

**University of Queensland
First Year Experience Workshop 2005
31 October 2005**

**Keynote Paper
The Changing Face of the First Year:
Challenges for Policy and Practice in Research-Led Universities**
Dr Kerri-Lee Krause, Centre for the Study of Higher Education
University of Melbourne

Introduction

The higher education landscape in Australia continues to evolve in the context of complex shifts in the international higher education market, along with national policy reforms. Within this kaleidoscopic environment, the quality of the first year student experience continues to be an instructive barometer pointing to the relative success with which institutions are managing change whilst seeking to maintain standards.

This paper opens by sketching some of the broad transformations occurring in higher education at the global and national levels. The focus then shifts to a discussion of three broad challenges for policy and practice. Particular attention is given to the significance of these challenges for research-led universities seeking to balance the dual imperatives of producing international quality research and ensuring premium quality learning experiences for students. The discussion is underpinned by empirical data from a ten-year trend analysis of the first year student experience in Australian universities (Krause et al., 2005).

Changes in higher education: The context¹

The changing face of the first year in Australian higher education must be interpreted in the context of significant national and international changes in higher education over the past decade. Internationally, we have witnessed unsurpassed trade in the higher education sector in recent years. This trade has come in the form of student movements across the globe for the purposes of studying in other countries. Australia, in particular, has become a significant exporter of higher education. The sector has seen a threefold increase in undergraduate student enrolments since 1994, predominantly from South-East Asia. Recent OECD figures (2005) reveal that Australia has the highest percentage of foreign tertiary students (almost 19 per cent), relative to total enrolments, of any OECD country.

A second international trend has been enabled by exponential growth in the availability and capabilities of information and communication technologies (ICTs). In recent years we have experienced a rapid expansion of online delivery as a means of transcending geographical and institutional boundaries and of capturing international markets. Related to this has been an equally rapid rise in the establishment of offshore campuses. Australian institutions have been particularly active in this arena. However, Australia is now starting to experience the reverse trend, where large US institutions such as Carnegie Mellon are beginning to explore the “offshore” opportunities offered by locating on Australian shores. Internationalisation in the higher education sector has raised the aspirations of students, both local and international, who now desire portability of degrees across national boundaries. Students also increasingly expect articulation between subjects and courses offered at other institutions, both within Australia and beyond. Globalisation has brought with it a significant rise in the number of undergraduate students who travel overseas partway through their study program and who expect to be able to receive the appropriate recognition for courses taken transnationally.

With such extensive global movements of people, resources and course delivery options, the international higher education sector has witnessed an inevitable rise in efforts to compare institutions on a range of quality indicators. Two of the most widely cited international rankings are those issued by Shanghai’s Jiao Tong University (JTU) along with the UK’s *Times Higher World University*

Rankings. In the 2004 JTI academic rankings of world universities, all of Australia's Group of Eight universities were rated in the top 300 institutions in the world, with two in the top 100.

At the national level, too, recent policy shifts have resulted in the publication of a ranking of Australian universities on the basis of quality of teaching indicators which revolve around graduate student survey responses and first year student attrition and progression indicators. Reduced federal funding and increased competition in the sector have been accompanied by the mandate to provide evidence of quality in all aspects of institutional practice. The Australian Universities Quality Agency has played a significant role in this respect since its inception in 2000. As the pressure to compete and succeed in the volatile higher education market increases, Australian universities find themselves re-examining policies and practices as never before. In this competitive client-focussed market environment, there is an imperative to define what is distinctive about universities and what they offer. Branding has become the name of the game, with students the major clients.

The "student as client" mindset has met with mixed reactions in the sector. Marketing offices realise their existence depends on successful market research which takes into account the demands and expectations of the future student market, both domestic and international. Academics, by contrast, argue vigorously for the primacy of maintaining disciplinary integrity and academic standards. In research-led universities, there is the added pressure on academics to maintain a high profile, productive research agenda. Meanwhile, student support staff find themselves caught somewhere in the middle – trying to provide support services to students who are highly sensitive to the mixed messages often received from different sectors of their institution. It is beyond the scope of this paper to deliberate on the relative merits and limitations of a market-driven approach to higher education; except to argue that those who ignore market forces in higher education do so at their peril. Nevertheless, I strongly contend for the critical importance of informed debate on the kinds of policies, processes and practices characterising universities – including research-led universities - in such an environment.

Another feature of the changing higher education landscape, both nationally and internationally, is the massification of the sector, resulting in much greater student diversity than was previously the case. Recent figures show that Australia has one of the highest rates of entry into tertiary study in the OECD – over 60 per cent of young people in this country enrol in tertiary programs of study (OECD, 2005). DEST statistics reveal that, in the last decade, the proportion of first year undergraduates has increased by 28 per cent; the proportion of mature age students over 25 years by 26 per cent; while the number of international first year undergraduates has grown threefold. Growth in participation in the higher education sector has been accompanied by concern for the needs and experiences of students from equity groups, such as those from low socio-economic backgrounds and those self-identifying with a disability (see James et al., 2004).

The changeful higher education landscape is not without its challenges for practitioners, researchers, administrators and policy makers in the sector. For those working with first year students, in particular, the challenges of sectoral changes are compounded by the need to manage the complex transition experiences of students making the move from school, home or industry to university study. While the challenges are many, I have nominated three of the most prominent and pressing for discussion in the context of supporting the first year experience and transition to higher education.

Three Challenges for Policy and Practice in Research-Led Universities

This section outlines three broad challenges for those who teach and support first year students, and for those who research and develop policies pertaining to the first year experience. While I acknowledge that the first challenge of managing student diversity is an issue confronting all Australian universities, the following two imperatives of building community and managing student expectations raise particular questions for research-led institutions. In the case of all three issues, research universities have a particular responsibility to scrutinise their practice and policy in relation to the student experience. An appropriate balance must be struck between the undeniable priority of high quality research, and the equally significant priority of the student experience and opportunities to engage with research in a range of ways.

1. Managing student diversity in informed, responsive ways

Several sources of student diversity feature prominently in the first year. Age differences play a significant role in the ways in which first year students engage with study and campus life. Other notable factors contributing to diversity include the role of international background in shaping students' learning experiences in Australian universities, and a selection of other defining characteristics, such as low socio-economic background, achievement levels and language background. Each issue is addressed in turn.

a. Unpacking the Y Generation²

The students entering higher education for the first time in 2005 are variously labelled Generation Y, Net-genners, Millennials, Digital Natives, Echo Boomers, or simply Yers. There are approximately 4.5 million of them in Australia – adolescents and young adults born between 1978 and 1994 (Sheahan, 2005).

The Y Generation are technoliterate – the first generation to grow up with computers. They are more comfortable typing on keyboards than writing with pen and paper, and they are often obsessed with the latest technologies and the mobility and access they offer. Yers are a wired and wireless generation rolled into one. The internet and internationalisation of education and society as a whole has provided this emerging generation with a global perspective. As a result, they tend to embrace and be tolerant of diversity. One obvious reason for this is that they are so heterogenous and racially and ethnically diverse as a group (Neuborne, 1999).

Undergraduate Yers trade with expertise in the knowledge economy and study their career options carefully. They are familiar with their university's marketing material and tend to have a clear sense of purpose on entering university. Following is a summary of the main differences between a sample of emergent Generation Y first year students surveyed in 2004 and their tail-end X Generation counterparts who were surveyed a decade earlier. Empirical data supporting this summary are available in the research report documenting the national trend study: *The First Year Experience in Australian Universities: Findings from a decade of national studies* (Krause et al., 2005).

Compared to 10 years ago, the 21st century first year student is more likely to:

- be clearer about why s/he has come to university;
- consider him/herself a 'client' being served by the university;
- want a 'portable degree' which will prepare her/him for multiple career pathways;
- expect the choice of combined/dual degrees; and
- expect the accompanying resources (technology, anywhere anytime, seamless support) to help them achieve this aim.

The Y Generation students in 2004 are more likely than their counterparts in 1994 to:

- really enjoy being a university student;
- regularly seek advice from academic staff; and
- be relatively satisfied with the quality of teaching at university (see also Hillman, 2005).

First year students tend to spend significantly less time on average on campus than they did ten years ago (16 hours compared to 18 hours per week). They are typically employed for 10-15 hours per week and spend at least 8 hours per week online for study and recreation. We have no comparative ten-year data on the last variable – a sobering reminder of the dramatic impact of ICTs on students' experiences and engagement over the past decade. The Y Generation are much more connected than previous generations. This is evident in the ease with which they report working with other students in groupwork and teamwork settings at university. It should be emphasised, however, that not all students share these sentiments. International students sampled were much less likely to report feeling comfortable contributing to class discussions, though they were more likely than their domestic counterparts to work with peers on group assignments. Their experience is discussed later in this section.

The Y Generation of university students (in 2004) is less likely than the X Generation tail-enders (in 1994) to:

- borrow books from the university library;
- photocopy journal articles and notes;

- be interested in extra-curricular activities at university; and
- spend time on the university campus.

While the emerging Y Generation are the focus of attention for politicians and market analysts around the world, they are not the only generation represented in the higher education sector. Students in the 25 years and over category make up a notable part of the first year demographic. The nature of their experience in the first year is the subject of the next section.

b. Catering for mature age students³

The attitudinal differences across the age groups in the 2004 national first year study were marked. Older students in the sample were very focused on their objectives. They indicated clear sets of goals and expressed fewer concerns about getting motivated to study. They also expressed high levels of satisfaction with their study and indicated they enjoyed the intellectual challenge of their courses. Table 1 summarises some of the main areas of contrast in the attitudes of school-leavers and mature-age students (25 years and over).

Table 1 Comparison of the attitudes of school-leavers and mature-age students (25 years+)

School-leavers (age 19 years) more likely to:	Mature-age students (age 25 years+) more likely to:
Be marking time while they decide their future	Have a strong clarity of purpose
Find it difficult to get motivated to study	Be motivated to develop talents and to be confident they know the occupation they want
Skip classes	Find their course stimulating and get satisfaction from studying
Wish to change courses	Find lectures stimulating
Have made close friends at university	Seek assistance from staff and believe they are receiving helpful feedback
Work collaboratively with other students and borrow notes from others	Be strategic about managing their workload
Like being on campus and be active in extracurricular activities	Keep to themselves at university and be uninterested in extracurricular activities

The responses of the older students indicate they tended to be strategic students who often worked independently. They were far less likely to borrow course notes than their younger peers, and were less likely to engage in collaborative study. Mature-age students were less likely to report that they used web-based resources and more likely to say they kept to themselves at university (39 per cent compared with 26 per cent).

c. Understanding the international student experience³

The responses of international students in the national study (Krause et al., 2005) demonstrated that they experience first year university in vastly different ways to their domestic counterparts. For example:

- the international students were significantly less likely to indicate that orientation programs helped them make a good start to university (in part a possible sign of problems caused by arrival times near the start of the academic year);
- 40 per cent of the international students reported they had difficulty comprehending course material compared with 21 per cent of domestic students;
- close to half of the international students were receiving grades lower than they had expected;
- the international students reported considerably more discomfort in participating in class discussions (31 per cent compared with 20 per cent); and
- 46 per cent of the international students found the workload too heavy, compared with 30 per cent of domestic students.

Significantly more international students than domestic students reported that they sought the advice and assistance of academic staff when needed — even though they were less likely to believe the staff to be approachable — and significantly more borrowed notes from friends.

One of the worrying signs in the 2004 dataset is the apparently lower level of social integration of international students. Fewer international students reported they felt part of a group committed to learning (46 per cent compared with 56 per cent) and fewer experienced a sense of belonging (35 per cent compared with 52 per cent). Fewer were confident that a staff member knew their name and fewer believed staff took an interest in their progress. Generally, the international students were more critical of the teaching and, significantly from a policy perspective, 46 per cent of the international students reported that university had not lived up to their expectation (compared with 27 per cent of domestic students).

d. Monitoring demographic subgroup differences in engagement

While the Y Generation on the whole might be depicted as confident and full of purpose, this by no means reflects the experience of all young people in their first year at university. One of the defining characteristics of first year students is the diversity of their experience, as demonstrated above. This diversity is further illustrated through differences in the ways students engage with university study.

In 2004, the national study of the first year experience (Krause et al., 2005) resulted in the development of the Comprehending and Coping Scale. It comprised a series of items intended to gauge the success with which students perceived they were engaging with their learning and managing their course requirements. The items were:

- I find it hard to keep up with the volume of work (reversed)
- I feel overwhelmed by all I have to do (reversed)
- My course workload is too heavy (reversed)
- I had difficulty comprehending my course material (reversed)
- I had difficulty adjusting to the university style of teaching (reversed)

Each item was reverse coded and a mean score determined. Table 2 provides details of demographic subgroups who scored below the national mean on this scale.

Table 2 **Student subgroups showing *below average engagement on Comprehending and Coping Scale***

Subgroup category	<i>Below average engagement on Comprehending and Coping Scale</i>
Sex	--
Age	Age 20-24
Aboriginal and Torres Strait Islander heritage	ATSI
Socioeconomic background	Low SES
Urban/rural background	--
LOTE	LOTE
First in family	--
Full-time/part-time	--
International/domestic student	International
Average mark	Less than 60%
Expectations of marks	Marks lower than expected

Arguably, for the groups of students represented in Table 2, engagement is in some senses a battle⁴. There may be several explanations for these subgroups emerging with below average scores on the

Comprehending and Coping Scale. Linguistic barriers may impede the understanding of students from LOTE and international backgrounds. For those entering higher education from disadvantaged backgrounds, the approach to learning and the requisite strategies may not be in place, leaving students feeling isolated and overwhelmed (Forsyth & Furlong, 2003). Those who enter the university environment with unrealistic expectations also tend to have greater difficulty engaging successfully. Age is an interesting predictor here. Commencing students in the 20 to 24 year age group in the first year may be those who deferred study, completed another qualification or perhaps transferred from another institution. It is interesting that this age group is struggling to engage successfully with learning and the style of teaching in the first year. There may also be an element of harsher self-rating on these items, typical of the mature age high-achieving mindset.

Regardless of the explanations for these findings, they nevertheless point to the need to manage diversity by being responsive to differences in the ways students from different demographic subgroups engage with learning and the university experience.

2. Building community and sustained connectivity

There are several acknowledged strategies for building a sense of community among first year students and connecting them with their peers, academic staff and the university learning community as a whole. Orientation and induction programs, along with avenues for encouraging personal interactions between and among peers and academic staff are integral to these approaches. But in a research-intensive institution, particular opportunities present themselves for connecting students with research and the research community from early in their experience. These strategies are pivotal to the second challenge for policy and practice in supporting first year students.

a. Orientation/induction programs: enabling sustained connections

In the 2004 national first year study we sought student feedback on the perceived impact of orientation programs on their experience and sense of belonging within the university community. Almost half of the first years believed that the orientation programs they had attended provided them with a good introduction to the university. Somewhat fewer students (40 per cent) felt that these programs helped them to develop a sense of belonging in the university community. Perhaps more concerning is the view of a quarter of the students sampled that the orientation programs did not play a role in helping them to feel that they belonged at university.

While there is clearly a developmental dimension to student identity and the associated sense of belonging, the initial orientation programs nevertheless are key to welcoming students into the learning community. These institution-level programs are most successful if accompanied by department or faculty-based initiatives designed to support students within their disciplinary subgroups. It is also important to view orientation as a process, rather than a one-off event. The most successful orientation programs are those which enable students to build sustained links with academic staff and with each other through peer collaboration and peer mentoring, for example. This may occur through groupwork opportunities which are integrated into the curriculum and assessment, or through peer tutoring/mentoring sessions which are offered during the course of the first semester as a way of providing sustained support. This becomes particularly important during the critical moments of the first year, such as when assignments are due, and when students receive their first piece of assessed work and feedback. These are occasions when support mechanisms need to be in place to assist students in a more targeted way than is typically the case in early orientation programs.

b. Building community through engagement with the institution and peers

Engaging with the institution

There is evidence that first year students are engaging with the institution in a range of ways, but their perception of the utility of these engagement opportunities varies considerably. In 2004 we asked students whether they felt they belonged in their university. While half responded in the affirmative, a disturbing 16 per cent did not feel as positive about their experience (see Table 3).

Table 3 Indicators of student engagement at the institutional level, 2004 (% of students) (N=2344)

		Disagree		Agree
I feel confident that at least one of my teachers knows my name	2004	23	11	66
I feel like I belong to the university community	2004	16	33	51
I really like being on my university campus	2004	12	28	60
I really like being a university student	2004	8	17	75

A more satisfying finding was that the majority really liked being identified as university students and a little fewer than two-thirds liked being on their university campus (note: the sample comprised only full-time on campus students, no distance education/external enrollees). This positive engagement has remained constant over a decade. School-leavers aged 19 years and under reported a significantly greater sense of belonging than their older peers, while students from rural areas felt more connected than city-based students. This may be partly attributed to the large number of rural students in residential colleges, which have strong support networks, and to the character of the particular institutions in which rural students were concentrated.

A new item in the 2004 study enquired about whether students felt known by name in their university. Table 3 shows that a majority of respondents replied in the affirmative, but one-third were not confident in this regard. This raises a practical challenge in terms of developing strategies for personalising the learning experience in the first year.

Engaging with peers

The literature convincingly points to evidence of the critical role of peer engagement in the first year (for example, Goodsell, Maher & Tinto, 1992). The national first year data provide mixed messages on the extent of student engagement in this regard. It is pleasing to know that almost 80 per cent of first year students had made at least one or two close friends during their first year at university. Nevertheless it seems that consistently a little under a third typically keep to themselves at university and do not interact with peers. Also gratifying is that approximately one-third worked with peers on course areas in which they had problems on a daily or weekly basis and 40 per cent said they got together with peers to discuss their subjects at least weekly (see Table 4). However, a little fewer than twenty per cent of students did neither of the above during their first year. Despite evidence of peer engagement, trend data suggest that proportionately fewer students are engaging with peers on a regular basis in the first year (see Table 4).

Table 4 Peer collaboration trends, 1999-2004 (% of students) (1999, N=2609; 2004, N=2344)

		Daily/ Weekly	Irregularly/ Never
Work with other students on course areas with which you had problems	1999	44	56
	2004	31	69
Get together with other students to discuss subjects/units	1999	48	52
	2004	40	60

In accordance with the large body of US research evidence (for example Kuh & Vesper, 1997; Pascarella & Terenzini, 2005), Australian undergraduates who were engaged with peers, academics and the institution as a whole were also most likely to: express satisfaction with their experience; report higher levels of achievement than their less engaged peers; and indicate clear plans to persist with their study at university.

c. Building community in a research-led university

In a recent publication entitled *Pursuing the Endless Frontier: Essays on MIT and the role of research universities* (2005), Charles Vest, former president of MIT, comments extensively on the challenges and possibilities of research universities in the 21st century. He proposes a triad of factors which should be considered fundamental to the student experience in research-led institutions: academic engagement and stimulation, research-led teaching and learning, and building a sense of community among the campus learning community and beyond.

Vest argues for the power of the research community as a binding force upon which research-led institutions should capitalise. It both enriches the intellectual experience of undergraduate students and provides them with a sense of belonging to an intellectual research community which includes academic staff, fellow students and a broader disciplinary community of researchers worldwide:

For many, the components of education have become too compartmentalised . . . We must assure every student of personal engagement with scholars and advisors, and with more inherent avenues for serious dialogue and mutual learning. (Vest, 2005, p. 172)

Research-led learning and teaching is pivotal in connecting students to the disciplinary community, its research methods, results and direct involvement in research experiences. This should be a feature of the first year undergraduate experience, just as much as it is in later years.

The building of community is the shared responsibility of academics who integrate the principles of research-led pedagogy into curriculum and assessment experiences, along with staff whose responsibility it may be to coordinate faculty-based and institution-wide orientation and induction programs. Administrators and policy-makers, too, share responsibility for addressing this challenge through such avenues as strategic planning of learning spaces, creation of seamless administrative procedures (for example, for student enrolment and advising), and development of responsive, pedagogically sound and research-informed institutional policies, such as those discussed in the next section.

3. Monitoring, shaping and addressing student expectations

The subject of student expectations has become a focal point of discussion in universities across the nation and internationally. The development of the 'student as client' mindset has been accompanied by the potentially deleterious effects of institutional kneejerk reactions to student demands. The effective management of student expectations calls for considered, informed and proactive decision-making which is at once responsive to changing student experiences and needs, while also being informed by good pedagogy with priority given to maintaining the highest standards in all facets of the educational experience.

By virtue of their relatively high standing and status in the local and international community, research-led Group of Eight institutions in Australia may tend to invoke comparatively higher student expectations than their counterparts which are typically further down the various institutional league tables of research performance. There is little empirical evidence to support this supposition in the Australian setting and it is difficult to know how one might go about quantifying such a phenomenon. Nevertheless, Miller (2005) supports the notion as it relates to the United States context, arguing that some student expectations clearly arise from the published rankings of institutions. As Australian institutions continue to vie for higher rankings on international league tables, and market themselves using superlatives such as "best", "most", "highest", and "largest", it is to be expected that such self-promotion will raise student expectations about the quality of services, support, teaching and degree status. Miller goes on to comment that the size and complexity of research universities, along with the explicitly stated value attached to research, tends to pose additional challenges for the student entering the institution: "It is harder for [them] ... to have a clear notion of what [they] can reasonably expect of the learning experience" (Miller, 2005, p.249).

Astin's (1993) report on the Cooperative Institutional Research Program in the United States included data on a survey of academics (faculty) and their characteristics. Of relevance to the present discussion is the impact on student experience of the research orientation of academic staff, defined

by such factors as publication rate, time spent conducting research, and personal commitment to research (see p. 37). Student orientation, on the other hand, was defined as the extent to which academic staff believed their colleagues were interested in and focussed on student development. Astin found a negative relationship between the research orientation of faculty and their student orientation. Research orientation also had a substantial negative effect on student satisfaction with overall quality of instruction and individual support services. Astin concludes that: "with the exception of performance on standardized tests, there is a significant institutional price to be paid, in terms of student development, for a very strong faculty emphasis on research" (1993, p.338). Astin's work raises questions about the potential mismatch between high – perhaps unrealistic - student expectations of research-led universities, based on reputation and international standing, and the reality of unmet expectations with respect to teaching, learning and support once students enrol. I do not believe that a research orientation and a student orientation are mutually exclusive by any means. And Astin's conclusions above need not necessarily be the case if a research intensive institution also devotes due attention and resources to the quality of the student experience in all its dimensions. Nevertheless, these data are a salutary reminder of the potential challenges for research-led universities who must manage and shape student expectations in an environment of competing research and student orientations.

The issue of student expectations of higher education as a whole, and specific institutions and types of institutions in particular, is fertile ground for further research in Australia. It will be important to monitor student subgroup differences in this regard, including the expectations of international students, and whether or not different fee structures among local student cohorts have a part to play in shaping their expectations.

With respect to rising and sometimes unrealistic expectations, the challenge is threefold. First, institutions must monitor student expectations through ongoing cycles of institutional and faculty-based research. This is particularly important among first year undergraduates as their early experiences of met or unmet expectations play such a significant role in shaping the rest of their experience. Research-led universities should be characterised by not only the highest quality internationally recognised disciplinary research, but also premium quality, benchmarked institutional research on the student experience which in turn informs policy and practice across the institution.

Second, the university should attach the highest priority to shaping and managing student expectations. This can only be accomplished if there is a shared importance attached to upholding academic standards and values. In many cases, these standards need to become the focus of debate and discussion, with careful consideration given to how they might be operationalised within faculties and departments and across all parts of the university. Having established these standards, institutional expectations must be communicated to students with regard to core student experience issues. These include expectations about: class attendance; preparation and participation; time commitments on academic work; managing part-time work and full-time study; use of ICTs in a range of contexts; how, when and why they might download notes from the web (if applicable); and whether web use should be considered a substitute for class attendance, to name a few.

Third, institutions should make strategic use of the data collected from students to ensure that students are aware that their voice has been heard. This may manifest itself in at least two ways. If students express unrealistic and pedagogically invalid expectations, these should be noted and reasons given for not reacting to and meeting certain expectations. On the other hand, where appropriate and in harmony with agreed standards, some changes may be made to policy and practice in the institution. In both cases, it is critical to be seen to be listening and responding to the student voice – either by addressing unrealistic expectations or by adapting practices where appropriate.

Concluding Remarks

The face of the first year experience has changed dramatically over the past decade and there is no reason to expect that this will not be the case in the decade to come. The one constant, however, is that the first year of university study remains arguably the most critical time for engaging students with their learning community and equipping them with the requisite skills to not only persist but to be successful and independent in their learning throughout the undergraduate years and beyond.

Research-led universities in Australia have a unique role to play in engaging first year students with research processes, outcomes and communities, while at the same time upholding the importance of a student orientation which is responsive to diversity and works to develop sustained connectivity among members of the learning community. The challenge for these institutions, in particular, is to recognise that strong, sustainable research and student orientations can co-exist and should be mutually beneficial and supportive for staff, students and the institution as a whole.

Notes

¹ Much of this section is drawn from Krause (2005a).

² This section is an excerpt from Krause (2005b) which provides more detailed discussion of the Y Generation and implications for supporting them at university.

³ I gratefully acknowledge the work of my research partners at the CSHE and their contributions to *The First Year Experience in Australian Universities: Findings from a decade of national studies*. The information in this section is drawn from chapter 7 of that report.

⁴ For further discussion of 'engagement as battle', see Krause (2005a).

References

- Astin, A. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Forsyth, A., & Furlong, A. (2003). Access to higher education and disadvantaged young people. *British Educational Research Journal*, 29 (2), 205–225.
- Goodsell, A., Maher, M., & Tinto, V. (Eds.). (1992). *Collaborative learning: A sourcebook for higher education*. University Park: National Center on Postsecondary Teaching, Learning and Assessment, The Pennsylvania State University.
- Hillman, K. *The first year experience: The transition from secondary school to university and TAFE in Australia*. Melbourne: ACER.
- James, R., Baldwin, G., Coates, H., Krause, K., & McInnis, C. (2004). *Analysis of equity groups in higher education*. Canberra: DEST.
- Krause, K. (2005a). *Engaged, inert, or otherwise occupied? Deconstructing the 21st century undergraduate student*. Keynote paper presented at 'Sharing Scholarship in Learning and Teaching: Engaging Students'. James Cook University, Townsville and Cairns, Queensland, 21-22 September, 2005. [Available online: <http://www.cshe.unimelb.edu.au/krause.html>]
- Krause, K. (2005b). *The changing student experience: Who's driving it and where is it going?* Keynote paper presented at 'Student Experience Conference: Good Practice in Practice'. Charles Sturt University, Wagga Wagga, New South Wales, 5-7 September 2005. [Available online: <http://www.cshe.unimelb.edu.au/krause.html>]
- Krause, K., Hartley, R., James, R., & McInnis, C. (2005). *The First Year Experience in Australian Universities: Findings from a decade of national studies*. Canberra: DEST. [Available online: <http://www.cshe.unimelb.edu.au>]
- Kuh, G., & Vesper, N. (1997). A comparison of student experiences with good practices in undergraduate education between 1990 and 1994. *The Review of Higher Education*, 21, 43-61.
- Miller, T. E. (2005). Conclusion. In T. E. Miller, B. E. Bender, J. H. Schuh, and associates (pp.244-253). *Promoting reasonable expectations*. San Francisco: Jossey-Bass.
- Neuborne, K. Generation Y. *BusinessWeek Online*, 15 February 1999. Available online: <http://www.businessweek.com/1999/99_07/b3616001.htm>.
- OECD. (2005). *Education at a Glance: OECD Indicators 2005*. OECD Publishing. Retrieved 12 October 2005: www.oecd.org/document/52/0,2340,en_2649_34515_13634484_1_1_1_1,00.html.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: Vol. 2 A third decade of research*. San Francisco: Jossey-Bass.
- Sheahan, P. (2005). *Generation Y: Thriving and surviving with generation Y at work*. Prahran, VIC: Hardie Grant Books.
- Vest, C. M. (2005). *Pursuing the endless frontier: Essays on MIT and the role of research universities*. Cambridge, MA: The MIT Press.

For further information, contact
Dr Kerri-Lee Krause, Centre for the Study of Higher Education
University of Melbourne
(k.krause@unimelb.edu.au)