



CASE STUDY

Widening participation to disadvantaged groups: one university's approach towards targeting and evaluation

Alan Beckley*

University of Western Sydney (UWS)

Widening participation (WP) in higher education to disadvantaged young people is essential for the future economic and social well-being of Australia to ensure sustainability of its national and commercial standing in the world, economic progress and social justice. This article will examine how, in a university, evaluation can be used to ensure optimum learning from WP projects for continuous improvement while complying with government funding and reporting requirements that ensure public money is spent wisely and to optimum effect. The approach of the University of Western Sydney is to utilise a three tier process of (i) appropriate project management tools and techniques; (ii) careful and sensitive targeting of equity group participants, and; (iii) non-intrusive and confidential evaluation processes. With this combination of procedures, programs and projects can be effectively evaluated to ensure pre-determined objectives will be achieved and the all-important socio-economic outcomes can be realised.

Keywords: widening participation; evaluation; tertiary education; Australia; equity groups

Introduction

This article will first set out the context of its work and then describe its main purpose which is that of outlining the targeting and evaluation processes within University of Western Sydney (UWS) widening participation (WP) programs. According to Kennedy (1997, p.15), widening participation 'means increasing access to learning and providing opportunities for success and progression to a much wider cross-section of the population than now'. The definition of WP in this discussion includes students from families that have not traditionally entered higher education, mainly in low socio-economic status (LSES) locations (McLachlan, Gilfillan and Gordon, 2013). Although there is not a global definition for the phrase (Walker, 2008), WP has been researched world-wide for the last 80 years (Religious Education, 1932, pp.677-8). Discussion relating to WP has increased since the release of the Gonski Report (2011), and the comment from the author was that the 'difference in school opportunity' for students from a LSES background was 'alarming' (Hurst, 2013). This article discusses the essential factor of evaluation of widening participation projects in terms of establishing 'what works' and cost-effectiveness of programs for their short, medium and long term outcomes. It is self-evident that such programs will take many years to reach fruition, especially when the students who participate are in primary school, therefore evaluation may take over ten years to realise a project's final impact; progression to tertiary education. In Australia, most *widening participation* (WP) projects are actually aimed at high school students in their last two years of study; but research has indicated that by that stage, 'achievements and aspirations have largely been set' (Gale, 2011, p.674).

* Corresponding author. Email A.Beckley@uws.edu.au

For these reasons it is important to identify methods of targeting individual students with a view to implementing sensitive but unobtrusive long-term tracking while observing confidentiality and data protection issues. In addition, the requirements of reporting on the use of public finance to ensure 'value for money' need to be acknowledged to ensure sustainability and to record the rationale behind funding decisions. Therefore recording systems for evaluation must be built in at the inception of the project and robust evaluation methods should be incorporated into the project plan including initial sign-off, monitoring and review processes incorporating progress, use of resources, outputs, outcomes and finance. All these factors will be discussed in this article which will first set out the context of widening participation.

Background

As a result of a report on 'global competitiveness' by the World Economic Forum (Schwab, 2012), politicians in Australia realised the need to encourage a larger number of students into higher education via a 'demand-driven' system. This article will be based on the examination of the factors used to justify widening participation for young people to progress into tertiary education; social justice, inclusion, equity, national competitiveness, innovation or 'filling the skills gap'. Young people who are engaged in their education are more likely to progress to tertiary education and thereby assist the Australian Government to make headway towards its objective of increasing educational levels to 40% of 25 to 34 year old people having at least a bachelor-level qualification by 2020 (Bradley, 2008, p.xiv) and that 20% of higher education enrolments should be students from LSES backgrounds (p.xviii). LSES locations are identified through researching socio-economic factors established from national census surveys down to small sectors of the country called 'collector districts' (ABS, 2014).

In order to realise the above educational objectives, the federal government has invested in the Higher Education Participation and Partnerships Program (HEPPP), as demographics show that only 15% of higher education students are from LSES localities, whereas this group comprises 25% of the Australian population. Bradley (2008, p.xi) concluded that when considering the overall level of skills in the population 'Australia is losing ground' which results in a 'great competitive disadvantage unless immediate action is taken'. The government focus on the LSES group is based on the twin drivers of social justice and economic prosperity, both for the individual student and society as a whole (Cuthill and Schmidt, 2011). In addition, there are a number of unemployed LSES youth; according to Cuthill and Schmidt (2011), all age unemployment in Australia is 5.2%, but unemployment for 15–19 year olds is 17.3% and for 15–24 year olds 'available and willing' to work, unemployment is 26%. Thus widening participation is targeted at young people (and 'mature aged students') who are not in employment, education and training (NEET) and are a member of the targeted 'equity groups'. In fact, the latest Institutional Performance Portfolio (DIISRTE, 2013, p.36) for University of Western Sydney (UWS) lists the organization's equity group focus as: LSES background; students with a disability; indigenous students; and mature aged students. However, WP programs are also offered to other equity groups such as children in Out-Of-Home Care. A good depiction of the features of WP initiatives is contained in Cuthill and Schmidt (2011):

Figure 1: Student Success through widening participation. Source: Cuthill and Schmidt, 2011, p.21



Funding for widening participation at UWS

WP programs at UWS are funded by internal 'core' funding and the two external sources of federal government funding; the HEPPP (DFE, 2014) and the Bridges to Higher Education (Bridges, 2014) programs which operate within the provisions of the *Higher Education Support Act 2003* (DEEWR, 2009, p.25). WP programs and projects should be integrated within university corporate strategies and comply with the method for managing, monitoring and reviewing programs and projects within that organization. At UWS, WP programs are split into two main categories to encourage students from backgrounds which have not normally participated in higher education: Access, and Retention programs. The access programs can be further sub-divided into programs which work directly with schools and colleges, aspiration building with targeted equity groups and direct development and support for WP students. Once students are successfully enrolled at university, there are many retention programmes to assist them to remain in their studies. In 2013, UWS WP programs engaged with over 177,000 students, 700 schools, 1,500 Teachers and 8,000 Parents / Carers in New South Wales, mainly in the Greater Western Sydney area with 24 access and 10 retention programs. Details of many UWS WP programs are available from the website (UWS, 2014).

Access projects

Access projects include a wide range of interventions, starting at year 3 with literacy projects, years 5 and 6 aspiration raising and then through all years to year 12 with confidence, raising, preparation for higher education, management and leadership skills, enhancing confidence to complete high school studies and progress to tertiary education. The Pathways/VET program identifies alternative pathways towards enrolling in university from the traditional Higher School Certificate (HSC) route. Aspiration and confidence building programs are delivered using innovative methods to targeted equity groups and include events specially designed for Aboriginal and Torres Strait Islander people; young people and families from a Pacific background; children in Out-Of-Home-Care and local communities linked to an Australian Rules Football club. On-line and face-to-face assistance is available to students with their academic studies in several subjects along with HSC to enhance confidence in their academic abilities. Professional development of teachers in providing opportunities for students is included in the program along with diagnostic attitudinal student surveys relating to self-engagement in education.

Retention projects

All commencing students at UWS benefit from a robust commencement and orientation procedure. Every student is contacted personally and is offered advice and contact details of pastoral and academic support facilities. Contacts are followed up assiduously but sensitively and confidentially by student peers and mentors, who especially support students from LSES backgrounds. Transition to university life is assisted by several WP programs and where necessary, students' finances are discreetly supported with emergency grants. Part-time jobs on campus are offered with the objective of assisting students' financial security while they are studying. Academic support is offered to first year students through peer-mentoring and electronic media. At UWS there is a synergy between retention programs to ensure students, once enrolled, remain to complete their studies and are supported by this holistic approach. Some outcomes of the UWS retention programs are included in the results section of this article. All of the WP projects and programs are subject to rigorous evaluation to ensure they achieve pre-planned objectives and make progress towards short, medium and long term outputs and outcomes.

Evaluation Method

The UWS Office of Widening Participation (OWP) evaluation framework procedures are in place¹ incorporating project management, equity targeting and evaluation to ensure that all projects are well-managed, cost-effective and engage the target audience of LSES background and other equity group students. In addition, the evaluation methods for all programs comply with good ethical practice (AES, 2006).

Approach of the Evaluation Framework

The WP evaluation framework is based on the Australian Government Department of Finance and Administration Treasury requirements (DFA, 2006a) and the guidance (DFA, 2006b) sets out the best practice for determining appropriate program objectives consistent with Australian Government policies. The approach of the WP evaluation framework is therefore set inside government guidelines; it is also compatible with evaluation strategies within UWS and is specifically linked to the reporting requirements for HEPPP funding and aligned with the Commonwealth/UWS Mission-based Compact (Australian Government, I.P.). There are four stages in the evaluation framework which have been recommended by international best practice: basic monitoring; assessment of targeting; measurement of outcomes; assessment of value for money (HEFCE, 2007). The overarching objectives of all WP projects are: students' aspirations and motivation for higher education are enhanced; students' knowledge about university increases including access pathways, university life and career options; students' academic potential is enhanced; students' family knowledge about higher education is broadened; widening participation projects are valued by community partners and stakeholders (UTS, 2012). Depending on the type and scope of the project, one or all of these objectives will be included in the evaluation plan for the project under consideration. Wherever possible for the sake of optimum ease of use, efficiency and effectiveness, surveys should be delivered through electronic means. All surveys should include questions that enable continuous improvement of the project and qualitative feedback on the satisfaction levels for participants.

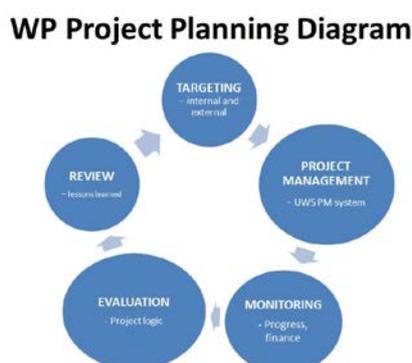
¹ All UWS Procedures mentioned in this article are unpublished in the public domain but are available upon request from the author: A.Beckley@uws.edu.au

Management of WP Programs/projects

All UWS projects administered by the Office of Widening Participation (OWP) have their inception and commencement through a three stage process: (i) targeting of equity groups; (ii) project planning including project logic; (iii) evaluation plan. This process offers a consistent method for managing projects and controlling budgets, while ensuring that projects are on track to achieve financial and educational outputs and outcomes.

- (i) **Targeting of equity groups:** WP project managers are given detailed guidance on how to target equity groups within the geographic region and within the individual school.
- (ii) **Project planning:** OWP utilises the corporate UWS project management methodology (UWS, n.d.) which describes the stages of a project; the requirement that there is full documentation of: a project plan; a business case; an evaluation plan; a reporting procedure. The OWP manages projects so that they are under constant monitoring and review to ensure objectives and milestones are being achieved.
- (iii) **Evaluation processes:** The OWP evaluation method is based on best practice of a seven step process: (i) programme objectives (SMART); (ii) evaluation questions; (iii) methodology; (iv) evaluation materials; (v) sampling; (vi) data analysis; (vii) reporting (AHGTM, n.d, p.4). Projects funded in the Bridges program are externally evaluated by consultancy company KPMG, but the OWP method is compatible with the external requirements (KPMG, 2013).

Figure 2: WP Project planning diagram. Source: Author

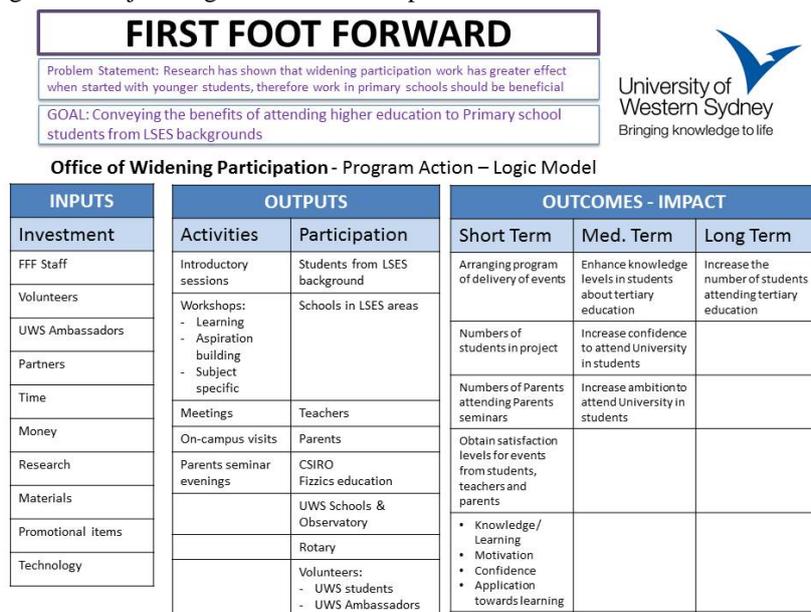


Project Logic

There is a project logic required for each project which is a succinct statement about the scope and rationale of the initiative, which justifies its existence. The logic sets out, on one page only, a problem statement; goals of the project; information about inputs, outputs, partnerships; and the short, medium and long term objectives (UWEX, 2010). Other reasons to use a project logic are:

- ‘Helps clarify the policy and project intent
- Assists in communicating with key stakeholders
- Helps support implementation fidelity – rationale for project
- Aids in focusing on key elements of the project
- Aligns out resources and actions with intended outcomes
- Can help to understand what worked to produce outcomes’ (Goodrick, 2014, p.34)

Figure 3: Project Logic – worked example: First Foot Forward. Source: Author



Targeting of Equity Groups

According to Harrison (2009, p.66), ‘Targeting is central to widening participation’ and in order to comply with government funding requirements relating to spending public money on WP projects, it is good practice to have accurate and responsive targeting processes that can identify the focus for the participants of the project such as LSES background students (HEFCE, 2008). Once the targeting practice has been operationalized, detailed records should be kept so that end-of-year reports back to government can be completed easily, ethically and with precision to demonstrate that public money has been spent wisely and for the purpose intended. The OWP at UWS recommends external targeting within the university catchment area and internal targeting to ensure that most, if not all, of the students accessing WP projects are within the pre-planned equity groups (*Higher Education Support Act 2003*).

The definition of LSES background was based on a combination of the ICSEA² and SEIFA³ school socio-economic scores linked to other Government listings and government recognised equity factors (DIISRTE, 2010). However, from 2014, targeting of government schools in New South Wales (NSW) is linked to the school score from the Family Occupation and Education Index (FOEI) Resource Allocation Model (NSW E&C, 2013). Once potential schools for the project are identified, project managers, in consultation with OWP staff, also take into account whether UWS or other universities are already working with the school, and the nature of the interventions. Once all factors have been considered, a final decision to approach the school is made.

In relation to internal targeting at the chosen school, new procedures have recently been agreed with school Principals participating on the *Fast Forward* program to carry out confidential anonymous *internal* targeting of students within their schools so that equity and deprivation factors can be considered when choosing students who will participate in WP

² ICSEA = Index of Community Socio-Educational Advantage available from the *My school* website: <http://www.myschool.edu.au/>

³ SEIFA = Socio-Economic Indexes for Areas – available from Australian Bureau of Statistics (ABS) website: <http://www.abs.gov.au/>

programs. This process is currently being tested for its accuracy and maintenance of confidentiality; schools also make a judgment on the ability of the student to successfully progress to tertiary education.

All surveys consist of a set list of 'demographic' questions to enable accuracy, comparison of data and long-term tracking; the remainder of the questions relate to qualitative aspects of the satisfaction levels of the stakeholders in the program and its learning outcomes (Cunningham, 2012, p. 41). In terms of stakeholders, the main ones are students, but all programs, where appropriate, survey Teachers, Parents and Community Influencers to gauge their satisfaction and obtain feedback. A good balance needs to be established between quantitative and qualitative measures to ensure issues relating to WP are explored and feedback is obtained. Themes should be measured, such as those mentioned above, by using a co-ordinated set of measures and standardised questions for surveys where possible. Project managers should be assisted to produce standard evaluation reports by the relevant manager who also monitors that the evaluation framework is cost-effective, user-friendly and economical with time and effort. The framework readily produces data that identifies whether outputs and outcomes have been achieved and that the project has produced good value for the public money being spent on WP. However, it should be noted that different types of programs may carry additional costs, for example WP programs targeted at out-of-home-care students will cost more per student than others. Also, the greater the intensity of the program, in terms of time spent with each student, the greater the cost.

Success/Impact/Reporting factors:

Research has indicated that WP work with students in years 5 and 6 (aged around 10 years) will provide enhanced outcomes in terms of instilling greater confidence and aspiration towards remaining in education to complete year 12 and progressing to tertiary education (Heckman and Rubinstein, 2001; OECD, 2012b). A report by the Australian Productivity Commission found: 'Results from trials and programs show that good quality early childhood education, particularly for children from socioeconomically disadvantaged backgrounds can contribute significantly to giving them a strong start to a good education and success in school' (McLachlan et al., 2013, p. 16). However, while the overall objective of the HEPPP LSES programs is to encourage and enable more people from LSES backgrounds to participate in higher education and to succeed within higher education, there are a number of factors that make the evaluation of access programs more problematic: (i) the programs take years to have an impact; (ii) the difficulty in tracking outcomes for participants to enrolling in university, given the lack of a unique student identifier, and privacy issues around tracking students.

For retention programs, the objective is to enable effective transition into higher education and to either achieve parity in outcomes between equity students and other students regarding success, retention and completion, or improvements on outcomes on previous years for that equity group. WP programs are subject to cost-benefit analyses by means of detailed management consideration of funding for programs based on the number of students benefitting, the perceived outcomes and the relative cost in terms of finance and resources, including opportunity costs. Cost benefit analyses are usually applied to the subject of 'economic returns to education' which has been researched in several studies (Dickson and Harmon, 2011; Harmon, Oosterbeek and Walker, 2000; Leigh, 2008). Most organizations should have their own reporting systems in place for summative or formative evaluations, monitoring and review of progress and outcomes. In addition, Government bodies will

usually require annual reports which will have to demonstrate that public money was spent wisely, only on the projects specified, and is achieving the planned outcomes.

Results

Outcomes for all WP projects and programs are evaluated and monitored constantly. Additionally, outcomes are published through government sources and publicly available reports; the following section discusses and analyses both internal and external data sources, the origin of which are cited. Although at UWS, the undergraduate success rate⁴ for LSES background students is lower than benchmark groups, the state and the sector results, it remains steady at around 80% and is close to the results for all UWS students (DIISRTE, 2013, pp. 41-43). However, the attainment rate⁵ (20.2%) at UWS for LSES students is considerably higher than the benchmarked groups and remains close to the all-student participation rate⁶ of 20.6% (DIISRTE, 2013, pp. 41-43). Thus, LSES students at UWS progress well in their studies in comparison to their peers and all undergraduates.

Evaluation of programs can demonstrate that participation in WP programs will considerably enhance the impact outcomes for students and those from LSES backgrounds in particular. An example of a medium term (one year) impact outcome was the comment from a teacher relating to the *Books in Schools* project: “I’m writing to let you know that this is the first year that we have had zero year five students in the bottom band for reading in NAPLAN. I believe that Books in Homes has contributed to this outstanding result!” (Personal communication: 2013, November 4). An example of a long term outcome (four years) was that in 2013, 55.34% of all students participating in the UWS *Fast Forward* program⁷ had university study as their post-school destination, plus a further 15.27% with TAFE as their destination. The overall data showed that 89% (n = 246) of students in the *Fast Forward* program have engaged in further study beyond year 12. In surveys across all the years (9 - 12) in the *Fast Forward* program, 88.70% (n = 1929) agreed or strongly agreed that they had a better understanding of higher education and the options available to them and were more confident about making decisions about their future after participating in the on-campus events. This is the sort of impact that will be necessary to achieve the government targets mentioned earlier (Bradley, 2008, p.xiv).

Furthermore, once students are enrolled at university it is necessary to make detailed arrangements for practical facilities, pastoral care, support and guidance on a number of issues to ensure high rates of student retention and correspondingly low attrition rates, particularly for LSES students. Students from a LSES background may face particular issues such as being ‘first in family’ and have little knowledge or experience of the trials and conventions of tertiary education within their immediate contacts; this could mean that concerns about students’ own abilities, levels of confidence and aspirations need to be addressed. Such students can also have financial (Bexley, Daroesman, Arkoudis and James, 2013; McLachlan et al., 2013, p. 93) or study issues that should be addressed with helpful and confidential mentoring and guidance. In a study by Devlin, Kift, Nelson, Smith and McKay (2012, p.1) it was found that an ‘empathic institutional context’ would assist LSES students.

⁴ The success rate is the EFTSL of units passed by students from Low SES CDs as a percentage of the EFTSL of all units attempted by students from Low SES CDs

⁵ The attainment rate is the proportion of all undergraduate students who completed their studies in a given year who are from Low SES CDs.

⁶ The participation rate is the proportion that the Low SES Interim Indicator represents of all undergraduate students.

⁷ Approximately 60% of students in the Fast Forward program are identified as from a LSES background.

Such an environment consisted of: inclusive teaching strategies; student agency; life and learning support; recognition of financial challenges. Many retention programs in UWS use volunteer and paid second and third year under-graduate students in a mentoring or tutoring role and this method is accepted well by new students; there is also a holistic approach to the wide range of retention programs (mentioned earlier) to benefit from optimum synergies. In addition, attention must be paid to the specific culture and heritage of students (Ballantyne, Madden and Todd, 2009; Benseman, Coxon, Anderson and Anae, 2006; Benson, Hewitt, Devos, Crosling and Heagney, 2009; Boulton-Lewis, Marton, Lewis and Wilss, 2000) and changes made to ensure inclusion.

Although it has been reported that university attrition rates of retention ‘have not changed measurably’ (Hare, 2014, p.25; Edwards and Radloff, 2013), some universities are doing much better than others according to a recent Higher Education Services analysis, the results of which are shown in Table 1, below.

Table 1: ‘Keeping them enrolled’

University	Attrition Rate	%age of LSES
UWS	11.88	24.90
Newcastle	13.75	26.30
Flinders	14.73	21.20
VU	14.98	24.10
Average	12.82	18.70

Source: Department of Education: Attrition rate for 2011, published March 2014. Retrieved 03 June 2014 from: <http://docs.education.gov.au/node/33863>

Also, research has been completed into the measures necessary to achieve higher rates of retention and lower attrition (Maher and Macallister, 2013) by focusing on what works (Nelson, Duncan and Clarke, 2009, p.50). Data contained in a Government report stated that the overall attrition rate in Australian universities was 21.2% for all domestic under-graduate students ‘compared with 18.0% for all international students’ (DEST, 2004, p.3). The more recent and lower attrition rates achieved by the universities in the HES study can be favourably compared with the government figures.

The attributes of the more structured and strategic approach in relation to project planning and evaluation can accrue many beneficial outcomes. It will directly lead to more robust targeting of equity students, improved objective setting to attain challenging but achievable outputs and outcomes. It ensures planned and targeted defined measures of success to establish impact rather than a list of activities. The approach provides continuous improvement of programs due to the monitoring and review of feedback on lessons learned and action research. Achieving the basic model of program/project management can set the scene for more detailed work on cost benefit analysis and impact analysis if required. By adopting the WP evaluation framework, colleagues have noticed that evaluation processes have been accepted and finally welcomed by program/project managers, as they can highlight the success of their work.

Conclusion

It has been estimated that participation in tertiary education by LSES background groups will not increase in the current system (Karmel and Lim, 2013). This assertion was further supported by work carried out by the National Centre for Vocational Education Research (NCVER, 2014) and the Group of Eight Universities (Go8, 2014). Despite this corroboration of the situation, the contention was challenged by Jan Thomas, University of Southern Queensland, who pointed out that figures from non-metropolitan universities give a

different result (Ross, 2014). However, if the result is that higher percentages of LSES students will not be recruited through the demand-driven system it is evident that *something different must be done to effect WP*. Between the commencement of the demand driven system in 2009 and 2012, there has been an increase of 21.3% all undergraduate commencement, but this is slowing down and will not achieve the Bradley targets (Edwards and Radloff, 2013). According to a study completed by the Australian Council for Educational Research (ACER), the current cohort of LSES background students makes up 18.2% of student commencements, but they forecast this will not improve much over the next few years unless changes are made (Edwards and Radloff, 2013). The recent ‘demand-driven review’ (Kemp and Norton, 2014, p.55) concluded: ‘Short of requiring higher education providers to take low SES applicants over others, the demand driven system is a necessary (although not sufficient) condition of continued increases in low SES enrolments’ (para. 4.3.2). We now await the outcome of the 2014 government budget proposals on higher education to gauge their effects on the participation of LSES background students.

The Council of Australian Governments report *Education 2012*, concluded that ‘More than a quarter of young people are not fully engaged in work or study after leaving school and this has worsened over five years’ (COAG, 2013). The report went on to give depressing news that over the last five years: ‘Australia is still behind leading countries in reading, maths and science’; ‘little progress for Indigenous students’; and ‘outcomes for students from the lowest socio-economic backgrounds still poor’. The most recent research on educational outcomes found that interventions that raise the aspirations of young people will have a similar result for all students, including those likely to achieve low educational outcomes (Homel and Ryan, 2014, p.7). Apart from government targets, the well-being of young people should also be considered, as research shows strong evidence that education is directly linked to improved life chances. McLachlan et al. (2013) found a relationship between education and: ‘better labour market outcomes (employment and earnings); better health and improved life satisfaction; raised levels of civic and social engagement (volunteering, associations, interest in civic/political matters; reduced crime)’ (McLachlan et al., 2013, p.109).

These are overwhelmingly convincing arguments for universities to pursue WP programs and persist with equity and diversity themes; demographics illustrate that to get the numbers of students to maintain organizational and government growth goals, students from LSES backgrounds must be recruited for purely commercial reasons let alone philanthropic aspirations. However, it is necessary to ensure that WP programs are cost-effective and effectively evaluated to ensure that the desired or predicted outcomes are, in fact, achieved. Therefore, good practices, policies and procedures are necessary to accomplish the breakthroughs to achieve government targets and ensure good opportunities, well-being and social justice for young people in Australia.

References

- Aim Higher Greater Merseyside (n.d.) *Evaluation toolkit: A resource for evaluating Aimhigher Greater Merseyside activities and programmes*. Liverpool: Author
- Australian Bureau of Statistics (2014) *National Census Surveys*. Retrieved from: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/6227.0/>
- Australasian Evaluation Society Inc. (2006) *Guidelines for the ethical conduct of evaluations*. Canberra: Author

- Australian Government (In press) *2014-16 Mission-based Compact between the Commonwealth of Australia and the University of Western Sydney*. Canberra: Author (draft dated 2/7/2013), page 6
- Ballantyne, J, Madden, T, Todd, N. (2009) Gauging the attitudes of non-traditional students at a new campus: An Australian case study. *Journal of Higher Education Policy and Management*, 31(4), 301-313
- Benseman, J, Coxon, E, Anderson, H, Anae, M (2006) Retaining non-traditional students: Lessons learned from Pasifika students in New Zealand. *Higher Education Research and Development* 25(2), pp. 147-162
- Benson, R, Hewitt, L, Devos, A, Crosling, G, Heagney, M. (2009) *Experiences of students from diverse backgrounds: The role of academic support*, in *The Student Experience*. Proceedings of the 32nd HERDSA Annual Conference, Darwin, 6-9 July 2009, pp.545-550
- Bexley, E., Daroesman, S., Arkoudis, S., James, R. (2013) *University student finances in 2012: A study of the financial circumstances of domestic and international students in Australia's universities*. Melbourne: Centre for the Study for Higher Education.
- Boulton-Lewis, G.M, Marton, F, Lewis, D.C, Wilss, L.A. (2000) Aboriginal and Torres Strait Islander university students' conceptions of formal learning and experiences of informal learning. *Higher Education* 39(4) pp.469-488
- Bradley, D. (2008). *Review of Higher Education*, Final Report. Canberra: Australian Government
- Bridges to Higher Education (2014) *Bridges to Higher Education Program*. Retrieved from: <http://www.bridges.nsw.edu.au/>
- Council of Australian Governments (2013) *Education in Australia 2012: Five years of performance. Report to the Council of Australian Governments, 21 October 2013*. Canberra: Author
- Cunningham, D. (2012) *University of Western Sydney. Low SES programs: Data collection and reporting roadmap*. Sydney: Altis Consulting Pty. Ltd. (Unpublished)
- Cuthill, M. and Schmidt, C. (2011) Widening participation: Challenges confronting a research-intensive university. *Journal of Institutional Research*. 16(2), 13-25.
- Department of Education (2014) *Higher Education Participation and Partnerships Program*. Canberra: Australian Government. Retrieved from: <https://education.gov.au/higher-education-participation-and-partnerships-program-heppp>
- Department of Education, Science and Training. (2004) *Higher education rates attrition rates 1994 to 2002: A brief overview*. Canberra: Australian Government.
- Department of Finance and Administration (2006a) *Australian government: Introduction to cost-benefit analysis and alternative evaluation methodologies and handbook of cost-benefit analysis*. Finance Circular No. 2006/01. Canberra: Australian Government.
- Department of Finance and Administration (2006b) *Introduction to cost-benefit analysis and alternative evaluation methodologies*, January 2006. Financial Management Reference Material No.5. Canberra: Australian Government.
- Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education. (2010) *New South Wales. National Smarter Schools Partnerships: Implementation plan*. Canberra: Australian Government
- Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education. (2013) *2012 Institutional performance portfolio: University of Western Sydney*. Canberra: Australian Government
- Devlin, M., Kift, S., Nelson, K., Smith, L. and McKay, J. (2012) *Effective teaching and support of students from low socioeconomic status backgrounds: Resources for Australian higher education*. Canberra: Department of Industry, Innovation, Science,

Research and Tertiary Education.

- Dickson, M., and Harmon, C. (2011) Economic returns to education: What we know, what we don't know, and where we are going – some brief pointers. *Economics of Education Review* 30 (2011) 1118-1122.
- Edwards, D., and Radloff, A. (2013) *Higher education enrolment growth, change and the role of private HEPs*. Melbourne: Australian Council for Private Education and Training.
- Gale, T. (2011) Expansion and equity in Australian higher education: three propositions for new relations. *Discourse: Studies in the Cultural Politics of Education*, 32:5, 668-685
- Gonski, D (2011) *Review of funding for schooling*. Final Report, December 2011. Canberra: Department of Education, Employment and Workplace Relations.
- Goodrick, D. (2014) Course notes for: *Fundamentals of program evaluation in public policy*. ACSPRI 2014 Summer Program. Canberra: Australian Consortium for Social and Political Research Incorporated.
- Group of Eight, Australia (2014) *Policy note: Demand driven funding and equity*. Canberra: Author
- Hare, J. (2014, March 12) Select few win war on attrition. *The Australian*, Higher Education, page 25.
- Harmon, C., Oosterbeek, H., Walker, I. (2000) *The returns to education: A review of evidence, issues and deficiencies in the literature*. London: Centre for the Economics of Education.
- Harrison, N. and Hatt, S. (2009) 'Disadvantaged Learners': Who are we targeting? Understanding the targeting of widening participation activity in the United Kingdom using geo-demographic data from Southwest England. *Higher Education Quarterly*, Volume 64, No.1, January 2010, pp 65-88.
- Heckman, J. J. and Rubinstein, Y. (2001) The importance of non-cognitive skills: lessons from the GED testing program, *American Economic Review*, vol. 91, issue 2, pages 145-149.
- Higher Education Funding Council for England (2007) *Measuring success: A guide to evaluation for Aimhigher*. London: Author.
- Higher Education Funding Council for England (2008) *Guidance for Aimhigher partnerships*. London: Author
- Homel, J. and Ryan, C. (2014) *Educational outcomes: the impact of aspirations and the role of student background characteristics*. Adelaide: Australian Government
- Hurst, D. (2013, March 15). Difference in school opportunity 'alarming'. *Sydney Morning Herald*.
- Karmel, T and Lim, P. (2013) *Socioeconomic disadvantage and participation in tertiary education: preliminary thoughts*. Adelaide: NCVER
- Kemp, D. and Norton, A. (2014) *Review of the demand driven funding system*. Canberra: Australian Government.
- Kennedy, H. (1997) *Learning works: Widening participation in further education*. Coventry: Further Education Funding Council
- KPMG (2013) *Evaluation of Bridges to Higher Education*. Preliminary Report, October 2013. Unpublished
- Leigh, A. (2008) Returns to education in Australia. *Economic s*, Vol. 27 No.3. September 2008 pp.233-249
- Maher, M., and Macallister, H. (2013) Retention and attrition of students in higher education: Challenges on modern times to what works. *Higher Education Studies*, Vol. 3, No. 2; 2013. 62-72.
- McLachlan, R., Gilfillan, G., Gordon, J. (2013) *Deep and persistent disadvantage in*

- Australia*. Canberra: Australian Government
- Micsko, J. (2014, March 13) Private communication with Head of Fast Forward Program, UWS.
- National Centre for Vocational Education Research (2014, March 19) *NCVER research backs up Go8 findings into equity targets*. Press release. Adelaide: Author
- Nelson, K. Duncan, M. Clarke, J. (2009) Student success: The identification and support of first year university students at risk of attrition. *Studies in Learning, Evaluation, Innovation and Development* 6(1), pp. 1-15
- NSW Education & Communities (2013) *2014 Resource allocation model equity loadings for Aboriginal and socio-economic backgrounds*, version 2, October 2013. Sydney: Author.
- Organisation for Economic Co-operation and Development (2012a) *Better skills better jobs better lives: A strategic approach to skills policies*. Paris: OECD Publishing.
- Organisation for Economic Co-operation and Development (2012b) *Equity and quality in education. Supporting disadvantaged students and schools*. Paris: Author.
- Religious Education (1932) Crime prevention through education. Editorial comment and news notes. *Religious Education*, 27, Jan/Dec. 1932.
- Ross, J. (2014, March 24) Uncapped system 'boosting equity': regional universities. *The Australian*.
- Schwab, K. (2012) *The global competitiveness report 2011-2012*. Switzerland: World Economic Forum.
- University of Technology Sydney (2012) *UTS monitoring and evaluation manual for building aspiration projects: Widening participation strategy 2010 – 2015*, Sydney: UTS Equity and Diversity Unit, p.7
- UWS (2014) *Office of Widening Participation: WP projects*. Penrith: Author. Retrieved from: http://www.uws.edu.au/widening_participation
- UWS Organisational Development Department (n.d.) *UWS project management methodology*. Penrith: University of Western Sydney.
- University of Wisconsin (2010) *Program development and evaluation: Logic model*. Retrieved from: <http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>
- Walker, M (2008) Widening participation; widening capability, *London Review of Education*, 6:3, 267-279