

# **University students in USA and Australia: anticipation and reflection on the transition to work**

*Leigh Wood*  
*University of Technology, Sydney*  
*Dr. Dan Kaczynski*  
*University of West Florida*

## **Introduction**

This paper discusses two different experiences of the transition to the professional workplace for upper division undergraduate students; one based at a state university in Florida and the other in Sydney, Australia. Of particular interest in this study is the examination of how students perceive the relationship of their university academic studies with work experience and subsequent professional placement. University professionals are confronted with several questions when this perspective is considered. What is our main aim in teaching undergraduates? Are we inducting them into a discipline or preparing them for the general workforce? Do we care about employability? Yorke and Knight (2003) summarise the views of the role of higher education and employability. Firstly, higher education can be a preparation for a profession, so employability can be defined as how well students are prepared for that profession; secondly, there is a view that university prepares students for any job by developing generic achievements so that employability is enhanced by the development of excellent generic achievements.

## **Review of Literature**

To find these generic achievements and get agreement on them is not easy. A large Australian study reported by Hambur, Rowe and Luc (2002) tested graduates over a range of graduate skills. The authors selected 5 cognitive dimensions to assess. Critical thinking, problem solving and interpersonal understandings were each tested using 30 multiple-choice items: argument writing and report writing were assessed using a writing task. The items were changed for context in different disciplines. These cognitive dimensions were selected after consultation with universities and other stakeholders such as employer groups and professional bodies. Employers preferred skills that helped their organisations with their goals, especially personal and interpersonal skills, which they listed as self management, effective oral communication, problem solving, logical and orderly thinking, creativity and flair in business, entrepreneurship, teamwork and leadership (p. 24). The universities focused more on academic skills and qualities related to citizenship. The cognitive skills investigated in the study were chosen because they were measurable and appeared to be components of other skills. Major findings included those that may be expected, such as that Arts/Humanities students performed better on 'critical thinking' and 'interpersonal understandings', whereas Engineering and Architecture students did relatively better on 'problem solving'. Mathematics and Science students (grouped for the report) perform around average for all domains,

slightly higher for problem solving and slightly lower for argument writing, and with less variability than students in other domains.

The report is an important contribution to the discussion on graduate skills. Student specific variables such as motivation and ability appeared to account for much of the variance in the scores. Performance did not seem to be related to gender, age and English-speaking background. Another useful finding was that scores on the domains tested were significantly higher in later years of study. The authors express caution concerning this result, as the reasons for it are not clear. The numbers tested in the later years were smaller, and those who did not have the required skills may have dropped out, or there could be a variety of other explanations. However, if the finding is correct, and students are improving on these graduate skills, then this is a positive result for teaching and learning. Further research with larger and matched samples will assist with understanding these findings.

Other recent research focuses on successful graduates (Scott & Yates, 2002; Scott, 2003). For a particular field of study, several employers were selected and asked to nominate a group of their most successful recent graduates, about 20 in all. The graduates and supervisors were then interviewed in depth to ascertain the attributes that had contributed to the graduates' success. From his research, Scott has developed a 'framework of professional capability' (Scott, 2003, p. 5). Scott's research points out that it is when things go wrong, when an unexpected or troubling problem emerges, that professional capability is most tested, not when things are running smoothly or routinely. It is at times like these that the individual must use the combination of a well-developed emotional stance and an astute way of thinking to 'read' the situation and, from this, to figure out ('match') a suitable strategy for addressing it, a strategy which brings together and delivers the generic and job-specific skills and knowledge most appropriate to the situation. An example used by Scott is that if a professional is unable to remain calm and work with staff when things go wrong, then how much s/he knows or how intelligent s/he is may be irrelevant.

Another avenue of research is to consider those graduates who fail to find professional employment after graduation. Fewer college graduates are prepared for the realities of work, with even fewer displaying the skills necessary for successful organizational entry (Holton, 2001). In a small study of unemployed graduates, Knight (2003) found that lack of work experience, unrealistic aspirations, competition for jobs, poor degree results and poor career planning were given as reasons for their unemployment. Graduates referred to the 'degree-work mismatch', feeling they had learned to execute a limited number of academic procedures well but remained deficient in areas such as self-presentation, self-motivation and communication. Many felt that they would need further qualifications before getting a job, and suggested that lecturers could include discussion about employability and careers as part of the curriculum from first year.

Professional societies in the United States and Australia commonly grapple with the professional development of graduates, in particular in the area of ethics and professional advancement. For example, the graduate student council of the American Educational

Research Association promotes the transition from graduate student to professional researcher by providing opportunities within AERA for professional growth, development and advancement (AERA). Engineers Australia and the Statistical Society of Australia both have codes of conduct for their members. Engineers Australia has a graduate program where they consider the professional formation of their graduates. Graduates have a mentor and development program that emphasises the competence and responsibility of an engineer. Developing professional capability and finding professional employment is important for graduates but so too is the influence of these ideas on learning at university.

The university sponsored internship program provides a valuable link between academics and professional growth. Unfortunately, limitations to the internship model have been well documented. Literature related to the work and learning experience of university students shows that traditional internships are deficient in (a) task relevance, (b) level of autonomy experienced, and (c) the nature of supervision received (Taylor, 1988). These concerns are further supported by internship participants who frequently report that they experience a lack of opportunities to fully utilize their skills and abilities and are often engaged in low challenge tasks (Holton, 2001). The internship model, however, has proven highly successful when professional development is oriented through experiential learning or direct service. Students benefit when they begin a process of meaningful interaction with professionals and community members (Gronski & Pigg, 2000). This process embeds technical skills within a larger practice of problem solving in authentic civic life across disciplines. Experiential learning programs can enhance skills in the areas of decision making, problem solving, planning, written and oral communication, and creativity (Bobbit, Inks, Kemp, & Mayo, 2000).

Two case studies are presented to explore how students perceive the relationship of their university academic studies with work experience and subsequent professional placement. At the University of West Florida (Pensacola) students receive a structured work experience programs to assist with their transition to the workplace. In Sydney, no structured program exists and the case study looks at graduates' reflections on their experiences with transition to the workplace and they make suggestions of better ways to make a successful transition. Through these cases a more multifaceted understanding of the benefits of work and learning can be explored.

### **Work and Learning in Pensacola – Case Study One**

The University of West Florida (UWF), Office of Juvenile Studies (OJS) administers grant programs and research-based studies related to at-risk and high-risk youth. These services are designed to improve juvenile justice intervention programs and enhance both pre-service and in-service staff training and professional development. Current activities by the Office of Juvenile Studies represent a wide range of prevention, diversion, assessment, employability training, and community aftercare services. Organizational research extends to public policy leadership, alternative education, school-to-work, entrepreneurship education, and outdoor education team building. University graduate and upper-division undergraduate student assistants are employed to provide community-

based services. UWF students find many aspects of the work to be directly applicable to their studies and are able to transfer these experiences into course projects, practicum, and graduate thesis research. OJS support for academic and employment integration includes a structured pay scale for undergraduate students based upon work experience and academic progress. Graduate level students receive partial tuition fee waivers along with step increases in the pay scale. All students engaged in advanced research studies are eligible for research support to attend conferences and professional training.

The vision of OJS is to support the intellectual, ethical, and professional development of current and future professionals through the contribution of quality community service, creative scholarly activities, and research. This organizational focus upon the university student is further demonstrated by the OJS mission statement to provide innovative learning opportunities for students and professionals through hands-on training, employment, practical, intern, and research opportunities, while providing an array of community-based services to at-risk and high-risk youth.

The 2003-04 OJS Annual Report provides specific examples meeting two organizational outcome assessment measures. Goal 1 is to offer community-based and experiential training and educational opportunities that further the development of socially-minded professionals. Goal 2 is to assist and support students' enhancements of academic experiences with integrated learning opportunities. Both of these goals were met through a diverse range of applied learning activities. Specific skills training and education activities were offered to students that are consistent with their individual degree programs and specialization pursuits. Training activities included individualized, group, and online training exercises on many topics including, but not limited to, developing and maintaining appropriate documentation, youth mental health needs, suicide and substance abuse risk screening, utilizing standardized assessment instruments, crisis prevention training, ethics and personal responsibility, CPR and first aid, juveniles and the law, working with families, and adolescent behavior.

During 2003-04 OJS provided employment, internship, volunteer, and shadowing experiences to 128 undergraduate and graduate students from various fields of study including, but not limited to, education, psychology, criminal justice, and social work. Experiences included working with community agencies, attending community business meetings, teaching workshops, interviewing/screening youth, intervening with youth and families, and collecting and analyzing data for research and evaluation studies.

This organizational commitment has continued into the 2004-05 calendar year with three goals designed to ensure continued organizational commitment in student focused outcome assessment measures.

- Expand the community-based and experiential training and educational opportunities offered to students by securing additional external funding sources.
- Better integrate students' academic experiences with career-oriented learning opportunities by offering additional, task-specific training activities.

- Create faculty and student research opportunities by conducting studies that target existing social, community, and educational needs.

Based on these examples of organizational commitment it is clear that work performance goals and objectives are firmly established within OJS to support a work based learning environment. Management support for learning, such as this, is recognized as an essential ingredient to making the work environment conducive for learning (Chappell, et.al., 2003). To further clarify this point, the following examples are provided of OJS students successfully transferring their work experience to their academic studies. These examples also represent a formative overview of internal research based findings specific to work-based learning.

Currently, 4 of 5 full time staff members are conducting graduate research that is integrated with their employment responsibilities. The fifth member was recently hired and is presently enrolled in graduate courses. Each of the four began working in the programs as part time students and progressed to full time staff members. Two are completing Masters theses and two are completing doctoral dissertations. Topics of study align with academic pursuits and employment experiences. One thesis focuses on anger and anxiety experiences of incarcerated females, while the other investigates the help-seeking behaviors of at-risk and high-risk youth. Similarly, the two doctoral research studies focus upon the examination of domestic violence arrests as it relates to parent/youth relationships and school-based arrests of adolescents.

In a separate study, a team of OJS undergraduate, graduate and doctoral student employees conducted a comprehensive internal formative study on work and learning. This study was presented as a referred mixed-methods research paper at the Annual Meeting of the American Educational Research Association in April, 2004. Findings from this study support student employee perceptions regarding the value of being exposed to real world work through a structured model that is closely aligned with their academic studies. "Many found they were able to take the theories they learned in the classroom and actually apply the theory during their employment experience" (p. 20). Findings further supported student perceptions that their OJS work experience had a significant effect on future educational and career choices. Particular value was identified from program in-service training, engaged supervision, and experiential hands-on work experience (Hayes et al., 2004).

This final example not only demonstrates the integration of work and learning but also addresses how students perceive the relationship of their university academic studies with work experience and subsequent professional placement. An OJS student employee conducted his doctoral dissertation examining the relationship of work, learning and career decision making among OJS student employees. The following are findings from this study specifically relevant to this discussion.

- "an 85% positive response rate...relating to the influence on [participant] career choices working in the juvenile programs." (p. 88)

- “92.5% of students indicated that there was no change in their choice of major during their time participating in the juvenile programs.” (p. 84).
- For students involved in psychology, education, or juvenile justice pursuits; “their work in the juvenile programs encouraged them to continue in their chosen fields.” (p. 84)
- 90% of students indicated that their work benefited their professional development, citing such benefits as “network capabilities for future jobs, experiences of different cultures and lifestyles, improvement of communication capabilities, tools to excel academically, growth in confidence, and documentation skills.” (p. 81) (McMahon, 2004)

These positive results are a good indication that the placement has worked well for this group of participants and given them a meaningful appreciation of the work required after graduation.

### **Work and Learning in Sydney – Case Study Two**

The second case study is in a different discipline area (mathematics) where the nature of the work that a graduate may move into is more diffuse (Wood & Reid, 2005). The students had not participated in a formal *transition to the workplace* program run by their university, as had the Florida students.

Here we consider an in-depth study of 18 graduates of the mathematical sciences (Wood & Reid, 2005). The graduates were all within five years of graduating and had graduated from five universities in the Sydney region. They were asked to reflect on their transition to the workplace and how their university studies had helped with the transition. They were also asked about other influences were important in their transition to the professional workplace.

The study revealed serious areas of under preparedness for the workforce. Graduates were unprepared for the office environment or to deal with colleagues and managers. Their first experience, particularly with their manager, set the scene for their adjustment. Many of the mathematicians were alone with their area of expertise and had to adjust to the language of those around them – with no training for this from university. Most were unprepared for the job seeking process itself and had to educate employers on their skill set. Graduates were unaware of language choices and how to communicate at different levels.

Graduates struck their first hurdle when finding a job. They did not have knowledge of the job market or the process of finding a job. During their degrees they had not had career training and there is no formal job placement processes so many of the graduates had found difficulty with the whole employment scene. Here we quote three graduates. Heloise is working in a position that really used her skills well but she had had to really push to get the position. Leah is working for a government department but again had difficulty finding appropriate work and negotiating the mire of job applications. Sally has

become an expert in writing resumes and practicing for interviews. She believes that career knowledge should be part of a degree.

Heloise: I think the other thing that graduates should know is that, when you do go into interviews you gotta sell the degree because... especially talking just with an agency who has no knowledge

Leah: I think it would be humane for somebody, whether it be the university or the Student's Union or, you know, a group of volunteers whatever, to have some kind of in-your-face ... I don't know if training's the word, just exposure to what happens when you go for a job.

Sally: Yeah, you should give an accurate idea of what potential jobs are out there, instead of finding out at the end.

When graduates secured a job, the people they worked with made an important contribution to their adjustment (or not) to the workplace.

Heloise. I think the biggest help was the people I work with. When you're comfortable, especially with your manager, the person you report to, you're comfortable with that person, it makes a big difference

William: I ended up leaving after a year ... I still worked and I wanted to work hard and learn but, I think, I wasn't prepared for the environment.

When asked what helped them with their transition to the workplace, graduates talked about part-time work and participation in outside activities, such as sporting clubs or church.

Nathan: Yeah. Actually, that's one thing I'd recommend as part of a degree. I mean most people, when they're going through uni, they have some sort of a casual or part-time job. Often it's probably in some sort of a service industry where they're working in 'Woolies' packing shelves or as a checkout operator or in McDonalds serving burgers or probably, you know, at the university grounds working behind the registers and all that. That's fine, gives you a bit of side money and keeps you going through uni. I was a bit lucky in that I did do tennis coaching which is quite different.

Kay: I'm quite involved in leadership and things in areas outside uni like in a helping situation, also in Church and things like that and I've done a few courses and I've actually read a lot of leadership books and things like that.

Many graduates talked about their personal attitude and how that helped them through their transition to the workplace.

James: It doesn't matter if you get a HD average, you're going to have to start at the bottom and work, in my case, you don't have to do the position (?). It's dull and boring for a while but if you've got the right attitude you can learn and work forward.

Thi: I think it goes into everything that you do in life: uni; friends, even; networking; business. Just striving and working and continuing to work until you're satisfied that this is all that you can do and you can not do any more and just doing that. Just actually going for it.

Graduates suggested a range of changes to university courses that would have helped them in their transition to the workplace.

Helen: Maybe an option, to do a six-month formal work experience but if you didn't want to do a full six months of it, maybe a few weeks... the difficulties of setting something like that

up... but just a bit of hands-on... I just found it very theoretical. The course that I did, when I went over to Singapore [sponsored by her workplace], was a training course on LPG trading and one of the days we spoke about swaps and futures and the paper market and all of that and with my finance it all sort of came back, 'I should know this' but it was just so theoretical here at uni that it doesn't really stick until you put it into practice and then I actually understood it better on this course than I did at uni because it was real...

Evan: Maybe like a transition to employment, like a third year subject, whether it's a subject or something else

Nathan: I mean it's fine to learn a degree in I.T. and you learn how to program but the real world teaches you all the other things that come with it and I think it would be very beneficial if those things were taught or at least focused on as the study, or part, of a subject. ... I think that you could probably, if you had a lot more exposure to the 'real world' as part of your learning process, I think you can't go wrong.

Paul: Probably more putting it in a professional context, ... like when we are at uni we basically given an essay or something, like try and write this in your own words and it had no relevance, no professional relevance and so making something more work relevant would be useful so maybe a report writing course or something like that but for business rather than for academics.

William: a graduated approach, where you might start by learning some theory, then be working a bit with, say, a lecturer in a mock team situation on a realistic project, then having industry experts come and work with you to maybe do real project, you know, they can farm out a lot of that work to the university as part of a, sort of, an apprenticeship and then it can, sort of, go from being 'on-campus' to 'off-campus' where you're doing, potentially for no money or for nominal money, the same sorts of projects and then, finally, from that the step into actually working professionally on projects is not a difficult one. So, I suppose, if university was able to forge stronger co-operative project-base (sic) work with industry that would be a really helpful thing to make that transition.

## **Discussion**

The two case studies show different situations: one where students had access to a university-sponsored work placement program and one where graduates make their own way in the world, with some support from university agencies, such as careers assistance. It is clear that the Pensacola program helped students make a successful transition and that graduates without access to such a program would like the idea of more connection with the workplace though much of this could be done by curriculum change with more applied learning.

University students in Pensacola and Sydney experienced anticipation and reflection on the transition to work from different perspectives. In the Pensacola case, student perceptions were measured while the students were still in university. This preliminary measurement of interdisciplinary student experience supports a favorable anticipation to the benefits of learning through work experience. This is particularly significant with 90% of these students indicating that their work benefited their professional development. The Sydney case represented post data from recent graduates in a specialized discipline. The study provided a different perspective to this issue by revealing that these students experienced serious areas of under preparedness for the workforce. This discrepancy in



findings between the two cases assists in illuminating a better understanding to student experiences. Much can be learned from exploring different higher education strategies that address student preparation for a profession. For example, mentoring, apprenticeship and peer support models may be more appropriate to meet the professional development needs of students in a specialized discipline. In both cases, however, the importance of professional organizations in supporting advancement of graduates is increasingly relevant.

With two researchers developing and examining these case studies, investigator triangulation was applied to support a richer deeper exploration of different real-world nuances (Patton, 2002). This is of particular value given the cultural and academic field distinctions between each setting. From this interpretive process two points emerged. First, effective work and learning experiences require organizational commitment to applied learning. This implicitly supports ongoing curriculum reform initiatives throughout what is regarded as traditional academic learning practices. Second, organizational commitment must clearly extend to equitable sharing of resources at all levels. The mission of the university is centered upon the learning experiences of the students. By addressing the relationship of work and learning in an equitable manner, organizational resources can be dedicated to different colleges and schools within the university to enhance work and learning instructional practices in support of the professional development of students.

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