national articulation arrangements whereby a student who completed a module or subject from one institution could commence the enabling program at

another institution. According to James et al (2014), enabling programs differ in terms of academic entry requirements, mode of delivery, course offerings per year, and expected time of completion. There is no national data on student enrolment trends maintained by any Australian government body. However due to the increased number of institutions offering open access programs and the continuing demand from students, it is envisaged that growth will continue in coming years. As of 2013, open access enabling (or equivalent) programs are offered in 35 Australian universities (Hodges et al. 2013), representing 85% of universities in the country. Across the sector, open access enabling programs have different course structures, learning outcomes, volume of learning, duration of study, and mode of delivery. The curriculum and pedagogy in open access enabling programs in Technical and Further Education (TAFE) and private providers is unknown due to lack of research in the area. In some institutions such as universities, staff teaching these courses are academics and in other institutions like TAFE, private providers, Open Universities Australia (OUA), and also in some universities, the courses are taught by teachers with no expectations to undertake research. There is a dearth of information on how institutions monitor academic standards in open access enabling programs. The academic and financial risk is significant if such programs are not preparing for student success at undergraduate study. Likewise, there are significant benefits to the sector and the community if such programs are preparing students for success with comparable and equivalent outcomes.

One of the myths of open access enabling programs is how the result of an individual student in various modules or subjects is converted into the Australian Tertiary Admission Rank (ATAR) or equivalent score to gain entry into degree programs. Anecdotal evidence suggests that many young students who did not do well in high schools consider doing open access programs in universities rather than reattempting high school certificate (HSC) in schools. According to young students enrolled in enabling programs, undertaking such programs in universities would result in attaining 10-15 marks higher than the ATAR score achieved in high schools. Whilst open access enabling programs have been in place for the last four decades, limited research has been undertaken on academic quality and the standard of these programs. Due to a lack of external regulation and accreditation, the programs have developed in a variety of different formats in different kinds of institutions offering the courses. Unlike vocational courses such as Diploma, Certificate III and IV which are part of AQF and subject to Australian Skills Quality Authority (ASQA) accreditation, open access enabling programs do not require any external registration or accreditation unless such programs are offered to international students which require compliance with the Education Services for Overseas Students (ESOS) Act.

This paper is based on a thorough review of the literature relating to open access enabling programs and it is based on the experience of two academics who have been involved in teaching and research in enabling programs. The paper argues that, while open access enabling programs are an excellent strategy for institutions and the government to meet equity aspirations, the lack of standards across the sector has the potential to put the quality of education at risk. The paper also argues that the academic standards in open access enabling programs should be regulated and monitored appropriately to maintain standards, and to ensure that such programs are preparing for student success in undergraduate study.

#### Literature on Open Access Enabling Programs in Australia

Enabling Programs, also known as preparation programs, bridging courses, and access programs (Whannell, Whannell & Allen, 2012; Whannell, Allen & Lynch, 2010; Anderson, 2007) or foundation skills programs (Habel, 2012), have become a popular but important part of the post-secondary schooling system (Hall, 2015), and have also been operating on the margins in the higher education scene for decades (Crawford, 2014). Enabling programs are preparatory courses, which on successful completion, qualifies students for entry into various undergraduate degrees. Student cohorts include a diverse range of individuals, including recent school leavers who have either completed the Higher School Certificate (HSC) or

dropped out in senior years of secondary education; mature aged adults above 20 years of age; and students from Indigenous, low socio-economic, first in family, non-English speaking, and refugee backgrounds (Sciffer & Shah, 2015). Enabling program students are often described as non-traditional university students (Asmar, Page & Radloff, 2011; Cantwell, Archer & Bourke, 2001: Coombes & Danaher, 2006: Habel, 2012: Klinger & Murray, 2009; Marshall, 2013; Whannell, Allen & Lynch, 2010). Students in enabling programs come from very diverse backgrounds with characteristics including: disadvantaged, underrepresented, equity groups, lacking opportunity and access, alienated, marginalised and minority (Bull, 2000; Cantwell, Archer & Bourke, 2001; Coombes & Danaher, 2006; Crawford; 2014; Dawe, 2004; Habel, 2012; Klinger & Murray, 2009) or "second chance" students (Terrell, 2004). These students are also from low socio-economic background: non-English speaking; living in a regional or remote area; mature; poor levels of basic skills; and early school leavers (Asmar, Page & Radloff, 2011; Cantwell, Archer & Bourke, 2001; Coombes & Danaher, 2006; Dawe, 2004; Klinger & Murray, 2009; Shah et al, 2014). According to Shah et al (2014) students enrolled in enabling programs have experienced a range of barriers limiting their access to higher education. They include, but are not limited to, location and distance from the University, financial pressures, academic achievement in high school, failure to complete high school education due to illness or other reasons, lack of appropriate careers advice, parental discouragement of higher education due to limited University education attainment within the family, lack of confidence to undertake University education, parenting or carer responsibilities, mental health issues and other social problems. Many of these students have considered university as not being a welcoming pathway for them due to their failure or negative experience in past educational efforts (Anderson, 2007; Behrendt et al., 2012; Coombes & Danaher, 2006). According to Ainley (2002) the educational needs of these disadvantaged students are qualitatively different and quantitatively greater than those of traditional university entrants (p. 89).

### **Open Access and Widening Participation**

Enabling programs are aimed at widening the educational opportunities for certain underrepresented groups of students via an alternative pathway into higher education (Hall, 2015). The effectiveness of enabling or equivalent programs in bringing a non-traditional population into higher education has been well documented in a range of national and international studies (Archer et al., 1999; Behrendt et al., 2012; Richardson, 1994; Hoskins et al., 1997 cited in Canthwell & Grayson, 2002). Enabling programs not only provide a greater diversity in the university student population; they also provide opportunity for many students to have better work-related skills, improved financial status and enhance new employment opportunities (Asmar, Page & Radloff, 2011; Dawe, 2004; Habel, 2012) and increased selfconfidence, self-efficacy, satisfaction, motivation, inner strength and self-knowledge (Boyle & Wallace, 2011; Coombes & Danaher, 2006; Dawe, 2004; Habel, 2012). One important social and economic contribution of enabling programs is the bridging of the skills shortage in regional communities that have struggled to recruit and retain professionals in health, education and engineering professions (Burgess & Relf, 2013). A study by Sciffer and Shah (2015) found that the pathway of enabling students into various elite undergraduate programs such as medicine, engineering, biomedical sciences and law is a testament of the success of enabling programs and its social and economic impact on individuals, families, regional communities, and the mobility of professionals. According to Dawe (2014), other benefits of participating in an enabling program include having more support networks, improved peer support, stronger intergenerational connections and improved relationships with other people. Thus, these benefits equip students from under-represented backgrounds with the skills to make a smooth transition to degree-level studies (Crawford, 2014).

While most enabling programs are different in structure, they tend to be run over a semester or year; some are skills based, while others offer study in discipline areas (Crawford, 2014) and are offered in both face-to-face and online mode (Shah et al, 2014). Shah et al (2014) concluded that online study has enabled non-traditional students with various responsibilities

to be successful in their return to education and widen participation for students from regional, low socio-economic, mature-aged and Indigenous backgrounds. They suggest that the availability of online enabling programs has provided opportunities for women with past or present child-rearing responsibilities to pursue higher education actively via an alternative pathway. Cocks and Stokes (2012), explored the realities of inclusive education by examining teaching practice in a foundation studies program based at an Australian university. They suggested that a foundation program with a focus on teaching academic literacies assisted students from different backgrounds to achieve a smoother transition into the university learning environment. An investigation on whether a pre-testing model in an enabling program predicted student success/non-success found that literacy and mathematics proficiency provide a valid predictor student success (James et al, 2014).

McIntyre, Todd, Huijser and Tehan (2012), in a study with 965 students in an Australian University, evaluated the academic outcomes of three cohorts of a five day enabling program offered to commencing students in the week before their formal university orientation program. They found that the program had a very strong effect on improving pass rates which resulted in the significant academic improvement in the majority of students and that the program helped to reduce the failure rate from 39% to 12% in their first semester. However, the authors also found that students who had the lowest entry levels appeared not to have benefitted academically from the participation in these programs. The success of an enabling program conducted with Year 12 school leavers has also been demonstrated (Ryan & Hopkins, 2013). The program was rated as being extremely successful, with 80% of participants transitioning into undergraduate study. Adam, Hartigan and Brown (2010), in their study of the UniStart program at the University of Tasmania, Australia, found that students became more confident and well-prepared in terms of academic studies.

International studies have also been undertaken on foundation or equivalent programs conducted with the aim to improve access and participation of underrepresented students. Ssempebwa, Eduan and Mulumba (2012) found that a bridging program in East Africa was effective in preparing students for university education and that bridging-route enrollees do not only satisfactorily cope with the programs to which they are *bridged*, but exceed the performance of students admitted through conventional routes. Mabila, Malatje, Addo-Bediako, Kazeni and Mathabatha (2006), in research attempting to determine the effectiveness of a science foundation program in preparing students for entry at the University of Limpopo, found that students who pass through the Foundation Year Program have a 'higher probability of completing their degree programs in record time than their direct entry counterparts" and that "without the science foundation programs, many people with a potential to effectively contribute to the South African economy would not have been accorded the opportunity to do so" (p.303). A case study conducted in the Persian Gulf suggests that foundation programs in universities are preparing students well for undergraduate study compared to high schools (Khoury, in press). In the UK, Access Courses have provided the opportunity for many underrepresented students to participate in higher education (Brine & Waller, 2004; Lieven, 1989; Wilkinson, 1997; Hayes et al, 1997) with almost 40,000 students recruited annual in the course (Busher et al, 2014).

## **Academic Outcomes**

High rates of attrition and low rates of retention and completion are considered the main concerns about non-traditional background students (Anderson, 2007; Asmar, Page & Radloff, 2011; Klinger & Murray, 2009). Crawford (2014) asserted that "high attrition rates and default measures of success (such as reports on numbers of students per unit, withdrawals, retention, and pass/fail rates), often eclipse the positive outcomes of enabling programs, as do arguments about the widening participation agenda lowering universities' quality and standards" (p.15). In the same vein, Muldoon (2011) agreed that attrition rates are normally high in enabling programs, considerably higher than that for undergraduate courses. Anderson (2007) also noted that "bridging students have the greatest mass of drop out

predictors working against them" (p.458).

Findings in some studies show that attrition rates in enabling programs in Australia range from about 45% to 58% (Bennett et al., 2013; Cooper, Ellis, & Sawyer, 2000; Muldoon, 2011, cited in Crawford, 2014). A large study on attrition in enabling programs by Hodges et al (2013) found an average of 50% attrition. Their study found that attrition varies with one institution experiencing 64% drop out in enabling program which is delivering on-campus and by distance. Muldoon (2011) stated that despite the fact that enabling programs are able to remove barriers to higher education for some non-traditional groups, it is undeniable that the attrition rate in enabling programs is significantly high. Muldoon (2011) studied the outcome of the pathways enabling program at a regional University in Australia and found that among 1,096 new enrolments, 57% students did not complete the first core unit in which 29% officially withdrew and 28% simply dropped out.

Whannell, in a study in 2013, examined the attrition and achievement of a sample of 295 students in an on-campus tertiary bridging program at a regional university and found that attrition was associated with younger students between 18 and 24 (Whannell, 2013). One year later, Whannell (2014) examined a sample of 92 students who had continued into the first semester of undergraduate study and noted that participants at risk of failure in the first semester of absence from scheduled classes in the and low levels of academic achievement in the final assessment tasks in the bridging program and reported lower quality relationships with academic staff. Andrewartha and Harvey (2014), on, the other hand, discovered in their study of the achievement levels of students undertaking a tertiary enabling program that, while the overall retention rate for participating students was relatively high (93%), the number who remained active declined 65% at the final exam. They also found that there was a high attrition rate among Indigenous students.

Whannell and Whannell (2013), in a study to address the high level of attrition experienced by tertiary bridging students studying by distance in a small rural town in Oueensland. Australia, found that attrition rate of students studying via distance was approximately 75% with 30% of them failing to submit any form of assessment. Sharing the same concerns about the high attrition rates in enabling programs, Muldoon, O'Brien, Pendreigh and Wijeyewardene (2009) in a case study at a regional University enabling program noted that with 214 students enrolled only 50% successfully completed the first foundations skills unit and the other 50% failed to complete. Similarly, Cooper, Ellis and Sawyer (2000) also found the attrition rates of 50% in their study on the bridging program for Nursing or Social Work at another University. Smith (2010), in a case study of an enabling program called StudyLink in an Australia University stated that it is undeniable that students benefit from enrolment in StudyLink in several ways, such as increasing skills and knowledge, however, the students' completion rates in StudyLink are below the sector average and that about one third of students with StudyLink enrollment officially withdraw or in some cases, no engagement with the program can be recorded. Whannell (2012), in a study to examine student attrition in a tertiary bridging program, pointed out that of 206 students who initially enrolled in bridging program in semester 1, only 65 (31.55%) continued on to commence an undergraduate degree in Semester 2, while 33 (16.02%) continued in the bridging program in Semester 2 and 108 (52.43%) withdrew from their study. Studies by Atherton (2015) and Atherton and Bailey (2014) on measuring confidence levels of male and female students in open access enabling courses found that students have a low level of confidence throughout their courses leading up to exams. She concluded that students showing low levels of confidence and high levels of uncertainty influence retention rates and affects student transition to university (p. 91).

Willans and Seary (2011) found that mature-age students in enabling programs encounter many difficulties when returning to their formal education and described these difficulties as a "barrage of physical, cognitive and emotional demands" (p.129). Bedford (2009), in an

investigation of the factors which were perceived by students to have most strongly influenced them to continue their study, identified factors related to personal volition, social/family support, institutional support, and the quality of the teaching-learning experience.

In addition to getting over a number of external challenges, non-traditional background students in enabling programs often have to cope with a range of internal challenges under the name of personal experiences and feelings, including low self-esteem or self-confidence, immaturity, low motivation, negative past experiences at school (Dawe, 2004; Cantwell, Archer & Bourke, 2001).

Chipperfield (2012), in a study of 13 students who had completed a foundation course in health and sciences discipline, described the effect of group diversity in the learning in the program. The study found that non-traditional students were not being able to work well with diverse peers with some students not knowing the aims of the program. Sciffer and Shah (2015), in their study of enabling students, found that students in various undergraduate engineering programs had low retention rates and grade point average compared to other students. Burgess and Relf (2013) in a study that investigated whether the current Chemistry and Life Sciences courses effectively prepared enabling students for successful participation in first year nursing, noted that there was anecdotal evidence from nursing faculty staff which indicated that "students entering undergraduate nursing from enabling programs were not performing on par with their non-enabling counterparts" (p.2). Another significant finding to be noted in their study is that in the period from 2009-2010 the attrition rate in enabling students was always 13% higher than that of no prior enabling students.

Studies in the USA found a positive relationship between remediation courses and educational attainment (Pascarella & Terenzini, 2005), and others indicated a negative effect of remediation (Adelman, 1999; Bailey & Alfonso, 2005). Another study suggested that students with low academic achievement in community college tend to have poor performance in degree programs. The study found that community college GPA is by far the strongest predictor of community college transfer students' academic performance in degree programs (Wang, 2012). Research has shown that the success rates of students in remedial courses (similar to enabling program in Australia) have been reported to be low in comparison to other students, and low academic performance has been mentioned as the most distinguishing characteristic of student dropouts (Moore & Shulock, 2007). A recent study (Jackson & Laanan, 2015) in community college concluded the importance of ensuring academic rigor in curriculum design and assessments which realistically prepares students for what they can expect upon enrolling in a degree program as some critics have argued that the course work at community colleges lacks rigor (Andrews, 2000). Various studies in the UK found that students who completed Access Courses have higher rates of withdrawal in degree programs compared to conventional students due to academic or personal reasons. The studies have also found that the final degree performance of Access Course completers is lower than the conventional students (Millins, 1984; Conolly, 1985; Yates & Davies, 1986; Mollov & Carroll, 1992 cited in Hayes et al, 1997).

# Academic Standards at Risk

Scholars have mostly written about academic standards in degree programs which lead to the conferral of an award. So far no study has been undertaken in Australia on academic standards in enabling programs despite its existence since the 1970s. Despite the growth of enabling programs with high student attrition, limited attempts have been made to examine academic standards and the extent to which the program prepares students for undergraduate study. Shah (2013) argued that the characteristics of enabling students and their level of preparedness to undertake undergraduate education requires a robust quality assurance framework to assure the quality of education delivery, adequacy of physical and human resources, support structures, assessments, and a range of academic and non-academic

support. He also argues that high attrition of enabling students due to University related factors in degree programs may have a significant impact on students and their families with questions being asked about the effectiveness of enabling programs in preparing for student success. The concept of academic standards lies at the heart of higher education quality (Coates, 2010). Alderman (2009) defined academic standards as discrete levels of intellectual performance, the attainment of which results in the award of academic credit, leading invariably to the conferment of an academic qualification -a degree, say, or a diploma. OAA (2010) defined academic standards as the threshold level of achievement that a student has to reach to gain an academic award. In recent years, there has been considerable public debate about academic standards in higher education, and there has been much effort directed towards strengthening, reviewing and articulating the quality assurance mechanisms that safeguard standards (UUK 2008; IUSSC 2009; Brown 2010; Shah, Lewis, & Fitzgerald 2011; DBIS 2011, 2012; Kohoutek 2014; Stowell, Falahee & Woolf, 2015). The responsibility of institutions with degree awarding powers for setting and maintaining standards is intrinsic to their status (Coates 2010). Whilst completion of enabling programs does not result in an award qualification, they play an important role in the pathway of students into undergraduate programs. The completion of an enabling program qualifies a student for undergraduate study. Therefore, institutions have the responsibility to monitor standards and assess students' readiness and academic achievement before entering into degrees.

Various issues around academic standards in open access enabling programs are evident. *First*, as already presented in this paper, **attrition in enabling** programs ranges from 50% in face to face delivery to 75% in distance and online study. Enabling educators have argued that 50% attrition is common in enabling programs, however limited effort is made to develop effective transition and retention strategies despite its existence for more than four decades. While attrition in face to face programs have been consistent at 50% across institutions, new modes of delivery such as online have shown significantly higher attrition rate: between 60-73%. In comparison, the attrition rates in Access Courses in the UK is around 16-30% with external quality agency monitoring retention rates and identifying colleges which are at risk (Quality Assurance Agency, 2010). One could argue that given such programs are open access like Massive Open Online Course (MOOC), students could drop out at any time. Unlike MOOCs, which are free, open access programs are funded by the government and there are cost implications to tax payers if students withdraw after a certain date. Assuming that there are 20,000 students across Australia who are undertaking government supported and fee-paying enabling or equivalent programs with 50% attrition, it can be argued that the financial loss is around \$30 million annually. The loss is higher given that fee-paying domestic and international students pay a higher tuition fees.

Second, the open access nature of the course enables students to enroll who may be less motivated, have a low confidence level, low academic achievement in high school, and with many personal and academic barriers. While access to higher education is important to meet social justice and equity aspirations, it is important to balance this with an approach that ensures that such programs have a minimum entry requirement or some form of assessment is in place before admission to ensure student readiness and predict academic success. The risk to the student of enrolling in an open access enabling program is minimal in a financial sense as failure to complete does not incur an associated financial debt, unlike the situation for undergraduate tertiary study. The financial burden on disadvantaged students such as low socio-economic is well documented. The most recent student finance survey in Australia found more than two-thirds of students reporting being worried about their financial situation with highest overall concerns among low socio-economic students (Bexley, et al, 2014). The depression and stress associated with debt due to attrition in degree programs cannot be ruled out among students and their families. The risk related to debt is also documented in a UK based study with students enrolled in Access Courses (Brine & Waller, 2004). The motivation to enroll in an open access program varies with some young students enrolling in the course with the aim of obtaining social security payments, rather than achieving academic

credentials to enroll in degree programs. In the UK, efforts are made to improve retention by implementing selection criteria of students to minimize the risk of withdrawal. Strategies such as interviews, written tasks to assess literacy and numeracy, diagnostic testing, and prior achievement of level 2 qualifications is used by institutions to select students (QAA, 2010).

*Third*, the **course design and learning outcomes** in open access programs vary across universities, TAFE's and private providers. Due to the lack of a national framework or guidelines for enabling programs, there is no requirement for accreditation. Some programs are designed to prepare students in certain disciplines of study, and others are generic. The program structure, learning outcomes, volume of learning, and assessment are different across all institutions. Unlike degree programs which require industry input in program design, open access programs are developed by enabling educators and the input from academic schools or faculties such as first year degree program coordinators is often limited. This has the potential to lead to a lack of systematic engagement between enabling educators and academic peers in relevant undergraduate schools in matters relating to curriculum design, and embedding skills and knowledge that is needed in first year of undergraduate study. As alluded before, almost 80% of enabling completers pathway in degree programs. The other 20% either enroll with other institutions or seek employment. The design of the program does not engage employers to find out the skills and knowledge required in junior roles at workplace where enabling completers pursue employment

Fourth, student assessment plays an important role in assessing student readiness for undergraduate study, and equipping students with key generic skills required for tertiary study. Whilst open access enabling programs are preparing for students in degree programs, there is lack of moderation of student assessment among enabling educators and peers in the other undergraduate schools. In the UK, the QAA requires as a part of annual reporting evidence of assessment moderation, details of moderators, reports on evaluation by external moderators, and data on grading of assessment (QAA, 2013). The current system in Australia does not have any mechanism to assess student readiness for undergraduate study. As outlined earlier, the method used to calculate the final score has flaws as many students believe that undertaking enabling programs would result in getting a better score than undertaking the high school certificate in a school setting. Due to the lack of any form of moderation of assessment and review of assessment practices, the opportunity exists for students with ability and performance below the minimum threshold to be conferred with enabling attainment, and hence gain access to undergraduate study. The importance of assessment in measuring the quality learning outcomes in enabling programs is outlined in Cantwell (2004) who argues that assessment informs the quality of student learning.

*Fifth*, while **teaching quality** in open access enabling programs generally has high student satisfaction, there is often no systematic examination of student engagement in these programs and the extent to which the curriculum and pedagogy is equipping students with key skills needed in first year undergraduate programs. Limited effort is made to assess if students have attained key skills after completing enabling programs through the use of evaluations of student undergraduate performance and feedback from enabling students in the first year of undergraduate study. Enabling programs in Australian universities are taught by both academics and teachers. Staff on academic award are required to undertake research and improve outcomes through publications, grants, and research degree supervision. Staff on teacher award are not required to undertake any research. In some institutions, a course or subject is taught in the same institution by both teachers and academics. Active engagement in research in both enabling education and disciplinary area could inform curriculum design, pedagogy, assessments and other aspects of the program. Given the nature of enabling programs, peer review of teaching by colleagues from schools offering degree programs could build staff capacity and ensure that teaching standards are comparable.

Sixth, as outlined earlier enabling programs are not regulated and subject to accreditation.

This limitation has witnessed the growth of enabling programs in universities, and private forprofit providers. Unlike degree programs, which require accreditation with TEQSA and in some cases with professional bodies, enabling programs are not subject to any external review. As part of the internal review process, some institutions undertake cyclical review of enabling programs with the engagement of external members in the panel, however there is lack of monitoring on the extent to which recommendations are acted upon. At national level, there is no review undertaken to examine academic standards, the effectiveness of enabling programs, and the extent to which it is preparing for student success in degree programs. It is worth to note here that in the UK, Access Courses are subject to accreditation and ongoing review by Access Validating Agencies (AVA) on behalf of QAA. On an annual basis accredited institutions are required to provide annual report which enables AVAs to assess the risk level and follow up on required actions (QAA, 2013). The AVA has also taken actions such as withdrawal of license based on risk level. One of the key requirements for access course providers is to provide data on a range of areas such as enrollment, academic outcomes, and grading. Institutions are also asked to provide reports on external moderators among other requirements such as such strategic planning, targets, and governance of access courses.

*Seven*, the profile of students in open access enabling programs requires **inclusive academic support services**, such as academic skills, counselling, careers advice, personalized tutoring, and fora for peer networking, and online support. Due to the increased diversity of students, specialist support such as health and wellbeing, disability support and support for refugee students is needed. While many institutions have established schools or colleges to offer enabling programs, there is lack of resourcing and inclusive support structures to assist students. In some universities these support services are centralized and used by other students, and in other institutions pockets of support services are decentralized in schools or colleges that offer enabling programs. The growth of enabling programs in online mode with almost 75% attrition requires adequate and personalized online support for students.

*Eight*, systematic assessment and improvement of quality outcomes require a **robust data and information system** to monitor longitudinal performance. Most universities in Australia have sophisticated management information systems which provide timely and reliable data on a range of performance measures (Shah & Aumann, 2011). While institutions have collected data on enabling students, limited attempts have been made to develop systematic reporting with trend and benchmarked data on various indicators. Enabling educators have mostly used internal data which is collected in schools or colleges rather than exploring the potential of the rich data that is collected in learning management systems which has the potential to assess and predict student engagement and success. The use of learning analytics together with academic performance data could enable institutions to identify students at risk and develop timely intervention strategies. Many enabling educators view that increased demand and the large percentage of students who pathway into degree programs is a measure of success. However, this only assesses the viability of the program rather than academic quality and curriculum relevance.

*Nine*, enabling program completers are at risk of a lower level of preparation for undergraduate study and are subsequently put at risk of lower academic outcomes compared with traditional students. While the literature over a number of years has indicated that students gaining entry to undergraduate study via enabling pathways demonstrate comparable undergraduate achievement outcomes for enabling program completers (Archer, Cantwell & Bourke, 1999; Clarke et. al., 2000; Klinger & Tranter, 2009), the risk exists that this may not continue in a completely unregulated and increasing market. This view is supported by more recent literature. A study by Andrewartha and Harvey (2014) identified that the academic performance of students in an enabling program demonstrated variable performance at a disciplinary level. They also found that enabling students do well in social science and

mathematics subjects, however performance is relatively low in adult learning and science subjects. A study by Muldoon (2011) found that 57% of enabling students did not complete the first core unit in a degree program with 29% officially withdrawing and 28% simply dropping out. According to McIntyre et al (2012), enabling programs are less effective with those students who had low academic achievement. Their findings suggest a close correlation between ATAR or equivalent score and student success in a degree program. Cantwell, Archer & Bourke (2001) found the academic achievement of enabling completers in degree programs is lower than high school completers. They also found that enabling completers had low achievement in business and sciences discipline.

A recent data analysis at the home institution of one of the authors of this paper in relation to the academic outcomes of enabling background students at undergraduate level found that student attrition in degree programs such as nursing, social work and education is higher than other students with more than 10% difference. A high drop-out rate in disciplines such as engineering, sciences, and business was also identified. While traditional students mostly withdraw in first year of study, enabling completers tend to withdraw throughout their study in first, second and third year with Indigenous students experiencing high drop-out in years two and three. The study also identified a lower progression rate in enabling background students. In disciplines such as nursing the difference is less than 12%, however in sciences and education, the progression rate is much lower with more than 15% difference. A significant difference also exists in engineering with more than 30% difference particularly with young students. At the home institution of the second author of this paper, an analysis of student progression indicated that enabling students demonstrated attrition rates in the first year of undergraduate study between 14% and 22% compared to 27% to 35% for non-enabled students over the period 2009 to 2014. While these figures suggestion very positive outcomes for the enabling background students by comparison, the attrition rate from the enabling program during the same period ranged from 66% to 87%. Likewise, the longer term performance of the enabling students is substantially lower than non-enabling background students in terms of undergraduate qualification completion. For the period from 2009 to 2011, qualification completion rates for enabling background students were 25.6%, 21% and 12% respectively. For the same period, non-enabling background students demonstrated completion rates of 35.5%, 31.9% and 27%.

*Ten*, relates to **complacency about enabling programs**. Institutions are proud of the fact that enabling programs provide access and opportunity to many underrepresented equity groups in higher education. Without enabling programs, many students may not have attained degrees and improved their social, economic, health and wellbeing outcomes. As students complete the program, the journey to higher education commences in degree programs. There is a lack of systematic tracking and monitoring of students while they are in degree programs. One particular challenge is that enabling educators may view that their responsibilities for student's cease once they enter into degree programs and faculties are responsible for the transition, retention and success. There is lack of ownership and accountability in monitoring the academic performance of students and renewing curriculum and pedagogy to ensure that enabling programs provide a smooth transition into degree programs.

# **Conclusion: The Marriage between Quality and Equity**

Various national reviews in Australia found that enabling programs have provided access and opportunity for many disadvantaged students to participate in higher education (Behrendt et al, 2012; Bradley et al, 2008; Kemp & Norton, 2014; Lomax-Smith et al, 2011). The review by Kemp and Norton (2014) found a 10% difference in terms of completions between enabling completers and non-enabling completers in degree programs. The Lomax-Smith et al (2011), report found that students who have entered higher education from enabling program generally have lower educational outcomes compared with students who have entered from other pathways (p. 123). They also found that students undertaking enabling study generally have lower progression rates than students who do not complete enabling study.

Internationally, research in the US suggests that whilst community colleges act as the gateway for students to higher education through open-door policies where students lacking basic reading, writing, and mathematics skills can enroll, such policies have created challenges when meeting academic standards (Gabbard & Mupinga, 2013). The open accessibility in community colleges might have resulted in a lack of fundamental skills in reading, writing, and mathematics when entering college (Rosenbaum, 1997). This open-door policy may explain the findings from Jenkins's (2005) study that an estimated 30 - 40% of first year students in community colleges need remediation or developmental education. Students without preparation require more assistance, which is time-consuming and costs much money from students and educational institutions (Gabbard & Mupinga, 2013). It is, therefore, according to Adams (2002), not surprising that community colleges experience greater challenges resulting from open enrollment and securing academic standards (Gabbard & Mupinga, 2013). There are two main strategies mentioned in Gabbard & Mupinga (2013) to achieve a balance between Open Access and academic standards include: relationships (faculty-to-student and institution-to-student relationships), and one-on-one advising, tutoring, orientation programs, learning labs, and other student support systems.

The educational environment in Australia from preschool to the doctoral level has been engaged for a number of years in moves to better manage the accreditation of educational programs and improve the professional standards of educators. At the primary and secondary levels of education there is now a national curriculum and a set of national standards for teachers. Higher and vocational education programs offered by different types of institutions are now accredited and overseen by national regulators. The situation in relation to tertiary enabling programs stands in stark contrast with this approach. These programs have no common curriculum, even between institutions in the same city, no accreditation requirements of the program being offered and no professional requirements in terms of qualifications, training and professional development of staff. Considering that open access enabling programs provide an equivalent opportunity to students in secondary school who intend to gain access to tertiary study and the secondary level of education operates within a strong framework of accreditation and professional standards, surely the same, or at least some formal and managed, approach to accreditation and professional standards is appropriate for the open access enabling program sector.

Based on the current context, it is predicted that enabling programs will grow in public and private institutions. Institutional diversity, their mission to provide access to underrepresented students, and the growing population of underprepared students may witness growth. However growth is also coupled with uncertainty in new funding models in Australia. Institutions are now recognizing the growing population of underrepresented students. Most recently, the University of New South Wales in Australia, with a long history of high admission standards and who have been defensive on the access and equity agenda, is now recognizing the need to widen student participation. The new strategic plan 2025 outlines a key priority with social dimension and focus on student equity at the heart of its commitment (UNSW, 2015). Likewise many regional universities are home to many disadvantaged students from various equity groups. While universities have developed policies and initiatives to widen participation, limited work is undertaken to ensure teaching methods, assessments, and range of support meets the growing diversity of students. The equity agenda has undoubtedly expanded higher education, however there are risks related to academic quality and standards particularly in open access enabling programs. The aspiration to achieve equity agenda is achieving its intended targets; however serious questions need to be asked about the extent to which enabling completers have comparable and equivalent achievement. Institutions of higher education need to rigorously defend their standards of teaching and outcomes as they plan to expand higher education to the growing diversity of unprepared students.

#### References

- Adam, A., Hartigan, C., & Brown, N. (2010). The value of an open, early academic development program to students' transition and first year experience: The UTAS UniStart program. *The International Journal of the First Year in Higher Education*, 1(1), 43.
- Adelman, C. (1999). Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment. Washington, DC: U.S. Department of Education
- Ainley, P. (2002). Capitalism and social progress, the future of society in a global economy. *Journal of Education Policy*, 17(5), 603-604.
- Anderson, H. (2007) 'Bridging to the Future: What Works?', in Australian Journal of Adult Learning, 47:3, 453-65.
- Andrews, H. A. (2000). Lessons learned from current state and national dual-credit programs. In J. C. Palmer (Ed.), New Directions for Community Colleges, 111, (pp. 31–39). San Francisco, CA: Jossey-Bass.
- Andrewartha, L., & Harvey, A. (2014). Willing and enabled: The academic outcomes of a tertiary enabling program in regional Australia. *Australian Journal of Adult Learning*, 54(1), 50.
- Archer, J., Cantwell, R., & Bourke, S. (1999). Coping at university: An examination of achievement, motivation, self-regulation, confidence, and method of entry. *Higher Education Research & Development*, 18(1), 31-54.
- Asmar, C. Page, S. & Radloff, A. (2011) 'Dispelling myths: Indigenous students' engagement with university', *Australian Survey of Student Engagement*, Vol 10, April 2011.
- Atherton, M. (2015). Measuring confidence levels of male and female students in open access enabling courses. *Issues in Educational Research*, 25(2), 81-98
- Atherton, M., & Bailey, A. (2014). Assessing disadvantaged student confidence in learning: a case of enabling pathway programs, *Journal of Institutional Research (South East Asia)*, 12 (2), 41-53.
- Bailey, T. R., & Alfonso, M. (2005). Paths to persistence: An analysis of research on program effectiveness at community colleges [Monograph]. Lumina Foundation for Education New Agenda Series, 6(1).
- Bedford, T. (2009, November). Beyond our control?: Pre-tertiary bridging program students' perceptions of factors that affect their progress with study. In *Proceedings of the 3rd National Conference for Enabling Educators: Enabling Pathways*. University of Southern Queensland.
- Behrendt, L. (2012) *Review of higher education access and outcomes for Aboriginal and Torres Strait Islander people: Final Report,* Department of Industry, Innovation, Science, Research and Tertiary Education, Canberra, Australian Government
- Bennett, A., Hodges, B., Kavanagh, K., Fagan, S., Hartley, J., & Schofield, N. (2013). 'Hard'and 'soft' aspects of learning as investment: opening up the neo-liberal view of a programme with 'high' levels of attrition. Widening Participation and Lifelong Learning, 14, 141-156.
- Bexley, E., Daroesma, S., Arkoudi, S., & James, R. (2013). University Student Finance 2012, Centre for the Study for Higher Education, The University of Melbourne, Australia.
- Boyle, A. & Wallace, R. (2011) 'Indigenous people and e-nabling technologies: An analysis of recent experiences in northern and central Australia', in *Kulumun: Journal of the Wollotuka Institute*, 1:1, 1-14.
- Bribe, J., & Waller, R. (2004). Working-class women on an Academic course-risk, opportunity and (re)construction identities, *Gender and Education*, 16(1), 97-113.
- Bull, D. (2000). Access and retention programs for tertiary students: new directions. *New Horizons in Education*, (102), 77-83.
- Burgess, C., & Relf, B. (2013). A flexible response: Monitoring the performance of enabling students in first year undergraduate nursing. The National Association Of Enabling Educators Of Australia, C/- Open Access College, University Of Southern Queensland, Toowoomba, Queensland, Australia, 4350, 1-9. Retrieved from

http://enablingeducators.org/conference/2013.html

- Busher, H., James, N., Piela, A., Palmer, A. (2014). Transforming marginalized adult learners' view of themselves: Access to Higher Education courses in England, *British Journal of Sociology of Education*, 35(5), 800-817.
- Cantwell, R. (2004). Positioning the bar: Outcomes associated with successful completions of an enabling course, *Australian Journal of Adult Learning*, 44(3), 354-388.
- Cantwell, R. Archer, J. & Bourke, S. (2001). A comparison of the academic experiences and achievement of university students entering by traditional and non-traditional means', in *Assessment & Evaluation in Higher Education*, 26(3), 221-34.
- Chipperfield, S. R. (2012). The effect of group diversity on learning on a university-based foundation course. *Journal of Further and Higher Education*, *36*(3), 333-350.
- Clarke, J., Bull, D., Neil, C., Turner, L., & Birney, D. (2000). *The cost and effectiveness of enabling and related programs in Australian tertiary education*. Department of Education, Training and Youth Affairs, Commonwealth of Australia.
- Cocks, T., & Stokes, J. (2012). A Strong Foundation: Inclusive Education at an Australian University College.
- Coombes, P. & Danaher, G. (2006) 'From the margins to the centre: The power of transformative learning in Australia', in *Teaching and Teacher Education*, 22:7, 759-65.
- Cooper, N., Ellis, B., & Sawyer, J. (2000, July). Expanded future opportunities provided by a bridging course at a regional university campus. In *4th Pacific Rim First Year in Higher Education Conference, Brisbane*.
- Conolly, M. (1985) Achievement of access and non-access students on a B.Ed. course, New Community, 12, pp. 33-51.
- Crawford, N. (2014). Practical and profound: multi-layered benefits of a university enabling program and implications for higher education. *International Studies in Widening Participation*, 1(2), 15-30.
- Dawe, S. (2004) 'Enabling learners: diverse outcomes', NCVER, AVETRA 2004, 1-10.
- Doyle, S. (2006). STEPS: Celebrating 20 Years 1986-2006. Central Queensland University.
- James, T., Conradie, H., Saint, R., & Browne, M. (2014). An exploratory study of the factors associated with an initial testing process: Testing the testing, *International Studies in Widening Participation*, 2 (1), 2-14.
- Habel, C. (2012), 'I can do it, and how! Student experience in access and equity pathways to higher education', in *Higher Education Research & Development*, 31:6, 811-825.
- Hall, L. (2015). What are the key ingredients for an effective and successful tertiary enabling program for Aboriginal and Torres Strait Islander students?: An evaluation of the evolution of one program. *Australian Journal of Adult Learning*, 55(2), 244.
- Hauptman, A. M. (2008). Participation and Persistence in the United States, *International Higher Education*, 52, 19-21.
- Hayes, K., King, E., & Richardson, J.T.E. (1997). Mature students in higher education: III. Approaches to studying in access students, *Studies in Higher Education*, 22(1), 19-31.
- Hodges, B., Bedford, T., Hartley, J., Klinger, C., Murray, N., O'Rourke, J., & Schofield, N. (2013). Enabling retention: processes and strategies for improving student retention in university-based enabling programs: final report 2013.
- Indigenous Higher Education Advisory Council (IHEAC) (2006). *Improving Indigenous outcomes and enhancing Indigenous culture and knowledge in Australian higher education*. Canberra: Department of Education, Science and Training.
- Jackson, L, D., & Laanan, S, F. (2015). Desiring to Fit: Fostering the Success of Community College Transfer Students in STEM, *Community College Journal of Research and Practice*, 39 (2), 132-149.
- Johnstone, J. W. C., & Rivera, R. J. (1965). Volunteers for learning: A study of the educational pursuits of American adults (Vol. 4). Aldine Pub. Co.
- Kemp, D. & Norton. A., (2014). Review of the Demand Driven Funding System. Available at <u>https://www.education.gov.au/report-review-demand-driven-funding-system</u>
- Khoury, I. (in press). Building a Foundation for Success? Foundation Programs in the Arab

Gulf States [in Shah, M., and Whiteford, G. (in press). *Bridges, Pathways and Transitions: International Innovations in Widening Participation*, Elsevier Publishing, Cambridge, UK.

- Klinger, C. M. (2010). Firm Foundations for the Future in a Knowledge-Based Global Economy: an Australian Perspective on Access Education. *From Access to Success: Closing the Knowledge Divide*, 75.
- Klinger, C.M. & Murray, N. (2009), 'Enabling Education: Adding Value and Transforming Lives', in *Enabling Pathways: Proceedings of the 3rd National Conference for Enabling Education*. University of Southern Queensland, Australia 25-27 November, 1-11.
- Klinger, C. M., & Tranter, D. (2009). Firm foundations for the future. Paper presented at the 2009 Enabling Pathways: Proceedings of the 3rd National Conference for Enabling Education.
- Lane, J., & Sharp, S. (2014). Pathways to Success: Evaluating the use of "enabling pedagogies" in a University Transition Course, *GSTF International Journal of Education*, 2(1), 66-73.
- Lieven, M. (1989). Access Courses After Ten Years: A Review, *Higher Education Quarterly*, 43(2), 160-174.
- Lomax-Smith, J., Watson, L. & Webster, B. (2011). Higher Education Base Funding Review, Final Report, October 2011. Australian Government, Canberra, Australia.
- Mabila, T. E., Malatje, S. E., Addo-Bediako, A., Kazeni, M. M. M., & Mathabatha, S. S. (2006). The role of foundation programmes in science education: The UNIFY programme at the University of Limpopo, South Africa. *International Journal of Educational Development*, 26(3), 295-304.
- Marshall, C. A. (2013). Good foundations: prediction of degree success in non-traditional students. *Widening Participation and Lifelong Learning*, 15(2), 22-42.
- McIntyre, J., Todd, N., Huijser, H., & Tehan, G. (2012). Building pathways to academic success: a practice report. *International Journal of the First Year in Higher Education*, 3(1), 109-118.
- Milburn, A. (2012). University challenge: How higher education can advance social mobility.
- Millins, P.K.C. (1984) Access Studies to Higher Education, September 1979-December 1983: a report (London, Centre for Access Studies to Higher Education, Roehampton Institute).
- Moore, C., & Shulock, N. (with Ceja, M., & Lang, D. M.) (2007). Beyond the Open Door: Increasing student success in the California community college. Sacramento, CA: *Institute for Higher Education Leadership and Policy*, California State University.
- Molloy, S. & Carroll, V. (1992) Progress and Performance in Higher Education: a report on performance monitoring of "standard' and "non-standard" entrants to undergraduate courses (London, Council for National Academic Awards).
- Muldoon, R. (2011) Tertiary Enabling Education: Removing barriers to higher education, in P. Cunningham & N. Fretwell (eds.) *Proceeding of Europe's Future: Citizenship in a Changing World Conference*. London: CiCe, pp. 288 – 297.
- Muldoon, R., O'Brien, D., Pendreigh, H., & Wijeyewardene, I. (2009). The UNE Pathways Enabling Program–a case study. *UNE*.
- Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students: A third decade of research (Vol. 2). San Francisco, CA: Jossey-Bass.
- PAC, Public Accounts Committee. (2009). Widening Participation in Higher Education Fourth Report of Session 2008-9. (HC 226). London: The Stationery Office Limited.
- Quality Assurance Agency (QAA). (2010). Access to HE Courses: Retention, Selection and Demand, available at

https://www.accesstohe.ac.uk/AboutUs/Publications/Pages/retention-selectiondemand.aspx

Quality Assurance Agency (QAA). (2013). AVA annual report requirements 2013-2014, available at <u>https://www.accesstohe.ac.uk/AboutUs/Publications/Documents/AVA-annual-reporting-requirements.pdf</u>

- Radloff, A., & Coates, H. (2010). Doing more for learning: Enhancing engagement and outcomes. *Australasian student engagement report. Camberwell, Victoria: Australian Council for Educational Research.*
- Ryan, N. J., & Hopkins, S. (2013). Combining social media and career development learning: An intensive tertiary preparation programme for disadvantaged youth. *Australian Journal of Career Development*, 22(3), 107-111.
- Sciffer, S., & Shah, M. (2015). Widening the Participation of Disadvantaged Students in Engineering. International Journal of Quality Assurance in Engineering and Technology Education (IJQAETE), 4(1), 1-13.
- Shah, M., & Aumann, T. (2011). The Changing Role of Planning Units in Universities: Renewing our Approach and Future Directions, *Journal of Institutional Research*, 17(1), 60-68.
- Shah, M., Goode, E., West, S., & Clark, H. (2014). Widening student participation in higher education through online enabling education. *Widening Participation and Lifelong Learning*, *16*(3), 36-57.
- Shah, M. (2013). Correlation or causality: Raising equity aspirations in the emergence of quality agenda, Paper presentation at the National Association of Enabling Educators of Australia conference. 27-29 November, Melbourne, Australia.
- Smith, L. (2010, November). StudyLink: A case study of an enabling program supporting the transition to the first year of university. In *First Year in Higher Education Conference*.
- Ssempebwa, J., Eduan, W., & Mulumba, F. N. (2012). Effectiveness of University Bridging Programs in Preparing Students for University Education A Case From East Africa. *Journal of Studies in International Education*, 16(2), 140-156.
- Terrell, J. (2004). 'Now I know I belong here!' Pathways to University: a strategy for improving access to tertiary education.[Paper delivered at Building Foundations, National Conference of Enabling Educators, School of Humanities, Ourimbah Campus, University of Newcastle, 2004.]. Australian Journal of Adult Learning, 44(3), 427.
- University of New South Wales. (2015). UNSW 2025 Strategy Our Strategic Priorities and Themes, available at

https://www.2025.unsw.edu.au/sites/default/files/uploads/unsw\_2025strategy\_201015. pdf

- Wang, X. (2012). Academic Performance of Community College Transfers:Psychological, Sociodemographic, and Educational Correlates, Community College Journal of Research and Practice, 36 (11), 872-883
- Whannell, P., & Whannell, R. (2013). Reducing the attrition of tertiary bridging students studying by distance: A practice report. In *Proceedings of the 1st Foundation and Bridging Educators New Zealand Conference (FABENZ 2012)* (pp. 26-37). National Centre for Tertiary Teaching Excellence.
- Whannell, P., Whannell, R., & Allen, B. (2012). Investigating the Influence of Teacher Strategies on Academic Self-Efficacy and Study Behaviour of Students in a Tertiary Bridging Program. Australian Journal of Adult Learning, 52(1), 39-65.
- Whannell, R. (2012). An examination of student attrition in a tertiary bridging program and progression to the first semester of undergraduate study in a regional university.
- Whannell, R. (2013). Predictors of Attrition and Achievement in a Tertiary Bridging Program. *Australian Journal of Adult Learning*, 53(2), 280-301.
- Whannell, R., Allen, B., & Lynch, K. (2010). Casualties of Schooling? 18 to 22 Year Old Students in a Tertiary Bridging Program. *Australian journal of teacher education*, 35(5), 1-17.
- Whannell, R., Whannell, P., & Bedford, T. (2013). Early departure from a tertiary bridging program: What can the institution do?. In *Proceedings of the 1st Foundation and Bridging Educators New Zealand Conference (FABENZ 2012)* (pp. 1-14). National Centre for Tertiary Teaching Excellence.
- Wilkinson, D. (1997). Assuring quality in Access Courses the authorized version, *Quality Assurance in Education*, 5(1), 32-39.
- Willans, J., & Seary, K. (2011). 'I Feel like I'm Being Hit from All Directions': Enduring the

Bombardment as a Mature-age Learner Returning to Formal Learning. Australian Journal of Adult Learning, 51(1), 119.

Yates, J. & Davies, P. (1986). The Progress and Performance of Former Access Students in Higher Education (1984--86) (London, Centre for Access Studies, Roehampton Institute of Higher Education).