Dancing in the moonlight: The nature and extent of portfolio employment by IT academics

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ABSTRACT

Portfolio working (PW) , where a person maintains more than one job, is a significant feature of the employment environment for New Zealand IT academics. Mostly, this work is undertaken to maintain professional skills and efficacy is seen as a more important motivator than financial reward. The high level of portfolio working reported amongst the respondents in a survey if IT academics within the NACCQ sector bodes well for a sector that considers links with industry and up to date commercial experience to be a critical competitive advantage in the tertiary marketplace. This paper discusses the nature of within the sector and presents demonstrable benefits of such activity both to the individual academic and to the institution.

1. INTRODUCTION

Anecdotal evidence supports that portfolio working (PW), where a person maintains more than one job, is common amongst lecturers in the computing and information technology (IT) discipline. Such a practice is also referred to as 'multiple job holding', 'secondary employment' or 'moonlighting' and is a global trend. To date no research has been undertaken on the specific impact of PW amongst IT academics and therefore it is difficult to gauge other than anecdotally whether this practice is positive for the sector. This paper attempts to describe the nature of portfolio working amongst IT lecturers within the NACCQ sector. It then goes on to describe the results of a survey carried out amongst IT academics within NACCQ member institutions in order to attempt to identify the nature, benefits and potential problems that are attendant to PW. Such research is considered timely given the conflict between academics maintaining up to date applied knowledge and an increased drive toward purely academic measures of productivity, heralded by the new Performance Based Research Funding (PBRF) model (TEC 2003).

2. LITERATURE REVIEW

The practice of non-standard work has received much attention in recent years, especially by governmental labour agencies. Butcher's (2002, see also Carroll 1999) review of non-standard work in New Zealand describes a "standardising of non-standard work and the non-standardising of standard work" (p4). Butcher found non-standard work practices to be particularly prevalent for IT workers.

New Zealand Department of Labour (DOL 2002) describe a common view of the future in which traditional employees - working for a single employer, in the employer's premises for a given wage or salary - are replaced by free-lancers, 'portfolio' workers, or teleworkers. Technology, the common view holds, will enable tomorrow's highly skilled technicians and professionals to engage in work through fluid networks, rather than the rigid hierarchies that defined the work of 'traditional employees'. Choice and flexibility will be

the order of the day. The evidence backs such a view to some extent at least. Globally, such practice is growing and forms a "significant feature of the employment landscape" (p11), although in the UK the TUC (2000) reports that over 90% of employment is still "traditional".

There is little data available on the number of persons engaged in non-standard work in New Zealand (DOL 2002 p11). The extent of PW in particular is a little clearer, with western countries ranging from 5-10%. (Canada 1997 Labour Force Survey 5% Sussman 1998, USA 1995 Current Population Survey 6.3% Amirault 1997, UK 5%, TUC 2000, NZ 2001 Census 10.1%).

In a major time use survey in NZ, Callister and Dixon (2001) reported on work practices. They found that "while most paid work is done at conventional times, a great many people - probably the majority - undertake some of their work outside of conventional business hours" (p8). In the non-agricultural sectors of the economy, 10 percent of all paid work time was at home, mostly a "spillover" of work from regular jobs. Unfortunately for the current research, Callister and Dixon made no distinction between primary and secondary jobs, or between work coded as a primary or a secondary activity (p29).

In the UK the Trade Union Congress (TUC 2000) reported on the "future of work" and discussed notions of flexible forms of employment in knowledge driven economy. They comment that portfolio workers are often portrayed as creative IT literate professionals, but they assert the reality is usually more in areas such as catering or cleaning and are often taken to supplement low earnings in a main job.

In the US, Anon (2000) reports a number of reasons for PW; only 40% were to meet regular expenses. Common reasons for working more than one job included enjoying the work on the second job, wanting to save for the future, wanting to get experience or build up a business, and wanting some extra money to buy something special. To this list, Sussman (1998) in Canada adds job security. She reports that half of PW cited non-financial reasons.

Sussman (1998) reports that PW whose main job was in educational services or health and social services were the most likely to hold their second job in the same industry as their first. By contrast, those whose main job was in manufacturing seldom held their second job in that industry.

Amirault (1997) reports on the American Current Population Survey. He found the tendency to work multiple jobs increases with education: 3.3% of unskilled, 9.4% of PhD - with those holding primary jobs in professional specialty (including college faculty) most likely to hold more than one job. Amirault suggests work schedules are a major reason for this, along with having skills or knowledge in sufficient demand to cause employers to seek their expertise even though they are already employed. 14.1% of college and university teachers have multiple jobs despite being above median in terms of salary.

Amirault also examined the relationship between primary and secondary job. Professionals were more likely to have both jobs in same occupational group: 53% (p12 cf 20.3% agriculture, 5% for machine operators). Workers performing in a secondary capacity are also an important contributor to -employment where 15.1% of employment is secondary, which Amirault attributes to people with specialized expertise supplementing earnings by teaching part time.

Much literature on secondary employment concerns legal aspects, particularly for government officials and law enforcement (LAAW 2001). Such a line also applies to education. Recently the Cambridge Vice Chancellor was criticised for taking on a directorship of public companies (Vettasseri 2002), staff unions arguing, "being a vice-chancellor is a full-time job, and you should not do anything else on the side" and a council member argued he should "set a clear professional lead in avoiding conflicts of interest".

Henderson (2000) reported that 28 percent of Texan teachers who responded to a work practice survey had extra jobs, compared to 22 percent 20 years ago. Seventy-eight percent of those who hold extra jobs felt it was detrimental to their performance in the classroom, compared to 64 percent 20 years ago.

Taylor and McCrostie Little (1998) found off-farm employment to be fundamental on a majority of NZ farms, 37-39 percent (1991) and is "widely accepted, no matter the reasons for it". In addition to economic benefits, Taylor and McCrostie Little reported social benefits, especially for women, for example "to me it is very important because it gives me contact with the community" (p6). They did not report any such benefits for the males nor professional development benefits, rather the qualitative responses where that those undertaking off-farm activity had a feeling of being "not considered 'real farmers'" (p6).

Another area of study is that of the 'academe entrepreneur'. Tertiary institutions are widely recognised as having a role in economic development. However, as Tidd et al. (2001) describes: "the creation and sharing of intellectual property is a core role of a university, but managing it for commercial gain is a different challenge" (p351). They describe issues such as intellectual property, equity split, academic

secondment and so on, noting bleakly "in short, it is complicated". The "academic entrepreneur … highlights most clearly the dilemmas faced as the scientist tries to manage the interface between academe and industry" (p352). They argue that it is essential to have explicit guidelines for the conduct of business in a university environment, in particular:

1. Specific guidelines on the use of university facilities, staff and students and intellectual property rights

2. Specific guidelines for, and periodic reviews of, the dual employment of scientist-entrepreneurs, including permanent part-time positions

3. Mechanisms to resolve issues of financial ownership and the allocation of research contracts between the university and the venture (p354).

The potential for staff to develop core complex relationships in order to facilitate innovation is not restricted to academia. Loudon (2001) reports that "an increasing number of established companies are working on programs to give employees the opportunity to develop ideas that don't necessarily fit in with the core business or which might be a threat to existing business but have the potential to create value for the company. They are doing this both to keep in touch with new webs of innovation for strategic renewal and to retain talented employees" (p90).

From this review of the available literature, it is apparent that there are many motivations for different forms of work. Such practices are significant contributors but not dominant, while IT workers and academics in particular seem likely to undertake such practices. There is much material on constraints such as legal aspects, but there is little research on potential benefits and conflicting evidence on the effect of such work on the academic role. With so many uncertainties, it is timely to undertake a survey of IT academics in New Zealand, with the aim of exploring the impact of PW practices.

3. METHODOLOGY

A survey form was designed and piloted before being electronically distributed to all IT lecturers in the NACCQ sector. A covering letter gave a broad description of portfolio work and asked respondents to complete and return the anonymous survey. A reminder email was sent two weeks later and 23 responses were received. All but two reported some form of portfolio work, and the PW responses are reported in the following sections. Identifying information has been removed. Non-PW workers argued *"I couldn't fit another job into my life. I work a bit of unpaid overtime as it is and I have a family and*

Table 1: Classification of work other than IT Academic

Area	Count
Information Technology	14
Training/related profession	4
Catering/retail	2
Management/ownership	9
Entertainment (Musician, Theatre)	2
Other (Civil Defence, Electrical Contracting)	2

sport commitments. I like to think I live a lifestyle rather than let money rule my life" or simply *"no time for moonlighting".*

4. RESULTS

Respondents described up to four roles, although most listed two roles including their academic responsibilities. This academic role was mostly fulltime, or nearly fulltime.

For those with fulltime academic roles the commitment to the other work ranged from one to two hours per week to 15 hours per week, or in other terms, 100 days per year. This work was generally *"after hours and weekends"* or *"whenever has time"*. People with less academic responsibilities did other jobs up to nearly full time. One respondent reported being *"fulltime plus in both"*. For many the other work involved self-employment or consulting. One respondent reported secondment and two described voluntary work.

Table 1 shows a classification of the areas of work other than the academic role, some roles were counted in more than one category. Work in the IT area was prevalent, and many respondents reported management or ownership roles in combination with IT. The tasks of those performing IT work falls into four areas: computer servicing and support, applications development, IT strategy consulting, and IT training. Two respondents reported work in catering or retail.

Respondents were asked what they get out of their portfolio arrangements. As expected, various explanations were given. For some, the reasons were financial: *"First (academic role) pays me an income; second (consulting) prepares me for retirement"*, or *"A mix of secure income- from the polytech- with the higher return from self-employment"*, and *"The idea is extra money, and a Plan B should Number One Job fall over"*.

For others, the reasons are more about skill development: *"Real live practical experience...stretching to solve problems that I would not have to solve otherwise"*, or *"An in-depth understanding of another world (publishing / bookselling)"* and *"...learning something of the mystical world of site hosting, domain names, Flash, databases and so on"*. An *"added dimension"* was also seen as a benefit beyond actual subject matter.

A common view was a combination of time and use of skills: *"better use of my spare time & some extra money to take care of my family's needs"* and *"$$$, $$$ plus currency in technology applications and networking contacts"*. Several respondents suggested that their PW had benefits in terms of research for the institution. One argued that *"research hours should be applied to outside work with or with out published results"*. Others also raised the raised an issue of research ownership.

For others, a sense of community or personal satisfaction was important: *"a sense of helping a worthwhile work...get to know youth leaders for my own kids etc (Bible College)"*, *"Apart from helping friends, the main activity (music) earns well and provides substantial stress relief"*.

For some, the reasons seem to have something to do with academic freedom: *"I am able to achieve an individual identity in my academic role in isolation to that of an employer in our business"*. The high rate of management and business ownership may also be seen to have a similar basis. Two respondents described research projects being *"rejected"* by their respective academic employer and the PW being a vehicle for *"pursuing it myself"*.

In the attempt to triangulate the reasons for undertaking PW, respondents were asked if they would continue this practice if they could raise a similar amount of money from their primary academic role. *"(No) they would prefer one set of responsibilities"* was the single negative response, although others gave conditional responses: *"While we run our business, it will be necessary to work in this manner. If we did not have a business, I think I would prefer just one set of responsibilities"*. For others it appears to be the academic role that would be dropped: *"it depends on the job. I don't think I'd like to be full-time at institution_name"* and *"I have pondered this several times. I am frustrated and stressed by working in the under-funded education sector...I won't give up my other job - as I feel I am still learning from it - and I enjoy the extra income. I will keep reviewing the situation and if I believe that I can do my other job without compromising my security of income - I would leave or reduce my education role"*.

Respondents were asked about relationships between roles. For some, the roles are compartmentalised, such as the individual identities above, or variations on *"they are entirely different"*, or *"both IT related but neither conflicts with the other"*. Some see relationships: *"the management roles are similar, organisational concepts apply equally to business and education"* or *"they complement each other fairly well. Some of the things I learn in each role are useful in the other"*.

When asked explicitly if they saw positive benefits for their academic role from their PW practice, every respondent described direct advantages.

"I get to meet lots of different types of people, which helps me in my interactions with my students. It helps me in time management & managing more than one task at a time. It also helps me to look at things from the other person's perspective."

"Being able to show real applications to students and bring the experience to the classroom. Also, using students in some projects for work experience."

"My involvement in our business provides currency and validity to the business focus of my lecturing topics. Helpful for my students to have an insight into real-life business examples and current industry practices. E.g. Employers expectations of employees in addition to qualifications, showing initiative, persistence, commitment, standard of presentation, etc; the role of word-processing in a business - often considered a boring part of computing by 'techie' type students; accounting practices; risks and challenges faced; the role of the employer's responsibilities for the employee and their family when making business decisions - strategic or operational, etc. The business also provides similar benefits to my ongoing Masters study".

"Get ideas... polytech student supervision"

"It keeps me current within the industry. Some of the contacts I develop are useful for my (and others) academic courses"

"Practical experience; much wider range of problems solved; greater product knowledge"

"Directing shows for schools keeps my relationship with potential customers"

On the negative side, respondents struggled to identify negative aspects of their PW practices, and where they did, it was to say how they avoided it. The most common issues surrounded time and energy *"I never let my part time work conflict with teaching. It is flexible and I keep it in the background. i.e. visit clients in evening or at weekend"* or *"Sometimes during difficult*

periods... it is more difficult to remain focussed on elements in academia that seem distant from real-life and therefore lack importance. I maintain a policy of non-availability by outside areas while teaching, except in emergencies involving family." and *"Occasionally, I have to attend to clients during my normal working hours. However, as my work is not secret - I don't have too many problems. It does not interfere with my classes and I make up any time lost in other ways."*

The other side of the PW arrangement is the other employer or other party. It is of interest to know the advantages for these parties. The main areas are that of credibility and professionalism: *"They know that I'm a professional & I will always be a professional in my work ethics, which is a big relief to them. Especially with things like sticking on to schedule / time, completing the work in the required manner, taking responsibility of the work that is assigned etc".* This benefit combines with lower cost *"as it is not my only income, I can offer my 30+ years of DP experience at well below market rates. As I teach a range of topics, I have a wider knowledge than someone working in narrow, specific areas".* Only one respondent pointed to access to materials such as software, but professional development and access to the library etc were common theme: *"the currency of knowledge gained for teaching purposes and in study are able to be applied to our business. e.g. new information systems, early adoption of internet applications to business systems"*

Tidd *et al.* (2001) described the importance of guidelines and clear arrangements for business in an academic environment. So, what were our PWer's experiences of such arrangements? For most, they've *"had no problems so far".* It seems that for most, their academic employer knows about their work practices and either formal contracts or *"gentlemen's"* agreements are in place. For example, *"I have dealt honestly with my boss and we have a good working relationship. I have had no real problems. If I think a conflict of interest may exist - I discuss it with my boss before it becomes a problem".* Many of the respondents stressed the importance of professionalism: *"there are no problems. I let my boss know what I am doing and he is supportive. He trusts me to do the best for the academic institute".*

Where formal contracts are in place, respondents reported areas including, materials, use of time, contact management, ownership and identity of materials (eg *"training material has been modified to suit company_name and not reflect institution_name"*) and permission to use the institution as a meeting place. One respondent highlighted a need to have a clause in outside work that excludes liability of his/her academic employer. Another argued that *"explicit contracts need to be in place for each staff—broad terms, not for each 'job'".* For most, the complications seem to be around the implementation of time management, for instance *"I have found institution very slow to respond to workload issues which has made some of my other work very difficult"* (but non PW workers may well have the same complaint).

Two respondents reported difficulties with their PW arrangements. However, in both cases, the PW was a result of previous disagreements and not the cause of the problem.

In closing, many respondents argued that PW should be encouraged as *"is healthy for the institution".* Perhaps the most intriguing statement came from a respondent who argued *"no one should be allowed to teach in information technology without some outside work in the IT field".*

5. DISCUSSION

Portfolio working is a significant feature of the employment environment for New Zealand IT academics. Despite fears of low paid jobs in the catering and cleaning sector being used as props for low paid other jobs (TUC 2001), it appears that the respondents in our survey are not primarily engaged in PW for the money. Rather, professional development, use of skills, experience of the 'real world' and community service are as important as the financial benefits.

PW may have potential advantages for the academic institution. Mann and Cowan (2000) found the polytechnic sector prides itself on links with industry. Recruitment practices stress the importance of experience, not only as a teacher, but also as a practitioner. The respondents in this survey all identified benefits for the institution. It would be worthwhile to investigate these benefits in more detail; perhaps an in depth triangulated study into the practices of a small number of lecturers. This should include student feedback and examination of classroom practices.

Further research is also needed into the relationship between theory and practice. We assume we want staff with experience, but the process of transfer/ translation to teaching is not clear. However, we need to better understand the links between teaching and practice as well as to further explore ways in which

professional activities can be integrated within a practice, teaching and research continuum.

From a staff management perspective, it would be worthwhile to explore best-case approaches to managing staff who undertake PW. Disclosure is well covered in terms of conflict of interest, but this research has highlighted that relationships between roles are often complex. In particular, intellectual property issues should be explored. It is important, however, that a contractual approach does not damage the goodwill and professional attitudes evidenced by the respondents in this research.

An overriding theme of respondents in this survey was that they felt their activities benefited teaching; they used their experiences directly to inform teaching. While this fits within definitions of research, it does not neatly fit with output models of research quality assessment.

REFERENCES

Amirault, T. (1997). "Characteristics of multiple jobholders, 1995." Monthly Labour Review(March): 9-15.

Butcher, A. (2002). A Review of the Literature on Non-Standard Work and the New Economy. Working Paper No. 9. Palmerston North, Labour Market Dynamics Research Programme. http://lmd.massey.ac.nz/documents/Working%20Paper%20No9.pdf

Callister, P. and S. Dixon (2001). New Zealanders' Working Time and Home Work Patterns: Evidence from the Time Use Survey. Wellington, Labour Market Policy Group, Department of Labour: 98. http://www.dol.govt.nz/PDFs/OP2001-5.pdf

Carroll, N. (1999). "Non-standard employment: a note on levels, trends, and some implications." Labour Market Bulletin 1999: 101-121.

Department of Labour (2002). Future of work. Wellington, Department of Labour: 29.http://www.dol.govt.nz/PDFs/Fow-stocktake.PDF

Henderson, D. (2000). Texas Teachers, Moonlighting and Morale, 1980-2000, Sam Houston Sate University. 2003.http://www.shsu.edu/~pin_www/HendersonStudy00.html

Liability Assessment and Awareness International (2001). Law enforcement off duty employment - should it be regulated. 2003. http://www.laaw.com/offdutyemp.htm

Loudon, A. (2001). Webs of Innovation. London, Pearson Education.245

Mann, S. and Cowan, K. (2000). Degrees of Information Technology in New Zealand Vocational Institutions. 13th Annual Conference of the National Advisory Committee on Computing Qualifications, Te Papa, Wellington, New Zealand, NACCQ.199-206 www.naccq.ac.nz

Martel, J. L. (2000). "Reasons for working multiple jobs." Monthly Labour Review Oct 2000: 42-43.

Taylor, C. N. and McCrostie Little, H. (1998). Off-farm employment and entrepeneurship: the New Zealand farm family in the 1990s. Rural Sociological Society, Portland USA

Tertiary Education Commission (2003). Research Outputs, Peer Esteem and Contribution to the Research Environment Guidelines,:.http://www.tec.govt.nz/Docs/PBRFresearchoutputs.pdf 17p

Tidd, J., Bessant, J. and Pavit, K.. (2001). Managing Innovation: Integrating technological, market and organisational change. Chichester, John Wiley.338

Trade Union Congress, (2000). The future of work.http://www.tuc.org.uk/em_research/tuc- 2397-f0.cfm

Vettasseri, R. (2002). Moonlighting V-C. Varsity: The Cambridge Student Newspaper. Cambridge.http://www.varsity.cam.ac.uk/8025694E0073CFEB/Pages/Issue562_News_5VodafonedocMoonligh.html

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