Australian Journal of Adult Learning

Contact details

Rob Townsend, PhD candidate, School of Education, Victoria
University, c/ PO Box 46, Gunbower Victoria 3566
Tel: 03 5487 1557 Fax: 03 5487 1567
Email: robert.townsend@research.vu.edu.au

Challenges in understanding and assisting mature-age students who participate in alternative entry programs

Marguerite Cullity Centre for Study of Higher Education University of Melbourne

Volume 46, Number 2, July 2006

Mature-age students are a significant group within the Australian sub-degree and undergraduate commencing cohort. Nevertheless, little is known about mature-age student backgrounds or factors that affect their participation at university. This paper draws on a case study that examined the nature and outcomes of Australian alternative entry programs for mature-age students. Specifically, the paper explores the demographic characteristics of mature-age students who participate in these programs. Australian research indicates that mature-age student circumstances influence their university aspirations and awareness of academic study. An understanding of mature-age student characteristics assists program organisers in designing effective alternative entry courses for unmatriculated, return-to-study and equity group mature learners. It is through a shared knowledge of mature learner

circumstances and appropriate pedagogy that alternative entry program personnel can monitor and advance student participation at university.

Introduction

Australia's universities have a greater mix of students than in many countries. In comparison to other countries, a smaller proportion of higher education students commence directly from school. There is also a greater proportion of mature-aged students, more students studying part-time and more students via distance education programmes (Nelson 2002: 5).

Mature-age students (21 years and over) constitute a notable group within Australia's higher education sector. Since the 1950s, matureage ('mature') students have represented a significant group of the commencing undergraduate cohort. In 2002, for instance, mature students comprised 38 per cent of the undergraduate intake (Commonwealth Department of Education, Science & Training 2002). Mature students help to diversify the social and age mix within the undergraduate population. Higher education also represents a means for mature learners to advance their life opportunities and outcomes. For these reasons, it is vital that mature students are encouraged to participate in academic study (Abbott-Chapman, Braithwaite & Godfrey 2004; Baldwin 1991; National Board of Employment, Education & Training/Higher Education Council [NBEET/HEC] 1996; Ramsay 2004; Rosenman 1996).

Some mature students lack admission criteria to higher education (for example, final year of school results, further education Certificate IV). In these circumstances, students' education backgrounds can prohibit them from attending university (Abbott-Chapman et al. 2004; Anderson & Vervoorn 1983; Cullity 2005; Dawkins 1987,

1988; Karmel 1975; NBEET/HEC 1996; Ramsay 2004). To re-dress this concern, 13 of the nation's 44 universities conduct alternative entry programs (AEPs) for mature students. Typically, students are required to complete two or more AEP subjects (for example, Earth Science, Introduction to Philosophy). Alternative entry programs provide mature learners with admission criteria to university and introduce students to academic culture, including the practices and expectations of study. Without an alternative entry route to university, undergraduate study is not possible for some adults. The immediate past Minister for Education, Brendan Nelson, stated:

There must be equality of opportunity in higher education to allow individuals to fulfil their potential, regardless of their personal circumstances and backgrounds.

There should be no systemic barriers to participation. There should be provision for the varying needs of students from different backgrounds. Special intervention measures may be needed to encourage participation from groups that are under-represented in certain areas, or to sustain their success, including 'second chance' [unmatriculated, return to study and/or older students] opportunities and dedicated support (Nelson 2002: 2).

Background to the paper

The paper illustrates how mature students' decisions to attend an AEP are influenced by a complex mix of adult circumstances. The snapshot of mature learners highlights the personal, social, attitudinal, educational, cultural, vocational and financial circumstances that can affect their beliefs about academic study. This paper is taken from a case study inquiry that examined the nature and outcomes of alternative entry programs for mature-age students. The project explored, in part, Australian research that investigated AEPs for mature students. The literature shows the relevance of: (i) investigating mature learner characteristics; (ii) understanding

how mature student circumstances affect their higher education opportunities and outcomes; and (iii) considering the backgrounds and needs of unmatriculated, return-to-study and equity group mature learners.

The case study did not explore AEPs for Indigenous or non-English speaking background (NESB) students. The decision to narrow the research focus was based on the awareness that AEPs for Indigenous and NESB students are conducted for 'all age' rather than mature learners. Therefore, this overview of mature learner circumstances is constrained by the research boundaries (that is, AEPs for matureage students), the limited amount of AEP research available, and the dated nature of some of this work. Nevertheless, the paper provides an insight into issues that affect mature learner involvement in alternative entry courses.

Mature learners illustrate a wide social mix of students

Mature students who participate in an AEP represent a broad spectrum of Australian society. Some of them have lived in middle or high income households, attended independent schools and completed Year 12. Typically, these students have undertaken paid employment or attended to home duties and, therefore, delayed university study (Osman 1981). Their final year of school qualification, however, is no longer admissible for entry to higher education. Possibly a closer portrayal of AEP mature students comprises adults who come from a low socio-economic status background, left school prior to completing Year 12, are first-in-the-family to study, and are either in paid employment or recipients of social security benefits (see Abbott-Chapman et al. 2004; Penglase 1993).

How many mature students participate in a program?

It is difficult to determine the number of mature students who participate in and complete an alternative entry program. Annually, Australian universities submit to the Department of Education, Science and Training (DEST) data that show commencing student numbers and admission routes to university. Student entrance routes are recorded in DEST Data Element No. 327: 'Basis for Admission to Current Course.' The DEST 'alternative admission' sub-categories relevant to this inquiry are:

- Mature-Age Special Entry, for example, Special Tertiary Admission Test [STAT] (Ramsay, Tranter, Sumner & Barrett 1996)
- Special Entry Provision, for example, specific tests for equity group students
- Other Basis applicants whose academic credentials cannot be matched to university admission system processes or Tertiary Admissions Centre requirements (Ramsay et al. 1996)
- Exam/Assessment held by, or conducted on behalf of, the admitting university

An awareness of AEP student numbers is blurred as some programs can be assigned to more than one DEST 'Basis for Admission to Current Course' sub-category (DEST, personal communication March 13 2002; Ramsay et al. 1996). Due to this overlap of sub-categories, Ramsay et al. have concerns about the "reliability of basis for admission data" in reporting student entry routes (1996: 28).

The lack of data regarding AEP mature student participation is further complicated as few universities publish information showing the number of mature students who enrol in, or complete, an alternative entry course. In addition, DEST student data rarely illustrate the combined elements of 'age' and 'basis of admission'. Nonetheless, aggregated DEST data sets (see Table 1 following) indicate the number of mature students (21 years plus) with alternative admission credentials.

Table 1: Mature students admitted to university via an alternative admissions route (taken from DEST data sets since 1998 – exact years unknown)

DEST, Basis for Admission to Current Course alternative entry sub-categories	Alternative admission mature students (21 years+) by age and number					Fotal of alternative admission mature students	Alternative admission mature students, as % of total of new undergraduates (n = 367 989)
DEST, Basis f Admission to Current Cour alternative er sub-categorie	21–29	30–39	40–49	50–59	+09	Total of admiss	Alte admiss stude of tol underg
Mature-Age Special Entry	4 404	2 506	1 216	307	47	8 480	2.30%
Special Entry Provision	2 276	1 227	569	156	29	4 257	1.16%
Exam/ Assessment	6 228	3 149	1 591	412	50	11 430	3.11%
Other Basis	15 442	5 733	2 393	670	105	24 343	6.61%
TOTAL	28 350	12 615	5 769	1545	231	48 510	13.18%

Adapted from unpublished aggregated DEST data sets compiled by Ian R Dobson, Centre for Population and Urban Research, Monash University, Victoria

Table 1 suggests that Other Basis admission procedures are the most likely alternative entry route completed by mature students. Other Basis strategies include alternative entry and enabling programs (that is, non-award preparation for study, for instance, Mathematics of Nursing Student). Significantly, all age clusters of mature learners show a preference for this type of admission strategy. The 24 343 mature students accepted to university via an Other Basis procedure constitute 50.18 per cent of all mature students with alternative

entry qualifications. As shown in Table 1, the Other Basis category of students represents 6.61 per cent of the undergraduate commencing student intake. These data are consistent with 1993 and 1994 student admission figures that show, respectively, 9.7 per cent and 7.0 per cent of 'all age' undergraduate commencers were admitted by way of an Other Basis admission procedure (DEET, as cited in Dobson, Sharma & Haydon 1996). The data shown in Table 1 suggest the significance of AEPs in assisting mature students to participate at university. The information, nevertheless, should be interpreted cautiously as the sub-category Other Basis includes enabling as well as alternative entry programs.

Circumstances and factors that influence mature learner participation

Age

Alternative entry program research indicates that there are two main age groupings of mature students: 20-30 and 30-40 year olds (Collins & Penglase 1991; Cullity 2005; Isaacs 1982; McNamee & Maxwell 1993; Moses 1978; Osman 1981; Smith 1987b; Stehlik, Pablo & Lansangan 1993; Stephenson & Munn 1989). Most of these studies show that 20-30 year olds are more likely than other age groups to participate in an alternative entry course. Specifically, 21 to 29 year olds make up the largest number, over 50 per cent, of mature students admitted to university via an alternative entrance route. A deeper analysis (see Table 1) shows that 21 to 25 year olds represent over one-third of all alternative entry students. These data suggest that 21 to 25 year olds were early school leavers or unmatriculated school completers. This assumption is made on the basis that their Year 12 results would be accepted, time wise, for admission purposes. The decline of student numbers as age increases highlights the significance of AEPs for young and middle-aged adults.

Gender

A greater number of women than men enrol in AEPs for mature learners (Barrett 1986; Beasley 1985; Broughton & Merley 2003; Collins & Penglase 1991; Cullity 2005; Isaacs 1982; McNamee & Maxwell 1993; Osman 1981; Penglase 1993; Ramsay 2004; Ramsay et al. 1996; Smith 1987b; Stehlik et al. 1993; Stephenson & Munn 1989). Research suggests that social and vocational matters affect the age at which males and females commence study. In particular, women who are early school leavers (Barrett, Beauchamp & Powell 1979) or whose families discouraged girls from attending university (Osman 1981; Isaacs 1982) are keen to enrol in alternative entry courses. These students regard alternative entry and university as ways to "catchup' on their education" (Barrett et al. 1979: 3). One suggested reason for the high number of women AEP participants is that male early school leavers return to study sooner than unmatriculated females (King, as cited in Ramsay 2004). Ramsay also considers the high AEP participation rate of women occurs as males show a preference to enrol in Vocational Education and Training (VET) courses and they, then, use these credentials as an alternative access route to university.

The notion of gender differences within higher education participation rates was explored by Birrell, Calderon, Dobson and Smith (2000). Similar to Ramsay (2004), Birrell et al. observed that young males, especially males from "blue-collar backgrounds", are more likely to enrol in a further education course than in undergraduate study (2000: 56). Birrell et al. suggest that men's education choices are influenced by "cultural factors", particularly the values held by "working-class communities" regarding the "appropriate career aspirations of boys" (2000: 56).

Ethnicity

Generally, Australian resident English-speaking background learners who come from a non-Indigenous upbringing participate in AEPs for mature students. Indigenous and local NESB students also enrol

in these programs. Commonly, however, universities with high catchments of Indigenous and NESB students conduct a dedicated program for these learners. For example, Charles Darwin and James Cook universities conduct AEPs for Indigenous students, and La Trobe and Curtin universities hold programs for NESB students. Some universities also conduct AEPs for international NESB students.

Social background, and issues that complicate an understanding of student circumstances

Face-to-face interviews with AEP staff indicate a change within the social backgrounds of students who enrol in these programs (Abbott-Chapman et al. 2004; Cullity 2005). Staff suggested that the student demographic has changed from a high intake of middleincome women with families to a broader social, gender and age mix of students. It appears that current AEPs are more likely to include learners in their early twenties, students who have failed Year 12 exams, employees who want to upgrade their vocational credentials as well as middle income women who want to study for personal growth reasons. Staff, from two separate AEPs, also suggest the numbers of males, long-term unemployed and people on social security benefits have increased (Cullity 2005). A staff member stated:

They are a younger, fragile, less skilled, less confident student ... The traditional upper-middle-class mum has changed to a broader demographic: people with mental illness, more people with issues (Cullity 2005: 182).

There are limited data to show the number or percentage of equity group students who participate in an alternative admission program. Information about student background or level of disadvantage is often assessed from anecdotal information regarding learner education, employment histories, place of residence, household income or social security documents (see Abbott-Chapman et al. 2004). Alternative entry studies locate a reader within the social and educational circumstances experienced by students and use this information to illustrate learner background. Alternative entry

program research suggests that students with a low socio-economic status or rural/regional background are more likely than other equity groups to participate in a program (Abbott-Chapman et al. 2004; Bond 1996; Broughton & Merley 2003; Cheong 2000; Cullity 2005; Fulmer & Jenkins 1992; McNamee & Maxwell 1993; Munns, Nanlohy & Thomas 2000; Murphy, Cobbin & Barlow 1992; Penglase 1993).

Significantly, socially and educationally disadvantaged mature learners remain some of the most under-represented students in the Australian higher education community (Abbott-Chapman et al. 2004; NBEET/HEC 1996; Ramsay 2004). The use of AEP selection practices (Gale & McNamee 1996) and increases to the student Higher Education Contribution Scheme (HECS) (Ramsay) are matters that can adversely affect the number of equity group mature students who attend university. Ramsay argues that research should explore why equity group and under-represented mature student numbers have not improved.

The notion of 'learner privacy' complicates the collation of student demographic data. Some AEP staff are concerned about protecting student confidentiality (Penglase 1993; Smith 1987a, 1987b). Program staff who hold this belief argue against documenting student backgrounds or following-up on program non-completers. Smith, for instance, indicates that student withdrawal from an AEP is simply a "matter of fact that we must accept" (1987a: 23). The author reveals tension about requesting information from alternative admission students:

No personal information is demanded of students at any time except their names, addresses, phone numbers and ages. Their occupations, family and financial circumstances and prior education are considered to be their own affair and quite irrelevant to our purpose (Smith 1987b: 8).

Contrary to Smith (1987b), Bond (1996) and Cobbin and Barwood (1993) contend that it is through a pooled knowledge of student

backgrounds and program findings that AEP providers can consider issues that affect student engagement in higher education.

Education and family background

Education experiences. Mature students who participate in an AEP represent learners with different education backgrounds but a desire to participate in higher education. Program research shows that a little over one-half of the mature students who attended an AEP left school prior to completing secondary education (Abbott-Chapman et al. 2004; Beasley, 1985; Collins & Penglase 1991; Greagg 1981; Isaacs 1982; Osman 1981; Ramsay et al. 1996). Even so, between 30 and 60 per cent of the students who were early school leavers have submatriculation credentials; for example, a trade certificate or diploma studies (Beasley 1985; Collins & Penglase 1991; Isaac 1982s; Osman 1981; Ramsay et al. 1996). These data suggest the relevance of lifelong learning to student personal and/or vocational well-being.

The significant number of early school leavers who participate in further education or trade apprenticeships indicates that these students left school for reasons other than a disinterest in learning. In particular, some AEP studies allude to social issues (namely, the nature of the local community, employment opportunities and family values) as matters that influence students' decision to leave school and undertake sub-degree studies (Beasley 1985; Collins & Penglase 1991; Cullity 2005; Osman 1981).

The socio-demographic nature of a community and the vocational opportunities it offers can affect the level of post-compulsory school education achieved by community members (Cheong 2000). Specifically, Collins and Penglase (1991) and Smith (1987b) found a high participation rate of 20 to 30 year olds in the Open Foundation Course conducted at the University of Newcastle. The city of Newcastle has one of the highest rates of non-Year 12 completers in Australia. Cheong suggests the low rate of Year 12 completers is

one of the main reasons why young adults participate in the Open Foundation Course.

Collins and Penglase (1991) also show that 80 per cent of Open Foundation Course students have enrolled in further education or completed a trade-based certificate. The number of Open Foundation Course students with sub-matriculation credentials is larger than the figures shown in other research (for example, Isaacs 1982; Osman 1981). The high rate of continuing education completed by Open Foundation Course students may be a result of the (then) industrial nature of the city of Newcastle, a city that once required a large semiskilled and skilled workforce.

Family values. The education background and values of family members can also influence a person's decision to complete Year 12 and study at university (Abbott-Chapman et al. 2004; Andrews 1999; Birrell et al. 2000; Munns et al. 2000; Penglase 1993; West & Boon 1980). Familial attitude to learning is instrumental in determining people's post-compulsory education choices and/or experiences (Birrell et al. 2000; James 2002). The effect of parental education and family ideals on student learning reveals how cultural factors can influence a person's higher education goals.

The low aspirations of family members (for example, 'uni is not for girls', 'study has no relevance to your life') discouraged some AEP mature students from attending university at an earlier age. This type of attitude from family creates a situation where women, in particular, can develop low self-esteem and perceive "themselves to have little status in the community and little control over the circumstances of their lives" (Penglase 1993: 45; Munns et al. 2000). The poor selfconcept developed and held by these people is a mixture of "social and cultural reasons", for example, "gender, class and ethnicity" (Munns et al. Home: para. 1). Munns et al. conclude: "Beliefs and expectations of family members regularly played significant roles in the students' leaving of school" (2000 Home: para. 1).

Abbott-Chapman et al. (2004) examined the demographic characteristics and academic performance of AEP mature learners with a low socio-economic and rural background. Survey results showed that over 66 per cent of respondents were first-in-the-family to participate at university. Moreover, many of them had attended government schools, a measure of education disadvantage for low socio-economic status students (James 2002; Western, McMillan & Durrington 1998). Abbott-Chapman et al. claim that the social and educational backgrounds of the mature students perpetuated a climate where "higher education may be seen to be irrelevant" to people living and working in a rural area (2004: 25).

Employment and financial arrangements

The mature learners who participate in an AEP show a variety of employment backgrounds. Employed adults, retrenched people, long-term unemployed, self-funded students and social security recipients undertake these courses (Cullity 2005). In some instances, the students fund their own learning (Barrett 1986; Collins & Penglase 1991; Penglase 1993) or some of them are supported by their partners/spouses (Collins & Penglase 1993; Penglase 1991). On the other hand, Bond (1996) and Stephenson and Munn (1989) state that approximately 60 per cent of AEP participants were unemployed prior to them attending a course. Likewise, Osman (1981) shows that some of the AEP students received government pensions. The different employment and financial circumstances experienced by mature students reveal the diverse social mix of adults who participate in an alternative entry program.

Academic interests

Demographic circumstances that can influence mature learner undergraduate choices include age, gender and secondary school studies. Historically, AEP mature learners show a higher enrolment rate in arts and humanities degrees than they do in commerce or science (Archer, Cantwell & Bourke 1999; Barrett & Powell 1980;

Barrett 1986; Cullity 2005; Osman 1981; Stehlik et al. 1993; West & Boon 1980). In addition, a greater number of women than men enrol in arts or humanities studies (Cullity 2005; Isaacs 1982; Moses 1978; Geogh, as cited in Osman 1981). Conversely, a higher number of male AEP completers than female students undertake a law, commerce or science degree (McNamee & Maxwell 1993; Osman 1981). These findings suggest that gender is a relevant indicator of AEP mature learner faculty enrolment patterns. A point worth considering is whether these results reflect current equity research findings (see James, Baldwin, Coates, Krause & McInnis 2004). James et al. (2004) illustrate, for instance, significant increases in the number of women who participate in a science degree.

Issues that may affect mature student choice of undergraduate field of education include: (i) changes in community attitudes regarding the intrinsic value of higher education; (ii) the abolition of student fees in the mid-1970s; and (iii) the low number of mature students with a science background. Specifically, Moses (1978) found that a higher number of unmatriculated women than men participated in a Faculty of Arts alternative entry program. The author conducted the research at a time in Australia when there was an increased demand for university places from mature students. This was especially the case for women who wanted to 'catch-up' on lost education opportunities and a growing community interest in continuing and lifelong learning (Barrett et al. 1979; Collins & Penglase 1991; Isaacs 1982; Watkins 1979; West & Boon 1980; West & Eaton 1980). In addition, the 1970s Labor Government abolished university course fees. The removal of course fees is sometimes attributed to an increase in the number of mature students enrolling in higher education during this period (DEET 1993).

Also, AEP mature student secondary education can influence their undergraduate choices. Students who studied social science and arts subjects at school are limited in their opportunities to undertake

science or mathematics degrees (Barrett & Powell 1980). To re-dress this educational disadvantage, especially for equity group students, universities now conduct science and mathematics alternative entry and enabling programs. Science oriented AEPs provide students with the necessary knowledge to participate in their preferred degree. For instance, Griffith University's Access Program is designed, in part, to increase the number of women who participate in science and technology-based degrees (Bond 1996). Similarly, the Open Foundation Course implemented science and mathematics units to address, as Penglase suggests, "the science bogey" that can prevent prospective students from enrolling in science or mathematics courses (1993: 47).

Pedagogic issues to ponder when creating a fit between academic culture and mature learner needs

Alternative entry program research discusses some of the personal, social, educational, vocational and employment circumstances that can influence mature student higher education opportunities and outcomes. Mature learners who participate in AEPs are not a uniform or static group of learners. In some instances mature students can experience similar circumstances to each other. These similarities do not suggest there is a typical group of mature learners as their social and education outcomes can differ. This paper indicates the need to consider mature students as individuals with separate social, education, personal and vocational experiences. To suggest otherwise is to ignore unmatriculated, return-to-study and equity group mature learner characteristics that can separately or collectively affect student decisions to participate at university.

A point worth noting, however, is the suggested changes to the student demographic. Of importance are the illustrated increases in the number of young adults, men, unemployed persons and social security recipients who undertake alternative admission courses.

Since the 1980s, policy-makers and academics have stressed the importance of implementing pedagogy that improves the higher education opportunities and outcomes of equity group and first-inthe-family-to-study learners (see Barton & Hamilton 1998; Biggs 2003; Clarke, Postle and Skuja 1997; Dawkins 1987, 1988; Giroux 2000; Karmel 1987; Lo Bianco 2004; NBEET/HEC 1996; Street 1996; Taylor & Burgess 1997; The New London Group 1996; Ramsay 1994; Webb 1999). The authors separately highlight the relevance of teaching and learning practices that promote a fit between academic culture and the higher education needs of these students.

A concern for some educationalists is that academic culture can inhibit rather than encourage students to participate in study. The standard use of academic practices and expectations suggests an assumption by lecturers that students have knowledge of these conventions (Street 1996). Instead of a shared awareness of academic discourse, there is a "gap between faculty expectations and student interpretations of what is expected in student writing" (Street 1996: 103). The use of academic discourse without a common understanding by the student community creates a scenario of power by lecturers over learners (Barton & Hamilton 1998; Biggs 2003; Lea 1998; Lo Bianco 2004; Stephens 1985; Street 1996; Taylor & Burgess 1997; The New London Group 1996). Academic discourse can limit, that is, student access to knowledge and practice. Gee, in citing the work of Brazilian educator and philosopher Paulo Freire, argues: "literacy only empowers people when it renders them active questioners of the social reality around them" (1990: 41).

In light of the above concerns, how should academics and AEP lecturers revise their pedagogy to create a fit between academic culture and mature learner needs? Biggs (2003: 2) contends that there is "no single, all purpose best method of teaching." Biggs (2003) and Entwistle (1993) suggest that teaching is a personal matter for individual educators, and that teachers should consider

collectively the resources available to them, learner requirements and backgrounds, and educator strengths and weaknesses. Biggs (2003: 5) states: "Good teaching is getting most students to use the higher cognitive level processes that the more academic students use spontaneously" [author's emphasis]. Metacognitive practices require students to, for instance, question, comprehend, analyse, interpret, theorise, reflect and apply knowledge at a deep learning level (Biggs 1991, 2003; Entwistle 1993; Gibbs 1992; Mann 2001; Ramsden, Beswick & Bowden 1986). Deep learning occurs, that is, when students reveal a desire "to engage the task appropriately and meaningfully" and where students implement "appropriate cognitive activities for handling it" (Biggs 1991: 16).

To encourage students to develop deep learning practices, Ramsden et al. (1986) contend that university lecturers and skills advisers need to embed academic procedures within knowledge. With this aim in mind, the academy and AEP educators have used such pedagogic approaches as problem-based learning (Taylor & Burgess 1997), social learning practices and ideals (Archer et al. 1999; Clarke 2000; Cullity 2005; Stephenson & Munn 1989) and andragogic principles, especially self-directed learning (Carbone 2000; Cullity 2005; Milligan 1995; Wuest 1991). In addition, Entwistle (1993: 79) describes seven 'teacher functions' that support deep learning; Biggs (2003) provides an overview of 'good teaching practice'; Simpson (2000) offers practical strategies to aid open and distance learning student progress; and Cantwell (2004) emphasises the importance of aiding student affective and cognitive growth.

The aim of increasing unmatriculated, return to study, equity group student engagement at university is not a straightforward matter of selecting pedagogic theories and practices. The demographic changes that have occurred during the 1990s and 2000s within the sub-degree and undergraduate population have required the academy to rethink their pedagogic practices. Perhaps the final comment regarding

appropriate teaching and learning should be left with Biggs (2003: 9-10):

Improving teaching under these conditions [increased social mix of students] is not a matter of simply learning a swag of teaching competencies. Teaching is personal, and the context in which each teacher works is different. What is effective for this teacher, for the subject, at this level, for those students, may not apply to other teachers, working under their own conditions. Individuals have to work out their own solutions. This requires *reflection* [author's emphasis], a theory of teaching to reflect with, a context of experiences as the object of the reflection. This process may be structured in action research, in which possible solutions are carefully monitored to gauge their success.

Progressive educationalists argue that it is the lack of explicitness from academic staff about academic literacy that, in part, confuses commencing students. Progressive educators stress the relevance of establishing a learning environment that realises and values cultural and social "differences" (The New London Group 1996: 69). In a changed and changing social world, it is incumbent on educators, first, to recognise, plan for and implement pedagogic practice that appreciates difference within a learning community, and, second, to join with learners to become "active participants in social change" (The New London Group 1996: 64). To achieve this aim, educators need to work towards improved student access to and active engagement in learning (The New London Group 1996; Taylor & Burgess 1997). The New London Group indicates that the "real deficits" experienced by learners, and ones that require attention, are a "lack of access to social power, wealth and symbols of recognition" (1996: 72). The argument presented by The New London Group contends: "The role of pedagogy is to develop an epistemology of pluralism that provides access without people having to erase or leave behind different subjectivities" (1996: 72).

Challenges arising from this paper

First, knowledge of mature learner backgrounds aids AEP organisers in creating, delivering and monitoring an effective course. The lack of AEP published work, however, limits educator awareness of mature learner circumstances. As argued within this paper, an increased and shared understanding of mature learner characteristics would benefit the planning, design and outcomes of future alternative admission courses. In particular, program design is enhanced by knowledge of AEP students: demographic backgrounds, participation and completion rates, undergraduate enrolment patterns, and their reasons for withdrawing from courses.

Second, the limited awareness of mature student characteristics and their participation and completion rates is worrying. A more current and reliable understanding of student outcomes would provide knowledge about the effectiveness of these programs. The AEP community and government agencies should consider how best to examine programs and report findings. Towards this end, AEP educators require institutional support. In addition, government personnel should consider the ambiguous nature of DEST course (for example, 'non-award', 'enabling') and admission sub-categories (see Table 1). The overlap of these sub-categories creates difficulties when researching and/or documenting AEP outcomes.

Third, mature student demographic details consistently show that more women that men enrol in alternative admission courses. Ramsay (2004) suggests that this happening is due to the greater number of men than women who undertake vocational education, and that men use this qualification to progress to university. King (cited in Ramsay 2004) indicates that male early school-leavers return to study sooner than women early school-leavers. While there is merit in these arguments, AEP organisers should examine whether, for instance, program timetabling, content or study demands discourage males from attending an alternative entry course. If AEPs

are to increase the social mix of mature undergraduates, plainly these programs need to explore ways to improve male student participation and completion rates.

Fourth, research indicates that women prefer to participate in arts as opposed to mathematics or science degrees. Nevertheless, some AEP educators show concern about improving mature learner opportunities for the study of science and mathematics courses (Barrett & Powell 1980; Bond 1996; Penglase 1993). An issue, and one that is alluded to in AEP research, is the notion that women may genuinely prefer to study arts and social science degrees (see Isaacs 1982; Moses 1978). More recently, however, James *et al.* (2004) illustrate the increased participation rate of women in science-based programs. Clearly, AEP research should further explore this issue.

Finally, the reasons why mature students withdraw from an AEP remain blurred. The suggested high attrition rate of program noncompleters indicates that, either, the programs fail to meet mature learner needs or that mature students decide against studying at university. Perhaps some mature students are intimidated by the academic and financial demands of university? These ideas are speculative and can only lead to guesses about why some mature students leave a program. Research which explores mature student non-completion would aid AEP organisers in assisting 'at risk of withdrawing' learners. This understanding would enhance the effectiveness of an AEP in meeting mature learner requirements.

Final thoughts regarding the importance of understanding mature learner circumstances

Mature students represent a valued and socially dynamic group within the Australian higher education community. A comprehensive understanding of mature learner characteristics aids AEP organisers in designing and implementing strategies that benefit these students. Demographic changes to the AEP student intake indicate the

significance of providing students with a supportive and working understanding of academic culture. Organising a fit between academic culture and mature learner requirements is fundamental in increasing mature learner higher education participation and success rates. It is also necessary that AEP personnel share with their colleagues about course practices that encourage or inhibit mature student learning. It is through a pooled knowledge of mature learner circumstances and the pedagogic practices used within AEPs that program organisers and the academy can achieve these worthwhile goals.

References

- Abbott-Chapman, J., Braithwaite, J. & Godfrey, J. (2004). Promoting access, increasing opportunities for university education: A study of matureaged students from disadvantaged regions, www.dest.gov.au/NR/ rdonlyres/AoFD5B3D-6F1A-47C6-B681-1C172B90DE9B/2392/mature access_report.pdf [retrieved 6 March, 2005].
- Anderson, D. & Vervoorn, A. (1983). Access to privilege: Patterns of participation in Australian post-secondary education. Canberra: Australian National University Press.
- Andrews, L. (1999). Does HECS deter? Factors affecting university participation by low SES groups, www.dest.gov.au/archive/highered/ occpaper/99F/does.pdf [retrieved 3 September, 2005].
- 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 and Development, 18(1), 31-54.
- Baldwin, P. (1991). Higher education: Quality and diversity in the 1990s, Canberra: Australian Government Publishing Service.
- Barrett, E. (1986). Mature age unmatriculated students (final report): A look at graduation rates and subsequent employment, Kensington, NSW: University of New South Wales.
- Barrett, E., Beauchamp, J. & Powell, J. (1979). 'Selecting unmatriculated mature age students: A new approach', in Knights, S. (ed.), Returning to study: The mature age student. Sydney: Sydney University Extension Program, 3-14.

- Barrett, E. & Powell, J. (1980). 'Mature age unmatriculated students and the justification of a more liberal admissions policy', Higher education, 9, 365-383.
- Barton, D. & Hamilton, M. (1998). Local literacies: Reading and writing in one community. London: Routledge.
- Beasley, V. (1985). Participation and equity: The Flinders experiment, Adelaide: Flinders University.
- Biggs, J. (2003). Teaching for quality learning at university: What the student does (2nd ed), Buckingham, England: SRHE and Open University Press.
- Biggs, J. (1991). 'Introduction and overview', in Biggs, J. (ed.), Teaching and learning: The view from cognitive psychology, Hawthorn, Victoria: Australian Council for Educational Research, 1–6.
- Birrell, B., Calderon, A., Dobson, I. & Smith, T. (2000). 'Equity in access to higher education revisited', *People and place*, 8(1), 50–60.
- Bond, C. (1996). Access to Griffith University: A study of the impact of the Logan Institute of TAFE Certificate in Tertiary Access to Griffith University, www.gu.edu.au/ua/aa/ss/equity/Bond report.pdf [retrieved 3 September, 2005].
- Broughton, S. & Merley, J. (2003). 'Enhancing aspirations through access and equity programs: The Griffith University model', proceedings of the 7th Pacific Rim, First Year in Higher Education Conference, *Enhancing* the transition to higher education: Strategies and policies that work, Brisbane, http://www.fyhe.qut.edu.au/FYHE Previous/paperso3/ Refereed%20Papers/Student%20Pop.%20&%20Div/Broughton&Merlev ab.htm [retrieved 3 September, 2005].
- Cantwell, R. (2004). 'Positioning the bar: Outcomes associated with successful completion of an enabling course". Australian journal of adult learning, 44(3), 354–388.
- Carbone. A. (2000). 'Support for self-directed, independent learning', in Herrman, A. & Kulski, M. (eds.), Flexible futures in university teaching, Perth: Centre for Educational Advancement, Curtin University of Technology, 75-88.
- Cheong, G. (2000). 'Equity and diversity: The Newcastle approach', Higher education management, 12(3), 75-96.
- Clarke, J., Postle, G. & Skuja, E. (1997). 'The nature of equity and educational disadvantage', in Postle, G., Clarke, J., Skuja, E., Bull, D., Batorowicz K. & McCann H. (eds.), Towards excellence in diversity: Status trends and future directions, Toowoomba: USQ Press, 7–18.

- Clarke, T. (2000). 'Access to academia: An accredited course for mature age students', paper presented at the Language and Academic Skills Conference, Bundoora, Victoria: La Trobe University, November.
- Cobbin, D. & Barwood, B. (1993). '.....but I don't have time to research!', in Cobbin, D. & Barlow, A. (eds.), Tertiary access and equity initiatives: A handbook for evaluative research, Canberra: Australian Government Publishing Service, 1–8.
- Collins, J. & Penglase, B. (1991). 'Offering a second chance who accepts? Characteristics of entrants to the University of Newcastle Open Foundation Course', Australian journal of adult and community education, 31(3), 189-195.
- Commonwealth Department of Education, Science and Training (2002). Students 2002: Selected higher education statistics, www.dest.gov. au/highered/statistics/students/02/student table/students2002.pdf [retrieved 4 August, 2003].
- Cullity, M. (2005). 'Alternative entry programs to university for mature age students: Program characteristics that encourage or inhibit mature student participation', unpublished doctoral dissertation, University of Melbourne, Melbourne.
- Dawkins, J. (1988). Higher education: A policy statement [White Paper]. Canberra: Australian Government Publishing Service.
- Dawkins, J. (1987). The challenge for higher education in Australia. Canberra: Australian Government Publishing Service.
- Department of Employment, Education and Training [DEET] (1993). National report on Australia's higher education sector, Canberra: Australian Government Publishing Service.
- Dobson, I., Sharma, R. & Haydon, A. (1996). Evaluation of the relative performance of commencing undergraduate students in Australian universities. Adelaide: Australian Credit Transfer Agency.
- Entwistle, N. (1993). 'Influences on the learning environment on the quality of learning', in Joostens. T., Heijnen G. & Heevel A. (eds.), Doability of curricula, Berwyn, PA: Swets and Zeitlinger, 69-87.
- Fulmer, A. & Jenkins, H. (1992). 'Evaluating a tertiary access program for mature age women', Higher Education Research and Development, 11(1), 45-60.
- Gale, T. & McNamee, P. (1995). 'Alternative pathways to traditional destinations: Higher education for disadvantaged Australians', British Journal of Sociology of Education, 16(4), 437–450.

- Gee, J. (1990). Social linguistics and literacies: Ideology and discourses, London: Falmer Press.
- Gibbs, G. (1992). Improving the quality of student learning: Based on the Improving Students Learning Project funded by the Council for National Academic Awards, Bristol, England: Technical and Education Services.
- Giroux, H. (2000). 'Public pedagogy as cultural politics: Stuart Hall and the "crisis" of culture', Cultural studies 14(2), 341-360.
- Greagg, L. (1981). 'Mature age students in tertiary courses', paper presented at the seventh annual conference of the Higher Education Research and Development Society of Australasia, Melbourne. In Wellard, R. (ed.), Essential elements of teaching and learning in higher education, Vol. 4. (ERIC Document Reproduction Service No. ED 235 693), 338-343.
- Isaacs, G. (1982). Mature age university students, Brisbane: Tertiary Education Institute, University of Queensland.
- James, R. (2002). Socioeconomic background and higher education participation: An analysis of school students' aspirations and expectations, Canberra: AusInfo.
- James, R., Baldwin, G., Coates, H., Krause, K-L. & McInnis, C. (2004). 'Analysis of equity groups in higher education: 1991–2002', Centre for the Study of Higher Education, University of Melbourne, Victoria, www. dest.gov.au/sectors/higher education/publications resources/profiles/ analysis_of_equity_groups_in_higher_education_1991_2002.htm [retrieved 3 September, 2005].
- Karmel, P. (1987). 'Notes on equality of opportunity: A postscript to "Quality and Equality in Education", Australian Journal of Education, 31(3), 317-319.
- Karmel, P. (1975). Open tertiary education in Australia: Final report of the Committee on Open Universities to the Universities Commission December 1974, Canberra: Australian Government Publishing Service.
- Lea, M. (1998). 'Academic literacies and learning in higher education: Constructing text through knowledge and experience', Studies in the Education of Adults, 30(2), 156-171.
- Lo Bianco, J. (2004). 'Widening access and literacy', in Osborne, M., Gallacher, J. & Crossan, B. (eds.), Researching widening access to lifelong learning: Issues and approaches in international research, London: Routledge Falmer, 65–76.
- Mann, S. (2001). 'Alternative perceptions on the student experience: Alienation and engagement', Studies in Higher Education, 26(1), 7–19.

- McNamee, P. & Maxwell, G. (1993). 'Access and equity: A case analysis of local implementation under the Higher Education Equity Programme', Higher Education Research and Development, 12(2), 207-223.
- Milligan, F. (1995). 'In defence of andragogy', Nurse Education Today, 15, 22-27.
- Moses, I. (1978). 'Mature age students: Are they really different?', in Knights, S. (ed.), Returning to study: The mature age student, Sydney: Sydney University Extension Programme, 69-86.
- Munns, G., Nanlohy, P. & Thomas, M. (2000). 'Let them eat caviar: Alternative pathways for university students attending to unfinished business', Asia-Pacific Journal of Teacher Education, 28(2), 165–177.
- Murphy, J., Cobbin, D. & Barlow, A. (1992). 'Longterm perceptions of the University of Western Sydney's preparatory program, New Start', Australian Journal of Adult and Community Education, 32(2), 99–105.
- National Board of Employment, Education and Training/Higher Education Council [NBEET/HEC]. (1996). Equality, diversity and excellence: Advancing the national higher education equity framework, Canberra: Australian Government Publishing Service.
- Nelson, B. (2002). Higher education at the crossroads: An overview paper, Canberra: AusInfo.
- Osman, R. (1981). Special entry schemes in universities and colleges of advanced education: A survey of applicants and entrants, Adelaide: Tertiary Education Commission of South Australia.
- Penglase, B. (1993). 'Mature-age access students: Affective support in the Open Foundation experience', Studies in Continuing Education, 15(1). 39-49.
- Ramsay, E. (2004). 'Blurring the boundaries and re-thinking the categories: Implications of enabling education for the mainstream post-compulsory sector', Australian Journal of Adult Learning, 44(3), 273–305.
- Ramsay, E. (1994). 'Managing equity in higher education', Australian Universities' Review, 37(2), 13-18.
- Ramsay, E., Tranter, D., Sumner, R. & Barrett, S. (1996). Outcomes of a university's flexible admissions policies. Canberra: Australian Government Publishing Service.
- Ramsden, P., Beswick, D. & Bowden, J. (1986). Do learning skills interventions have any effect on student learning? Research working paper 85.5, Parkville, Victoria: The University of Melbourne.

- Rosenman, L. (1996). The broadening of university education: An analysis of entry restructuring and curriculum change options, Canberra: DEETYA.
- Simpson, O. (2000). Supporting students in open and distance learning. London: Kogan Page.
- Smith, B. (1987a). 'Investigating "dropout" from the Open Foundation Course', Australian Journal of Adult Education, 27(1), 17–24.
- Smith, B. (1987b). Open Foundation: An account of the mature-age matriculation programme at the University of Newcastle, Newcastle, NSW: Department of Community Programmes, University of Newcastle.
- Stehlik, T., Pablo, B. & Lansangan, N. (1993). 'An evaluation of the matureage entry workshop: Workers' Educational Association of South Australia', Australian Journal of Adult and Community Education, 33(3), 208-212.
- Stephens, J. (1985). Access without success: Participation and equity in the tertiary sector [Discussion paper No. 3]. Melbourne: Participation and Equity Program (PEP), Victoria Ministry of Education.
- Stephenson, J. & Munn, P. (1989). 'An alternative access approach', in Mullins, G. (ed.), Breaking the mould: The proceedings of the Higher Education Research and Development Society of Australasia, Sydney: HERDSA, 309-311.
- Street, B. (1996). 'Academic literacies', in Baker, D., Clay J. & Fox C. (eds.), Challenging ways of knowing: In mathematics and science, London: Falmer Press, 101-106.
- Taylor, I. & Burgess, H. (1997). 'Responding to "non-traditional" students: An enquiry and action approach, in Boud, D. & Feletti, G. (eds.), The challenge of problem-based learning (2nd ed.). London: Kogan Page, 103-116.
- The New London Group. (1996). 'A pedagogy of multiliteracies: Designing social futures', Harvard Educational Review, 66(1), 60–92.
- Watkins, D. (1979). 'The adjustment of mature age unmatriculated entrants to life as internal students at the University of New England: A pilot study', Vestes, 22(1), 48-51.
- Webb, C. (1999). 'Improving the literacy and oral communication skills of students at UWS Hawkesbury: A discussion paper', presented at a meeting of the University of Western Sydney's Academic Board, University of Western Sydney, Hawkesbury, NSW.

- West, L. & Boon, P. (1980). 'A profile of mature age entering students', in Hore, T. & West, L. (eds.), Mature age students in Australian higher education, Blackburn, Victoria: Acacia Press, 71-85.
- West, L. & Eaton, E. (1980). 'Reasons for entry into higher education', in Hore, T. & West, L. (eds.), Mature age students in Australian higher education. Blackburn, Victoria: Acacia Press, 86-121.
- Western, J., McMillan, J. & Durrington, D. (1998). Differential access to higher education: The measurement of socioeconomic status, rurality and isolation. Canberra: AusInfo.
- Wuest, J. (1991). 'Learning contracts: A vehicle for increased student involvement in audio teleconferencing', Nurse Education Today, 11, 185-190.

About the author

Dr Marguerite Cullity recently passed her Ph D (Education) from the Centre for the Study of Higher Education, University of Melbourne. She is currently researching university teaching and learning practices at Edith Cowan University. Marguerite's research and pedagogic interest in mature-age student and undergraduate learning stems from lecturing, academic skills advisory and research work completed at two Australian universities.

Contact details

14-128 Forrest Street, Peppermint Grove, WA 6011

Tel: (08) 9384 3609

Email: mmcullity@bigpond.com