

# Learning in the learning workplace: tertiary institution staff perceptions

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Australian researchers Chappell and Hawke completed a survey of their tertiary training organizations within Australia in 2006 and 2007. This related to workplace learning within their tertiary environment sector. In 2007, a small research team from Otago Polytechnic recruited participants to complete a two-domain Provider Learning Environment Scale as developed by Chappell and Hawke in Australia. The domains were organizational environment and job complexity. This was implemented across 16 New Zealand tertiary organizations. The aim here was to define the perceptions workplace learning environment in New Zealand. The aim was also to evaluate and compare the results from the Australian research by Chappell and Hawke. On the basis of this, a two domain *Provider Learning Environment Scale* with 45 questions, using a 5 point Likert scale response system was developed by Chappell and Hawke. This was then repeated and disseminated in 2007 to staff from 16 New Zealand tertiary organizations by way of an online survey. The two domains surveyed, that is, organizational environment and job complexity showed a high level (67%) of agreement with the 45 questions. There was a larger number of academic and teaching staff amongst the respondents. The administration and support staff responses reflected the impact of change on their work practices as being very high. Overall, the level of agreement with the 45 questions was high. Because the respondents were overwhelmingly academic and teaching staff, a more focused exploration of the perceptions of administrative staff may be of value and contribute to the structuring of job complexity and organizational environmental practices within tertiary institutions. (Asia-Pacific Journal of Cooperative Education, 2009, 10(2), 141-149).

Keywords: Learning, workplace, tertiary, staff.

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New Zealand tertiary training providers are challenged to adapt to the increased bureaucratization of the tertiary sector, to move away from the rational economic, market forces-driven environment of the previous 20 years. This will take, among other things a shift to niche and specialty provision, reduced competition and duplication, capturing of non-governmental sources of funding, retention of learners to completion of qualifications with an emphasis on the higher levels (Level 4 and above), and post-initial qualification developments. It is a culture shift that demands movement of staff groups to new patterns of thought, motivation and practice. Tertiary training institutions (TTOs) along with other education and training organizations are being challenged to deploy their staff to best advantage and to support those staff in ongoing learning and development. Australian researchers have been looking increasingly over the last decade at what defines workplace learning (Harris et al, 1998). Billett (2001) describes workplace learning as affordances. Furthermore, the classic human resource literature on what might make a learning organization Schön (1973) and Senge (1990), and how such learning might be organized within regular work practices (Van der Krogt 1998, Poell 2004). In a large study, designed to contribute to capability building in the vocational education and training sector, Chappell and Hawke (2005) conducted a major literature review investigating learning and work. This led them to suggest that despite differing ways of expressing the characteristics of the work environment, an organization's learning environment can be clustered around four areas or

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domains: Work environment; Work process environment; Social interaction environment; and Managerial environment.

Chappell and Hawke (2005) subsequently developed a diagnostic tool based on their literature review, and trialed it in 2006 across nine registered training organizations in Australia, both public and private, that each employed more than 200 staff. The key messages from this trial reveal that employees in these organizations understand critical aspects of their work environment to be more intertwined than the body of research literature suggests, and that two aspects of the workplace appear to be of most relevance:

- *Organizational Environment*: this involves aspects of the ways in which the managements is structured and organized, the ways in which the organizations structures and processes allow or encourage communication, and the ways in which the work of the institution is shared among employees; and
- *Job Complexity*: this is the extent to which the individual jobs entail complexity, uncertainty or variety.

On the basis of this, a two domain *Provider Learning Environment Scale* with 45 statements, using a 5-point Likert scale response system was developed and trialed in 2007. Chappell and Hawke (2005) hypothesized that *Organizational Environment* is defined by items that focus on:

- Manager/management support;
- Intentional creation of learning opportunities by the institution;
- Involvement in teams;
- Provision of useful feedback on performance;
- A clear sense of the organization's mission/purpose;
- Ready access to necessary information; and
- Ready access to other people in the organization.

Further, *Job Complexity* is characterized by items that reflect:

- Work with considerable variety;
- Regular contact with a variety of people and ideas external to the organization;
- Regular contact with people and ideas within the organization;
- Ongoing change;
- Work with high intensity/demands.

Of the 45 items 19 relate to job complexity, and the remaining 26 to Organizational Environment.

## METHODOLOGY AND CONTEXT

### *Theories and Models of Workplace Learning*

The notion that people develop throughout their lives as a result of their work experiences, and the assumption that people develop know how which is defined as a type of knowing what to do in practice that is evident in their various intentional actions, is the basis of workplace learning. (Beckett & Hager 2001) This adult capacity for learning amongst the experiences of the workplace supports the notion of lifelong learning. In policy terms the future of lifelong learning is connected to the whole person and their experience knowledge and skills possessed over a life time. A model of practice based workplace learning has been developed that incorporates six key features. These are: practice based informal workplace learning is organic/holistic, practice based informal workplace learning is contextual, practice based informal workplace learning is activity and experience based, practice based informal workplace learning arises in situations where learning is not the main aim, practice based informal workplace learning is activated by individual learners rather than by teachers/trainers, practice based informal workplace learning is collaborative/collegial

(Beckett & Hager 2001). Historically the standard paradigm of learning excludes practice-based learning from work. This exclusion is an indication of the ongoing tension between education and work. The problems stem from the assumption that vocational education is inferior, the assumption that front end model of occupational preparation is more superior, and the failure to provide an educational account of workplace performance and learning. There is a newer emerging paradigm which points the way to an educational account of workplace performance and learning to replace the theory practice account. (Beckett & Hager 2001) Thus the dualism in education/vocational education has been dominant influences in educational thought and practice. These dualisms have had major influences on educational practice, policy at social and political levels. There are some distinctive differences between formal learning and informal workplace learning (Table 1, Beckett & Hager 2001).

TABLE 1

Differences between formal learning and informal workplace learning (after Beckett & Hager 2001)

<i>Formal Learning</i>	<i>Informal Workplace Learning</i>
Single capacity focus, e.g., cognition	Organic/holistic
Decontextualized	Contextualized
Passive spectator	Activity and experience based
An end in itself	Dependant on other activities
Stimulated by teachers/trainers	Activated by individual learners
Individualistic	Often collaborative/collegial

Although informal learning in the workplace is often classified as being more relevant to the actual needs of the workers and the organization (in contrast to classroom learning), this relevance can come up short in situations that demand more of workers, which they cannot be prepared for in advance. Discussions on “relevance” in schools and whether teaching and learning should be more or less theoretical or experiential in schools, produces a similar situation. So in workplace terms, simple production values may dominate in a “business as usual” scenario, but they fail when the organization is required to respond to new challenges—which is why Senge (1990) found that learning has been a key factor in organizational adaptiveness, productivity, and survival. Where people are positioned in the political economy of the workplace affects not only the types of learning in which they engage, and the types of knowledge they can acquire, but also the extent to, and manner in which, their learning and knowledge is recognized. The emergence of “new economy” and greater employee involvement means more learning-intensive workplaces. In other words, learning is really only as good as the opportunities to really participate in the organization. There may be a predisposition that tertiary learning workplaces are more predisposed to ‘workplace learning’ than others however this is not an assumption that is supported by research. Knowledge-rich organizations like universities and polytechnics do not always prove to be the most educational, because they sometimes classify and frame the use of knowledge in ways that bar newcomers and other marginal players from participation.

Access to opportunities to participate in the workplace, and learning, is competitive because of groups such as newcomers and old-timers, full-time and part-time or contract workers, teams with different roles and esteem, individual workers’ goals and careers, and institutions or groups representing different groups of workers (Billett, 2001). However, much of the literature also points to a complete lack of agreement about what informal and formal (and

non-formal) actually mean, and where the boundaries between them might be. Workplace learning can certainly include both formal and informal learning, and important informal learning can include workers consulting with or seeking advice from other workers or even from wider contacts such as professional networks, suppliers, and customers. Hager (1998) suggests a focus on “making judgments” as the central activity worth studying in workplace learning. He claims that workplace learning is essentially about learning to make appropriate judgments in the changing and often unique circumstances that occur in the workplace. Eccelston and Pryor (2003) acknowledge that there are dual pressures both to formalize the informal aspects (with curriculum and prescribed texts) and to in formalize the formal aspects (through learning mentors, often without teaching qualifications). Yet in studies of workplace learning, both informal and formal learning are present and neither is inherently superior to the other; moreover that no theory of learning ever only applies to just one. So the challenge is not therefore to combine the two, but to recognize and study the nature of the informality and formality and the balance between them (which vary in different situations), and to understand the implications of those things. Eccelston and Pryor (2003) suggest focusing on: learning processes; location and setting; purposes; and content. Workplace conditions and learning opportunities may be on offer, but without an understanding of the learners themselves, workplace learning cannot be successful. As with learning in any context, there needs to be an appreciation of people’s learning backgrounds, for example, their age, literacy, and numeracy levels, the characteristics of any social group they belong to. Because learners bring with them into the workplace many experiences and preconceptions, it is also important to take account of their past experiences of learning and how they feel about learning now. A learning career develops over time and changes as experiences of learning, and experiences of oneself as a learner change (Smith, 2003). A learning career is not necessarily experienced in a conscious way but it does contribute to learning decisions and preferences in a working career, as well as an identity as a particular worker within a specific field. Conclusions drawn from one Australian study suggested that mature-aged workers tended to be keen learners who were limited by a lack of confidence but they had other qualities that could be useful in carefully managed workplace learning programs (Smith, 2003). The authors suggested that workplaces recognize that mature-aged workers were generally keen to learn, with a propensity for a stronger work ethic and greater life experience than younger workers. Mature-aged workers’ tendency to be shy about in-class discussions, their comparatively low literacy levels, and interest in task-related learning suggested that personal learner-trainer relationships worked best, especially if learning and teaching took place in the workplace (Eccleston & Pryor, 2003). Workplace learning is not just a one-way process then. It is an interaction between workplace, learning, and the learner. The study by Chappell and Hawke (2005), focused on a scale of learning as it related to the employees in each tertiary organization. The statements were broken into two main areas of job complexity and organizational environment. The aim of this project was to ascertain the strengths and weaknesses for the staff (learners) of tertiary organizations in Australia, as learning environments. To ensure that staff are challenged, productive and active in their working environment is essential to a ‘healthy’ work environment and tertiary institutions are not immune to this. The relevance and importance of this study is what prompted a replication in New Zealand to see if the results were similar or not to their Australian counterparts.

*New Zealand Replication*

Thus, in 2007, our research team from Otago Polytechnic recruited participants to complete the two-domain *Provider Learning Environment Scale* as developed by Chappell and Hawke. This was carried out through direct contact with the research contact person in 16 public sector tertiary training institutions, all of whom are in the institute of technology, polytechnic grouping. The survey was put online through Otago Polytechnic's electronic survey software and all responses went directly to the organizational research officer. As researchers we have access to the summary data only. The reason why this scale was adopted and distributed was to dovetail on the Australian study by Chappell and Hawke. There were some minor changes made regarding the survey including a change to the acronym RTO which depicted Regional Training Organization in Australia. In New Zealand it stands for Regional Tourism Organization. Instead the acronym TTO was incorporated into the New Zealand study which depicts Tertiary Training Organization.

## RESULTS AND DISCUSSION

The surveys were disseminated to 16 institutions with a possible approximate return of approximately 3000-3500. The final response included a total of 95 staff from nine institutions who responded to the survey (Table 2). This reflected a mixture of academic and administrative staff. The value of results and the way data can be analyzed is heavily dependent on a reasonable number of respondents. The low response rate may have been a result of how the surveys were disseminated. Perhaps the research contacts were not the most useful way to enter an institution, possibly negotiated entry through the human resources section of each may have produced a higher response rate. It is also notable that the response rate was higher from those in the Southern institutions. Is collegial support for such research evident here? Or again, are there issues with the dispatch of the survey through Central and Northern institutions. This is a subject for further exploration. In purely descriptive summary, the responses to these proposed components of *Organizational Environment* and *Job Complexity* show a high level (67%) of agreement with the statements provided (Table 2, Figure 1). Furthermore, there was a high percentage of 16% who rated neutral as their response. This is unusually high and questions should be asked as to why this is so. Perhaps the participants did not understand the question, or had no desire to make comment. If so why would this be the case? What the descriptive summary does not reveal is the complexity of relationships between the various factors in the questions. The respondents are disproportionately academic and teaching staff, with nearly two thirds of those responding in that category. A staff member's role within an institution can hugely affect many of the responses to individual questions, for example, those around relationships with external clients (Q6, 50% disagree), and extensive contact with professionals outside of the institution (Q1, 45% disagree). Responses to questions around change (e.g., Q20, The Institution regularly changes the ways in which my work is organized) may reflect the idea that change seems to have an impact of the work practices of administrative and support staff in the first instance (Q20, 46% agree). The data analyzed were descriptive in nature, and so limited to frequency and cross tabulations. Respondents identified themselves as working in a grouping of four major categories:

- Academic Staff in Teaching Departments and/or Schools; 58.6%
- Student Support Staff (e.g. career advice, learning support, counseling, health); 10.3%
- Administrators; 8.6%, and
- Professional and Workplace Development and Entrepreneurial Staff (e.g., staff development, workplace learning and development, business to business); 22.4%.

TABLE 2

Summary findings for survey of New Zealand tertiary education trainers' using the *Provider Learning Environment Scale* (N=95, 5-point Likert, 1=SA, 5=SD)

	Mean	SD
My work involves extensive contact with professionals in other organizations	2.50	1.13
My manager in the TTO actively involves him/herself in providing me with learning opportunities	2.27	1.14
The TTO clearly communicates its mission/purpose to staff	1.97	1.01
My job requires me to work with a range of different networks of people in the TTO	1.77	0.78
The TTO regularly creates project teams of people from different sections when something new crops up	2.35	1.04
My work requires me to undertake a high degree of negotiation with clients outside the TTO	2.93	1.34
I regularly meet with colleagues in other organizations	2.75	1.17
The objectives set for me relate directly to the objectives of the TTO	2.14	0.88
In this TTO, co-workers routinely provide helpful feedback on performance	2.43	1.05
I have ready access to the knowledge or information I need for my job	1.98	0.91
For most of my job, I deal with only a fixed part of the product/service my section of the TTO offers. Others do the rest	2.80	1.15
I am kept informed of changes that impact on the education and training provided by my TTO	2.09	0.96
My job requires a high degree of concentration most of the time	1.54	0.69
A lot of our work requires different sections to collaborate on a problem or issue	2.28	1.09
I am given sufficient feedback regarding my work	2.45	1.03
My work requires me to engage in professional conversations with colleagues outside my TTO	2.32	1.07
I have opportunities to work with different groups in my TTO	2.23	0.98
My work involves me in a wide range of the TTO's activities	2.65	1.13
The TTO regularly changes the ways in which my work is organized	3.16	1.03
TTO Managers actively support and encourage learning	2.11	.96
I regularly work with other sections of the TTO	2.58	1.07
My work requires me to undertake a wide range of different activities	1.77	0.82

TABLE 2 *Continued*

	Mean	SD
My manager in the TTO sets me clear objectives for my job	2.40	1.12
The TTO has clear rules about who can access such things as information about individual clients	2.05	0.94
My work requires me to undertake a high degree of negotiation with clients outside the TTO	2.97	1.27
Inter-personal relationships in my job involve managing a wide range of issues/personalities	1.61	0.73
My work in the TTO often requires me to manage unusual situations	2.12	0.98
In the course of a typical week, I will do a wide variety of very different tasks	1.73	0.84
My manager in the TTO delegates some decision-making to me	2.04	0.93
I've learnt a lot about my job from discussions with more experienced colleagues	2.04	1.04
The work I do in the TTO is complex and involves a wide range of factors and variables	1.85	0.81
My TTO provides opportunities for me to undertake interesting tasks and rewards success	2.34	1.05
My manager in the TTO encourages me to learn while I am working	1.98	1.08
I feel that I am part of a team that works collaboratively to reach work goals	2.14	1.06
Relationships with colleagues in the TTO are collegiate rather than competitive	1.97	0.89
Demands from the TTO's clients and my colleagues are a constant feature of my work	2.07	0.89
My manager in the TTO works with me to develop, monitor and review my work plan	2.65	1.06
When faced with a new challenge in my work, I am aware of whom in the TTO I should talk to	2.09	0.90
The way my job in the TTO is constructed, limits what I can do	2.89	1.06
My TTO actively encourages me to learn in order to improve my work performance	1.97	0.98
My supervisors and line managers in the TTO routinely provide helpful feedback on my performance	2.80	1.11
The objectives set for me relate directly to the work outcomes of my job	2.22	0.94
The TTO clearly expects all staff to support the learning of other employees	2.14	1.00
The TTO clearly communicates its mission/purpose to staff	2.11	1.06
My colleagues in the TTO share their knowledge with each other	2.04	0.91

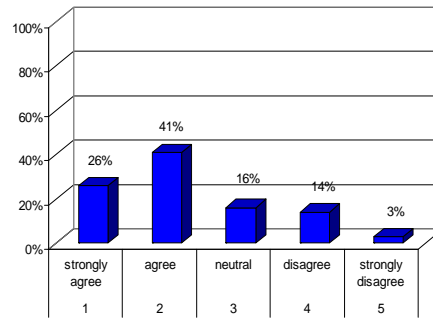


FIGURE 1  
 Aggregated results by percentage for all questions by respondents, for survey of New Zealand tertiary education trainers' using the *Provider Learning Environment Scale* (N=95)

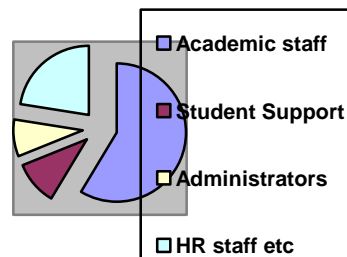


FIGURE 2  
 Pie graph results for work type categories of participants in tertiary institutions for survey of New Zealand tertiary education trainers' using the *Provider Learning Environment Scale* (N=95)

Acknowledging the small number of respondents and the likelihood of some active subject specific professional relationships (and of course, the small overall population and the career movement of staff within New Zealand) no single institution has been identified in the results. Instead institutions were grouped into three geographical areas, North, from Hamilton east-west and north; Central, the remainder of the North Island; and South, the South island. Each group has a range of small to large in terms of student body and both metropolitan and provincial based institutions. An exploratory factor analysis was completed, first applying the Kaiser-Meyer-Olkin measure of sample adequacy and Bartlett's test of sphericity (at the critical value for  $p < 0.001$ ). Results of these suggested the dataset was, at least preliminarily, suitable for a possible factor analysis (Sampling adequacy – KMO 0.739; Sphericity – Bartlett's test chi sq 2030.890, df 820, sig. 0.000; Norusis/SPSS, Inc., 1994). The analysis method chosen was Principle Factor Analysis (PFA) as the intent was to focus only upon the respondent variance common to a small number of latent constructs (Pedhazur & Schmelkin, 1991). As the latter were not obviously uncorrelated, we allowed for oblique rotations via SPSS Direct Oblimin PFA. The resultant scree plots suggested a good possibility that a stable solution would be found after extraction of 4 factors. This 4 factor solution, in turn, was reasonably interpretable (i.e., with relatively simple structure) in association with four conceptual areas: *Learning and Professional Development* (sample item: "TTO Managers actively support and encourage learning"; *Complexity of Work/Workplace Relationships* (sample item: "The work I do in the TTO is complex and involves a wide range of factors and variables"); *Variety of Networking and Organisational Engagements* (sample item:



“I regularly work with other sections of the TTO”); and *Negotiation Tasks or Challenging Professional Conversations* (sample item: “My work requires me to undertake a high degree of negotiation with clients outside the TTO”). The greatest modal chunk (or lion’s share) of variance accounted for is related to factor 1 - Learning and Professional Development (factor of 9.353, cf., 2=3.764, 3=4.958, and 4=3.747).

## CONCLUSIONS AND IMPLICATIONS

As the response rate was low, it may be that this means of introduction to the available participants is not the most effective. Thus an alternative, such as distribution of the surveys through executive management, or the human resource section may result in a greater take-up rate. Overall, the level of agreement with statements was high by the participants, but summary by description only is of limited explanatory value. Factorial analysis of the two sets of data is a possibility for greater understanding. Given that the emphasis here is on discovering perceptions of what made a tertiary training institution a learning environment, it would be of interest to contrast the responses to items in this online survey with existing organizational work environment satisfaction surveys to discover similarities or differences. Many tertiary institutions currently disseminate work environment surveys to their staff. The questions do tend to be more explicit regarding working conditions associated with specific areas, but these would provide a good benchmark to compare and contrast. These then could help in the human resource and development planning for effective workplace learning. In conclusion the respondents were overwhelmingly academic and teaching staff. A more focused exploration of the perceptions of administrative staff could be of value and contribute to the structuring of job complexity and organizational practices with this group. Furthermore there could be further exploration regarding whether the low response rate from administration staff was due to their work schedules or just a negative perception of online surveys.

## REFERENCES

- Billett, S. (2001, November). Participation and continuity at work: A critique of current workplace learning discourses. Paper presented at Joint Network/SKOPE/TRLP International Workshop. Sunley Management Centre, University College of Northampton.
- Chappell, C., & Hawke, G. (2005). Investigating learning and work: Targeted literature review. Activity 5. Consortium research program: Supporting vocational education and training providers in building capability for the future. NCVER.
- Chappell, C., & Hawke, G. (2006). Investigating learning through work. Final Report of Research Activity 5. NCVER
- Ecclestone, K., & Pryor, J. (2003). ‘Learning careers’ or ‘assessment careers’? The impact of assessment systems on learning. *British Educational Research Journal*, 29(4), 471–488.
- Harris, R., Simons, M., & Edwards, G. (1999, November-December). From institution-based to work-based learning. Paper presented at the Australian Association for Research in Education Conference. Adelaide, Australia.
- Harris, R., & Simons, M. (1999, September). Rethinking the role of workplace trainer: Building a learning culture. Paper presented at the seventh annual conference on Post-Compulsory Education and Training. Gold Coast, Australia.
- Norusis, M. J. & SPSS, Inc. (1994). *User’s Guide: SPSS for Windows*, Chicago: SPSS, 606 pp
- Pedhazur E & Schmelkin, L., (1991). *Measurement Design and Analysis*. Earlbaum Associates: New Jersey
- Poell, R., van Dam, K., & Van den Berg, P. (2004). Organizing learning in work contexts. *Applied Psychology*, 53(4), 529-540.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. London: Random House.
- Schön, D. (1973). *Beyond the stable state: Public and private learning in a changing society*. Harmondsworth, UK: Penguin.
- Smith, P.J. (2003). Workplace learning and flexible delivery. *Review of Educational Research*, 73(1), 53–88.
- Van der Krogt, F. (1998). Learning network theory: The tension between learning systems and work systems in organizations. *Human Resource Development Quarterly*, 9(2), 157-177.

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