Working on a dream: Educational returns from off-campus paid work

Taking a stance towards work during study

The following analysis investigates Australian university students’ participation in off-campus paid work. During the 1990s, this phenomenon became an increasingly interesting and significant narrative in Australian higher education (McInnis & Harley, 2002), with implications for institutions, industries, individuals and the economy as a whole. In 2011, as this briefing shows, undertaking off-campus paid work is an intrinsic and rewarding part of undergraduate life.

In recent decades combining paid off-campus work and study has tended to be viewed as a troubling situation driven by economic hardship and a lack of government support that resulted in students being distracted from their studies (see: James, Bexley, Devlin & Marginson, 2007; Pascarella & Terenzini, 1991; Beffy, Fougére & Maurel, 2009). As with any complex sociological notion the story becomes much more complex on closer inspection (McInnis & Harley, 2002; Radloff & Coates, 2010; Polidano & Zakirova, 2011; Salisbury, Pascarella & Padgett, 2011). As the following analysis shows, in 2010 off-campus paid work would appear to have become an intrinsic and often rewarding facet of undergraduate life.

Finding sustainable opportunities to improve the outcomes of higher education for graduates, institutions and the economy as a whole is an ongoing challenge...
for practitioners, policymakers and higher education researchers alike. Improving the productivity and standards of higher education is becoming more important than ever given the growing economic and social relevance of higher education to many countries, coupled with a decrease in public investment (KPMG, 2009). Doing more higher learning, doing it wiser and faster, and doing it for less, is pressing preoccupation for higher education.

Within this frame, helping students develop the employability skills and professional capabilities they will need to transition into graduate roles is one of the most important mandates for university study. While institutions and courses vary in the weight they place on ‘real-world work readiness’, even the most broadly liberal areas of study have underpinning vocational components. Employers and graduate schools alike are increasingly explicit in their calls for people completing university with a bachelor degree to be work-ready (Bradley, Noonan, Nugent & Scales, 2008).

The present analysis approaches the phenomenon empirically, treating it as an inexorable trend. It ventures beyond moralism, although leaves open the possibility that participating in paid work during study may well be a good thing. Either way, this is a significant facet of Australia’s higher education life that is slipping between the cracks, as with opportunities to venture beyond didactic vocational training and educate the whole person. Somewhat a matter yet to be resolved, and with complex links to educational practice and the quality and productivity of higher education, analysing students’ participation in paid work provides an excellent test case for exploring institutional support for students’ engagement.

The focus on ‘off-campus’ as opposed to ‘on-campus’ employment is deliberate and non-trivial, and a note of clarification is helpful. Broadly, while off-campus employment has been seen to have uncertain or even harmful effects on study, this is not the case for on-campus employment, which research has shown to be positively related to academic outcomes (Pascarella & Terenzini, 1991, 2005). Hence there is less immediate need to explore the impact of on-campus employment. In Australia, on-campus paid work is also far less prevalent than off-campus employment, involving only around five per cent of first year and ten per cent of later (third) year students – a point considered by way of conclusion.

The briefing draws on data from the 2010 Australasian Survey of Student Engagement (AUSSE – see Appendix 1) – the largest nationally representative set of data on current students yet collected in Australian higher education. The overall sample size for this analysis is very large – 25,950 students (around 14,300 first years and 11,650 later (mostly third) years), and is weighted to ensure representativeness of the target population – onshore undergraduate students.

The briefing begins by looking at the incidence with which students participate in paid work, and follows this with an analysis of the influence such participation has on academic engagement and outcomes. There are disjuncts, the data show, between student activity and the support received from institutions. It is suggested that institutions need to embrace students’ off-campus paid work. The findings shed light on practices that institutions can use to support students’ participation and promote positive outcomes.
Who's working, and who's not

If learning how to think is the primary purpose of university, then getting a job at the end likely comes a close second. This partly explains why a very large number of students participate in paid work activities during their study. Clearly there are a variety of reasons – needing money, socialising, soaking up free time, developing employability skills, reinforcing academic skills, career formation, having fun, meeting family expectations, and responding – implicitly or otherwise – to cultural factors.

But the bottom line is that students work. Results from the last four administrations of the AUSSE show that about two-thirds of Australian university students participate in paid work activities during their study. Between 2007 and 2010 the figure for first year students has varied from a low of 65 per cent in 2007 to 69 per cent in 2008, and for later years from 71 per cent in 2007 to 76 per cent in 2008. As this does not include the approximately ten per cent of students who are working on campus, it seems reasonable to assume that around four-fifths of first-year students and nine out of ten later years are working for pay. This estimate is affirmed by a census of 2002 bachelor degree students conducted in 2008 that found 83 per cent of students worked during their final year of study (Coates & Edwards, 2009). These figures also accord with extrapolations from Long and Hayden’s 2001 national survey of student finances.

Turning to 2010, Figure 2 shows the time students spend working in the average week. A quarter of all first years who work do so for between six and 10 hours, which is the most common level of participation. Later year students tend to work longer. The most common length of time for later-year students is 11 to 15 hours per week, with 40 per cent undertaking between 11 and 20 hours of paid work each week. The ‘blip’ at the end of the distribution for each year level is interesting, reflecting those students who report working over 30 hours per week – levels close to a full-time load. Eight per cent of first-year students fall into this category, and around double this percentage (14%) of later-year learners. Interestingly, these results along

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Participation (%)</th>
<th>Subgroup</th>
<th>Participation (%)</th>
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<tbody>
<tr>
<td>Male</td>
<td>66</td>
<td>Metropolitan home location</td>
<td>72</td>
</tr>
<tr>
<td>Female</td>
<td>72</td>
<td>Provincial home location</td>
<td>64</td>
</tr>
<tr>
<td>No government financial support</td>
<td>73</td>
<td>Remote home location</td>
<td>60</td>
</tr>
<tr>
<td>Government financial support</td>
<td>64</td>
<td>English language background</td>
<td>73</td>
</tr>
<tr>
<td>No university financial support</td>
<td>70</td>
<td>Language other than English</td>
<td>55</td>
</tr>
<tr>
<td>University financial support</td>
<td>64</td>
<td>On campus in a college or residence</td>
<td>37</td>
</tr>
<tr>
<td>International student</td>
<td>47</td>
<td>Off campus student accommodation</td>
<td>40</td>
</tr>
<tr>
<td>Domestic student</td>
<td>72</td>
<td>Living with friends or in a share house</td>
<td>64</td>
</tr>
<tr>
<td>Low SES</td>
<td>66</td>
<td>Living with parents or guardians</td>
<td>77</td>
</tr>
<tr>
<td>Middle SES</td>
<td>72</td>
<td>Living by yourself</td>
<td>67</td>
</tr>
<tr>
<td>High SES</td>
<td>70</td>
<td>Living with a partner or children</td>
<td>71</td>
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Educational returns from off-campus paid work

with those in Figure 1 mirror 2009 figures in Germany (HIS, 2009), and also 2001 Australian figures collected by McInnis and Harley (2002).

A number of students are working long hours, and a wide range of students are working. As Figure 1 shows, first-year students work less than later years. More females tend to work than males. People who receive financial support from government or their university work less than those who do not. International students work less than their domestic counterparts. Students from high or middle socioeconomic backgrounds work more than others, flagging that Australian university students may not be participating in paid work for the income alone. Similarly, students from metropolitan areas work more than those from provincial or remote areas, although the regional availability of work may play a role. Strikingly, students living with their parents are more likely to work than those living with partners or by themselves, or in on- or off-campus student accommodation – again, highlighting that students may be working for lifestyle rather than subsistence alone. These findings are triangulated by insights procured through the 2008 Graduate Pathways Survey (Coates & Edwards, 2009) – for instance, that females worked more than males as did Australian citizens and first-in-family students, people from metropolitan areas, and people who completed primary school in a low socioeconomic area.

Participation in paid off-campus work has a striking relationship with academic performance. Essentially, as Figure 3 shows, students with lower or higher grades tend to participate in less work compared with those with average grades. There is a positive relationship between grades and paid-work participation for students who work for one to 10 hours per week – except for those with the highest grade. People working for 11 to 20 hours per week tend to have average grades. Learners working over 20 hours tend to receive grades across the performance spectrum, with a slight dip towards the upper extreme.

Table 2: Participation in off-campus paid work by field of education

<table>
<thead>
<tr>
<th>Field of education</th>
<th>Participation (%)</th>
<th>Field of education</th>
<th>Participation (%)</th>
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<tbody>
<tr>
<td>Dental studies</td>
<td>40</td>
<td>Creative arts</td>
<td>74</td>
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<tr>
<td>Veterinary studies</td>
<td>50</td>
<td>Business and management</td>
<td>74</td>
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<td>Medical studies</td>
<td>50</td>
<td>Health</td>
<td>75</td>
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<tr>
<td>Computer science</td>
<td>53</td>
<td>Law</td>
<td>75</td>
</tr>
<tr>
<td>Physics and astronomy</td>
<td>55</td>
<td>Mechanical/industrial engineering</td>
<td>75</td>
</tr>
<tr>
<td>Chemical sciences</td>
<td>55</td>
<td>Nursing</td>
<td>77</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>56</td>
<td>Language and literature</td>
<td>78</td>
</tr>
<tr>
<td>Engineering</td>
<td>64</td>
<td>Teacher education</td>
<td>79</td>
</tr>
<tr>
<td>Mathematical sciences</td>
<td>65</td>
<td>Building</td>
<td>82</td>
</tr>
<tr>
<td>Natural and physical sciences</td>
<td>66</td>
<td>Public health</td>
<td>86</td>
</tr>
</tbody>
</table>
As might be expected, engagement in various work experiences does vary by field. Table 2 reports average participation rates for twenty fields of education – ten having among the lowest rates, and ten having among the highest rates. There are clear trends. Science-oriented professional studies which also tend to be highly competitive to enter have rates about 20-to-30 points lower than other often non-science related fields. The fields with higher rates of participation do, however, appear more heterogeneous than those with lower rates of participation, possibly flagging the increased influence of other mediating institutional or individual factors.

The situation is slightly different when looking at participation in broader forms of work-related activity. As Figure 4 shows, people in ‘professional’ fields are typically more likely than those in others to enjoy various kind of vocational experience during their study. Curriculum differences, for instance, mean that students in health, medical studies, nursing or education are much more likely to participate in a practicum or industry placement than those studying sciences, IT, accounting or humanities.

Considerable variation across institutions exists, too. Figure 5 reports year-level statistics for each institution, sorted by first-year rates. The diversity between institutions is enormous. While one institution has only 48 per cent of its first year students participating in off-campus paid work, another has 82 per cent. A similar range is evident for later-year students – ranging from 45 to 81 per cent. The gap between first- and later-year participation tends to be less pronounced for those institutions that have higher rates for both year levels, likely due to the very high number of students participating in paid work. In terms of institutional groupings (not shown), students in research intensive and regional institutions tend to work less than others, followed by students in ‘innovative research’ institutions. People studying in metropolitan institutions tend to work the most.

They support the fact that we have a life outside of uni that can put just as much weight on our shoulders as does uni work.
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Clearly, these statistics only scratch the surface of this very widespread and significant phenomenon. Yet even these descriptive results show that participation varies across a number of student subgroups, and in complex and conditional ways. These insights provide a springboard and foundation for future work that should seek to build a typological framework that institutions can use to understand and hence manage this phenomenon.

The academic impact of paid work

Insights into the incidence of participation in off-campus paid work are intrinsically important, but they also affirm the need to explore how vocational activity interacts with students’ academic engagements.

Off-campus paid work appears to be yielding positive returns for learners, although the effects are conditional on individual and academic characteristics. Figure 6 reports results for each of the six aggregate student participation and institutional support scales measured in the AUSSE. Scale scores are reported on a metric ranging from 0 to 100, with differences of five scale-points or more reflecting an educationally meaningful effect. Clearly, paid-work participation does not have a negative impact on students’ engagement or perceptions of support. Conversely, people in paid work report higher levels of active learning, interactions with academic staff, engagement in enriching educational experiences, and – perhaps unsurprisingly – work-integrated learning. At an aggregate (national) level, therefore, paid work is not associated with lower engagement in academic work.

All staff are considerate of adult learners’ lives and the needs they may have outside of study and they are supportive and flexible when extra time is needed.
Off-campus paid work is often linked with the time that students spend on campus. The AUSSE provides two measures of this facet of engagement – time on-campus including and excluding class. Time outside class is important, as this captures students’ engagement in the broader life of the academy.

Unsurprisingly, Figure 7 shows that having off-campus vocational commitments leads students to spend less time on campus. These results are reported for full-time and campus-based students who are participating in paid work. Around half (49%) of all off-campus workers only spend between one and five hours per week on campus outside class, compared with only 37 per cent for those who do not work. Conversely, nearly no working students spend more than 30 hours on campus per week, compared with a figure of 10 per cent for people who do not work off campus. Interestingly, the lines cross between 11 to 15 hours, which Figure 2 shows is the same amount of time most undergraduates spend working, providing high-level evidence of a substitution effect (for discussion, see: AUSSE Research Briefing 9). Similar trends are evident for the time spent on campus including class-time. Obviously this latter set of results is particularly influenced by discipline, curriculum, year level, the time required to travel to campus, and the availability of online learning materials and more general resources.

Vocational effort yields similar positive returns for student outcomes (Figure 8). At the national level, there is little impact on students’ development of higher order thinking or general skills, on average grade or dropout intentions, or on overall satisfaction. The national results do highlight a positive impact on general learning outcomes (outcomes such as reading, writing and speaking), and particularly on career development. The results for average grade in Figure 8 are qualified by those in Figure 3, which showed that working between one and 20 hours per week can yield positive returns. Further analysis of the Career Readiness and Departure Intention scales, the latter being the percentage of students who have ‘seriously considered’ dropping out before course completion, is undertaken below.

Figure 9 showed only a slight difference in dropout intentions and work participation, but digging beneath this aggregate result yields an interesting story. For first years, there appear to be three groups of students. Taking part in paid off-campus work does not increase early departure unless it is over 10 hours per week. Departure intentions increase by between five to ten per cent for those working between 11 and 30 hours (but with little variation within this), and then fall back to lower levels for students working over 30 hours. Results for later-year students show a different pattern. Here, the first group consists of students working up to five hours per week (around 30%), the second group between 6 and 20 hours per week (dropout intentions of around 35%), and the third group of more than 20 hours (around 40% considering early departure). These broad statistics suggest that paid off-campus work may yield educational benefits if practiced in moderation.

As Figure 8 suggests, the benefits of paid work are particularly strong in relation to career readiness. Closer analysis of specific items reveals that participation in off-campus paid work increases the extent to which students report:
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• developing communication skills relevant to the discipline;
• exploring how to apply learning in the workforce;
• knowing how to present to potential employers;
• improving knowledge and skills that will contribute to employability;
• keeping their resume up-to-date;
• networking for job opportunities;
• setting career development goals and plans; and
• knowing where to look for jobs.

Skill development in these areas is important because these are clearly the kinds of skills that help people secure employment after graduation. Results from Australia’s first census of bachelor degree students five years after graduation (Coates & Edwards, 2009) showed that people who participated in paid work during university studies were much more likely to move seamlessly into paid work after graduation, and to receive higher salaries (Figure 10). In the first year after graduation, while 49 per cent of those who did not work for pay as an undergraduate were in full-time graduate employment, this increases to 67 per cent for those who worked 21 to 30 hours and 78 per cent for those who worked 31 hours or more. Participation in part-time work increased from 13 to 26 per cent then decreased to 15 per cent for the same groups. These patterns were repeated at the five-year point, although the rates of full-time work are higher and part-time work lower. After five years, graduates who worked between 1 and 10 hours per week as undergraduates are more likely to have professional or managerial occupations than those who did not work (71 compared with 62 per cent). They are also likely to have higher salaries (Figure 10), and the relationship between paid-work hours per week and salary grows over time.

Figure 10: Graduate employability outcomes by participation in paid work

There should be a greater understanding and support for families with children, and responsibilities outside of university.

Figure 11: Relationship between study and participation in off-campus work
A support-practice disconnect

Involvement in paid off-campus work would seem unlikely to be diminishing, affirming a need to understand how institutions can support students and link work efforts with academic practice. Improving support would help capture the benefits that accrue from working off-campus while at the same time dampen or better manage unhelpful or unintended consequences, such as early departure.

To tap into the important link between student work activity and institutional support, students responding to the 2010 AUSSE were asked to report the level of relationship between their paid work and study. Results are shown in Figure 11. Clearly these are concerning, exposing a disconnect that is unproductive, and quite likely even harmful.

This misalignment is evidenced by looking at the lack of student participation in career-related academic activities. In 2010, only around seven per cent of first years and 15 per cent of final years consulted a careers service for advice. Strikingly, 41 per cent of first years and 27 per cent of later years said that in the current academic year they ‘never’ blended academic learning with workplace experience, and a large proportion reported ‘never’ participating in other work-related activities such as participating in a community-based project (‘never’: 76% first years, 66% later years), talking about career plans with academics (‘never’: 59% first years, 45% later years), or working with academics on activities outside of coursework (‘never’: 76% first years, 70% later years). The percentage of undergraduate students who did not engage in various work preparation experiences (Figure 12) is somewhat concerning.

Such misalignment has a clear potential to cause problems, to create bumps and inefficiencies, in students’ education. A significant amount of learners’ activity is disconnected from what would in principle appear to be their main activity – full-time study. This doubtless creates conflicts for learners’ work and study and at the same time fails to capitalise on the synergies that would likely derive from testing and using academic skills in the workplace and, conversely, embracing the significant work-derived learning that can greatly enhance academic study.

Work that needs to be done

A large proportion of today’s undergraduate students participate in off-campus paid work. This is a phenomenon to be recognised and managed rather than lamented, for the effects are mostly positive and the situation appears unlikely to change anytime soon. To this end, a series of policy-level suggestions are offered which draw together threads running through the above results.

First, and most basically, it is patently no longer possible for higher education stakeholders – students, teachers, institutions and employers – to ignore students’ participation in off-campus paid work. This is a widespread phenomenon that merits detailed research at all universities. Only by replicating the kinds of analyses presented in this briefing – and going beyond to look at links with campus characteristics, commuting practices, local missions, and feedback from consultations – is it possible to build insights into how to manage this phenomenon.

Second, it is clear that moderate amounts of paid work carry benefits for educational engagement and outcomes. Universities should thereby play their role in creating further opportunities for students to participate in paid work, particularly on campus. Working for pay helps people develop the work-ready skills employers want. It can broaden students’ development beyond discipline-specific study.

Third, and taking one step further, institutions and teachers need to develop programs that recognise or even embed students’ paid-work effort in the curriculum. Recognition of work activity exists in vocationally oriented curricular and at a growing number of institutions, but more needs to be done. Assessing links between scholarly and community work is complex at all levels of practice, but considerable dividends would derive from attempting further progress in this area.
Fourth, there is a related need to dramatically improve students’ participation in career-oriented educational activities. With clear evidence about the benefits of paid work, the low level of engagement in many work-relevant activities, and persistent calls from graduate employers for graduates to be more ‘work ready’, there is a clear case for bolstering engagement in work-integrated forms of learning. This could be progressed in several ways – potentially through increased internships, by rewarding participation in paid work, through service learning activities, or by promoting participation what could loosely be referred to as ‘enriching educational activities’.

Fifth, to enhance outcomes and reduce attrition, it is imperative that institutions develop strategies to better support students’ off-campus work. There are clear problems with current support practices – they are either failing to deliver, or have yet to be designed or re-tuned around students’ everyday activities. Doubtless good practices do exist, and with the stimulus offered by the findings in this briefing these should be studied and generalised to develop new or improved approaches that capture the positive facets of paid work and reduce attrition.

While the opportunities flowing from these reforms are great, what are the chances that such change will proceed? The answer undoubtedly depends on the extent to which institutions are able to reform curriculum and support services around engaging students in effective educational practice. This, in turn, will stem from how institutions respond to broader forces such as demand-driven funding, international competition for foreign students, student cohort characteristics, and louder calls from employers to supply graduates who are ready for the world of work. Future replications of this briefing will provide a means of monitoring the extent to which change has taken place.

Resources


What they are, who has access to them, and why they matter. Washington: Association of American Colleges and Universities.


Appendix 1: Overview of the Australasian Survey of Student Engagement (AUSSE)

The AUSSE (AUSSE, 2011) was conducted with 25 Australasian universities in 2007, 29 in 2008, 35 in 2009, and 55 higher education providers in 2010. It offers institutions in Australia and New Zealand information on students’ involvement with the activities and conditions that empirical research has linked with high-quality learning and development. The concept provides a practical lens for assessing and responding to the significant dynamics, constraints and opportunities facing higher education institutions. The AUSSE provides key insights into what students are actually doing, a structure for framing conversations about quality, and a stimulus for guiding new thinking about good practice.

Student engagement is an idea specifically focused on learners and their interactions with higher education institutions. Once considered behaviourally in terms of ‘time on task’, contemporary perspectives now touch on aspects of teaching, the broader student experience, learners’ lives beyond university, and institutional support. It is based on the premise that learning is influenced by how an individual participates in educationally purposeful activities. While students are seen to be responsible for constructing their knowledge, learning is also seen to depend on institutions and staff generating conditions that stimulate and encourage involvement. Learners are central to the idea of student engagement, which focuses squarely on enhancing individual learning and development.

This perspective draws together decades of research into higher education student learning and development (Pace, 1979; Pascarella and Terenzini, 2005; Ewell and Jones, 1996; Astin, 1985; Coates, 2006, 2010; Kuh, 2008). In addition to confirming the importance of ensuring appropriate levels of active learning and academic challenge, this research has emphasised the importance of examining students’ integration into institutional life and involvement in educationally relevant, ‘beyond classroom’ experiences.

The AUSSE measures student engagement through administration of the Student Engagement Questionnaire (SEQ) to a representative sample of first- and later-year bachelor degree students at each institution. The SEQ measures six facets of student engagement: Academic Challenge (AC), Active Learning (AL), Student and Staff Interactions (SSI), Enriching Educational Experiences (EEE), Supportive Learning Environment (SLE), and Work Integrated Learning (WIL). The SEQ is the most thoroughly validated survey instrument in use in Australian higher education, and has been revised for use in Australasian higher education.

The AUSSE has close methodological links with the USA’s NSSE. To facilitate cross-national benchmarking, work has been done to align the instrument, population, sampling, analysis and reporting characteristics of AUSSE and NSSE. There are close ties between the SEQ items and those used in the College Student Report, NSSE’s main instrument. This enables comparison to be made across these collections, with the exception of the WIL scale which is unique to AUSSE.