Workplace assessment in New Zealand: stated intentions and realisations

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Abstract

Workplace assessment (WPA) of New Zealand's National Qualifications Framework (NQF) competencies has become a significant alternative pathway for vocational adult education. This article reports on a research project which compares stated intentions for workplace assessment with evidence of its practical realization. The perceptions of the workplace assessors and candidates are analysed in a case study of qualitative interviews of ambulance service officers. Assessment guidelines are reviewed and then compared to a discussion of selected findings. Three areas of the research project are discussed in this article. The first covers how workplace assessments meet technical prescriptions for evidence-gathering and discusses findings on the validity, directness and sufficiency of evidence. Secondly, the development of a holistic Interplay model offers a counter to 'checklist' assessment methods. Lastly the article discusses the nature of the assessor/candidate relationship and develops Positive and Negative Closeness Models. Recommendations are made for workplace assessor training.

Introduction

Workplace assessment (WPA) of National Qualifications Framework (NQF) competencies, or unit standards, has become a significant alternative pathway for vocational adult education in New Zealand, in terms of total vocational education learners. This is borne out by a cursory glance at New Zealand government statistics for 2003 (TEC, 2004); these identified 126,870 people participating in workplace training in that year, compared to 337,004 tertiary students as at July 2003 (MOE, 2004). This article reports on a small-scale research project, which compares the stated intentions for New Zealand workplace assessment with evidence of its practical realization. This main comparative research question explores and analyses the perceptions of the workplace assessors and candidates in a case study, based on qualitative interviews of ambulance service officers. These interviewees worked together on everyday ambulance duties during the assessments, in a manner suggested by the New Zealand Qualifications Authority (NZQA) (1991, 1998). Practical guidelines from the NZQA and others are reviewed and then compared to a discussion of selected findings from the research project.

Stated intentions for the NQF and WPA

Stated intentions for WPA (and the NQF) fall into two categories: policy and practice, and this article focuses on the latter. The research project also explored the realisation of stated *policy* intentions, which are only briefly outlined here. A more extensive report of research findings relating to policy is to be found elsewhere. In brief, the stated policy intentions for the NQF and WPA were to: increase the skill levels of the New Zealand population, to provide a single, unified and standards-based framework for qualifications, to bridge the academic/vocational divide (Jessup, 1992; Foulkes, 1992; NZ Government, 1993; NZQA, 1994), to be cost effective for enterprises and business (NZQA, 1991, 1998) and to be an alternative for sections of the population for whom traditional vocational education was not formerly available (NZQA, 1991; Bowen-Clewley & Strachan, 1997), who would be then be protected from the worst excesses of the labour market (Skill NZ, 2001a). Interestingly, WPA was also intended to lessen the dominance of traditional tertiary education providers in the education market (Eagle & McDonald, 2000; Codd, 1999). Support for WPA policy was found amongst very diverse groupings in New Zealand, partly because competency standards, as the constituent parts of the NQF (NZQA, 1991), have had the quality of appealing to very different groups (Hager, 1994; Hornblow, 1996).

The intentions for the practice of WPA, and NQF assessment in general, took the form of technical prescriptions. These operationalised an intended benefit of the NQF and WPA, which was the amelioration of the negative effects of normbased examinations through the implementation of standards-based assessment (Bowen-Clewley, 1997). Assessor judgments should be fair, consistent and based on a holistic evidence-gathering methodology (Harris, Guthrie, Hobart and Lundberg, 1995). This evidence was to be valid, authentic, direct and current (Griffin & Gillis, 1998; NZQA, 1996; NZPPC & ITF, 2001). prescriptions emerged after analysis of Australian (Bloch & Thompson, 1994) and Scottish (MacFarlane, 1992) experiences of competency-based assessments, which were reported to be fragmented, mechanistic and overly checklist oriented. The New Zealand prescriptions followed the most powerful response to such criticisms; this held that they may "apply only to bad practice" and that fragmentation may be avoided by using holistic, integrated competency assessment, based on actual task performance, with supplementary evidence of knowledge and historical evidence such as records and certificates (Hager, 1995).

Later comment on the NQFand WPA

Cornford (1997) asserted "the new [holistic] competency training paradigm advocated by Hager (1995); Gonczi (1993); Hager, Athanasou & Gonczi (1994) has assumed quasi-official status" (ibid:54) in Australia; this was probably also the case in New Zealand. Yet, practices of fragmentation and checklist-ticking persisted long after they had been identified (Mulcahy & James, 1998; Eynon & Wall, 2002), reportedly stifling workplace innovation. Nevertheless, recent Australian research into "good practice" in holistic competency assessment has been reported by Hager & Becket (2002), Connally, Jorgensen, Gillis & Griffin (2003) and Billet (2002).

Considerable academic debate, as well as some policy checking research, ensued from the establishment of the NQF in New Zealand. On the one hand, the NQF was seen as a mere set of behaviourist learning outcomes which are not conducive to either deeper cognitive learning (Elley, 1993; Hall, 1996; Irwin, 1997), workplace change (Web Research, 1996) or holistic work performance (Codd, McAlpine & Poskitt, 1995; Irwin, 1997). On the other hand, the NQF has been represented as an opportunity to teach and assess deep cognitive learning (Broadfoot, 1992) and an integrated way to assess learning at work based on holistic practice (Hager, 1995; Bowen-Clewley & Strachan, 1997). Intriguingly, the NQF was criticised by Law (1993, 1998) and Strathdee (1994) as overly representing employer interests; yet employer-funded research did not particularly support the NQF (Smithers, 1997). Links were identified between the NQF, as a repository of official knowledge (McGookin, 1999; Zepke, 1998), and a culture of accountability and distrust of professional educators (Codd, 1997; McKenzie, 1999; Lauder, Hughes & Watson, 1999; Locke, 2001). Furthermore, Hodgetts & Hodgetts (1999) reported an administrative burden due to the NQF. An accurate summary is given by Viskovic (2000:69), who pointed out that the 'grand vision" of a unified framework had not been realised.

Some specific comment and research on WPA also ensued. Practical guidelines for WPA were developed by the NZ Qualifications Authority (Miller & Bowen-Clewley, 1997; NZQA, 1998) and some research projects commented on the training and often inconsistent practices of workplace assessors (Lees, 1996; Webb, 1996; Capper, 1997). Criticisms of the costly and voluminous nature of NQF and WPA were made by Callister, (1994), Coogan (1996), and Smithers (1997), much like those reported by Wolf (1995) in the United Kingdom. A comprehensive outline of the issues facing workplace assessment (Web Research, 1996) pointed to practical and theoretical difficulties with its implementation. However, somewhat later, commentators in government publications argued that WPA had "come of age" (NZQA, 2000:12; NZQA, 1999c:1; NZQA, 2000) by virtue of its survival and growth through the somewhat unfavourable historical environment of the mid 1990's. Prescriptions for practice for assessment (including those in workplaces) were offered by a quasi-official set of "Principles of Best Practice in Assessment" (ITF & APNZ, 2000: NZPPC & ITF, 2001), which were in part a response to ongoing criticism of NQF practices in assessment, especially over-assessment. Recent research identifying some shortcomings in equity intentions of workplace training was conducted by Piercy (1999) and Curson (2003).

In summary, there is little published New Zealand research on WPA which compares the prescriptions for practice for WPA with its realisation.

Methodology and methods of the research project

The research employed a constructionist (Crotty, 1998), critical hermeneutical methodology. The methodology was drawn from critical theory in two ways; in researcher engagement (Schwandt, 2000) and as part of a "hermeneutic circle" (Kincheloe and McLaren, 2000). The circle (because no interpretation is ever final) seeks to relate larger social forces that are at play to this particular context.

Prescriptions for practice in workplace assessment were viewed through a critical theory 'lens'. Assessment as a kind of science based on observations and evidence was itself critically assessed. Furthermore, a specific critical theory tool was used to analyse the research data; this was the juxtaposition of "counternarratives" with the "official narrative". Theories of counternarratives arise from Giroux's (1996) recommendation to mine or employ elements of postmodernism in a critical way. Counternarratives have a critically interpretive effect, contesting the official narratives which are frequently "masking a will-to-power and excluding the interests of others" (Lyotard, in Peters & Lankshear, 1996:3).

Qualitative research methods were selected because interviews were appropriate for examination of the experiences of those directly involved in workplace assessment. The qualitative field work constituted semi-structured interviews of six workplace assessors and eight candidates in the Wellington region, who were conducting assessments for the National Certificate (Level 4) and the National Diploma (Level 5) in Ambulance Care. The sample was purposive in that it was selected as being typical of the national population of ambulance assessors and candidates in terms of identity and employment status. Access to the interview sample was facilitated by the NZ Ambulance Education Council. The assessor interviews were conducted in 2000 and the candidate interviews in 2002, using an open-ended question schedule, covering the positives and negatives of workplace assessment and any changes respondents would wish to make. An additional layer of interview questions devised as possible follow-up and used at times to explore emerging themes.

The interview data was subjected to an analytical process similar to that advocated by Silvermann (2000) and Davidson & Tolich (1999); involving constant comparison and comprehensive data treatment. Categories of generalisations were generated through the analysis of the literature survey, a critical theory review and close reading of the transcribed data. This whole body of data was systematically sifted through, in order to refine and expand the categories. Nvivo, a computer software package, was used to identify and collate data under these coded categories. In the presentation of the data, some use is made of direct quotations to support interpretations and observations about the data, using coded identities to protect interviewees' privacy.

Selected findings on prescriptions for assessment practice

Findings on technical assessment issues, including assessment evidence, assessors' decisions and assessor/candidate relationships are presented in this section. The stated intention that assessors' decisions be accountable and based on standards and evidence is partly met. The interviews indicated that the NQF standards did offer the assessors a benchmark for their measures of performance. Assessors felt they could ensure that standards did not change markedly over time, and that 'goalpost shift', according to the relative performance and nature of the candidates, was less likely. Furthermore, the respondents valued the implicit transparency and fairness which was offered by the standards; assessors were aware of the potential for inconsistencies:

Sometimes you have to be really, really critical of yourself to the point of

saying, 'hey look, this isn't fair on this guy lets do it again and make it fair on this guy (S1)

Direct Evidence

NZQA had prescribed in 1996 that assessment evidence should be direct, or as close as possible to real performance Workplace assessments described in the ambulance officer interviews were completely direct. Significantly, there were other parts of the ambulance qualifications that were undertaken in scenarios and examinations and the contrast to scenario training was emphasised:

You're always doing it in a room where it's not raining [in the scenarios] and you haven't got the wind blowing and you haven't got all the fire trucks and everybody that's at the scene as well. (A1) In the view of the respondents, there was no contest on the question of direct evidence; it appears that ambulance assessors and candidates alike set great store on the value of real workplace evidence. Question and answer assessments of knowledge did not disrupt work:

You're actually talking as you're doing things (J1)

The assessments were integrated into daily reality and the assessor was working in the team as usual, rather than a distant observer:

No paramedic [as an assessor] is going to stand there with a clipboard in his hand watching someone die, while two people struggle (D4)

NQF training and assessment for ambulance officers in New Zealand follows Hager's (1998) recommendations for seeking balance between on-job and off-job training. The findings show WPA is the final benchmark or test to be applied when the candidate is granted the 'licence' to operate as an independent ambulance officer:

It's the threshold; it's the entry into the profession. (K1)

As Hager (ibid) had recommended, the overall assessment of holistic job competency in New Zealand ambulance work gave consideration is given to the entire job as it was conducted in a real workplace, not to a list of tasks in a training situation:

Whereas with scenarios you tend to set up perfect situation a textbook situation that you never get out on the road. (A1

This neatly coincides with the prescriptions for practice put forward by the regulatory bodies (NZQA, 1996, 2001) and early educationalists promulgating the NQF (Broadfoot, 1992; McCool, 1992; Jessup, 1992).

Valid Evidence

More controversial were the findings on the validity of evidence used in workplace assessments. On one hand, assessors thought carefully about whether evidence of performance matched the standards for ambulance *work*.

I think the pluses are that we are assessing what we say we are (D1)

WPA was valued by respondents for its match with the standards. On the other hand, the findings pointed at times, to a mismatch between the ambulance

officers' own notions of validity and the NZQA standards. Some standards were described as not correctly reflecting the skills and knowledge needed by a competent ambulance officer:

...we teach very specific things about driving. It's advanced driving that we teach. And it's not actually reflected in the NZQA standards (G1)

At times assessors struggled with the internal validity of the standard and dealt with imperfections as they thought fit. The actual practices of ambulance assessors encourage the view that performance standards are difficult to capture in absolute detail and that value should be placed on the interpretive knowledge of the assessors involved.

Sufficient Evidence

Ambulance assessments did appear to meet the sufficiency prescription. NZQA's (1996) advice to use "sufficient" evidence has clearly led to the practice, described in the interviews, of gathering evidence from a number of sources. However, the generalised educational backlash against competency unit standards, as described in the research literature review, led the NZQA to later respond with advice to avoid over-assessment, which ameliorated and somewhat contradicted the earlier instructions to gather sufficient evidence. The National Certificate and Diploma in Ambulance Care are assessed in a blend of different systems; examinations, scenarios and workplace assessments (which in turn include observations, logbooks and oral questions). This eclectic 'hedging your bets' approach may well prove to be onerous and not particularly well suited to the principle of 'least evidence' (ITF & APNZ, 2000: NZPPC & ITF, 2001). It was notable that none of the interview respondents referred to over-assessing, although they frequently referred to the workload resulting from workplace assessments.

Certainly by the end of it they're getting sick of it, they're getting sick of filling in the logbook and they're going, not another one, you know, and particularly if comms know you're on training, they will send you to as many interesting jobs as you can get. And people just get worn out, by the end of it, you're both tired. Not another one... (S1)

In 1995, Alison Wolf predicted that sufficiency would be the rock on which competency-based assessment in the workplace would founder. She postulated that high costs and excessive volume or time needed would be the undoing of workplace assessment and employers would seek to avoid these high costs in most professions and occupations. The reason offered by Wolf for this avoidance was that businesses do not regard education as their primary function. She also conjectured however, that high-risk jobs would develop or retain the more costly method of workplace assessment. High-risk occupations include those where human life would be endangered if workers had been awarded licensing-type qualifications and later found to be not performing adequately. It is highly likely that ambulance work is such an occupation. The research findings indicated that the ambulance assessments were certainly thorough and sufficient evidence was

gathered in order to make assessment decisions. The ambulance service has so far neatly avoided the costs associated with sufficiency of evidence by transferring the load onto employees, both assessors and candidates. However, the long-term viability of transferring costs was thrown into question by some respondents, who found the workload a challenge:

We do all the paperwork in our own time because we don't have an opportunity to do it at work so I guess cost is really just time (K1)

Overall, the match with prescriptions for practice is patchy. However, it would be difficult to dismiss the direct nature of the evidence used and the reported practices of fairness and transparency; these may constitute the strongest argument, from the research data, for workplace assessment of national standards in ambulance training.

Holistic and atomistic: findings on interpretive assessment knowledge

A significant criticism of the NQF was the behaviourism said to be implicit in the prescription of learning outcomes, which are measured in a purely technical process. The research findings described how assessors and candidates integrated atomistic lists of competencies with overall workplace performance. The assessment of workplace performance was shown to involve a fluid interplay between analytic and holistic, so that the assessor intensively understands the candidate's performance.

Although it is impossible to look inside the mind of the assessors or candidates to see what is going on during the assessments, interview data indicated that this interplay is constantly present during the assessments, running throughout as a thread that draws it together. The candidates were often so focused on the job in hand they were not aware that they were being assessed against a set of outcomes. The assessor, however, in analysing the performance of the candidate, was making internal reference to the competencies without making it openly apparent. Possibly if an assessor did openly refer to each of the atomistic competencies this would slow down real performance; this being unacceptable in ambulance work, as much depends on rapid response and the ready integration of knowledge and skill, as one candidate explained:

I wasn't very aware at all. I knew the unit standards were there and that's what he would be assessing me against but he didn't verbally or didn't physically have a checklist that he went through and ticked off or anything like that.

This notion of interplay does serve to some degree to counter the argument that competency standards atomise and reduce work, 'dumbing it down' and losing its complexity.

Post-modern arguments (for example, Lather, 1995) convincingly point to a distrust of simple dualistic explanations, seeking theories with more complex and multiple explanatory powers. Bearing in mind Giroux's 1996) recommendation to 'mine' post-modernist theories, the holistic nature of assessment could be

theorised as follows. The dualistic portrayal of the NQF, given by McGookin (1999) and Irwin, Elley & Hall (1998), portrays lists of competencies, which break work down into atomistic descriptions or behaviourist outcomes. It contrasts competency with other holistic understandings of work. More useful is to discard either/or characterisations of competency and to focus on the interplay and continuum between atomistic, which is a necessary part of looking closely at work, and holistic thought, which pulls those fragments together into the coherent whole, which is work itself.

This can be seen as the interplay between the big picture - being a good ambulance officer - and the requisite skills that constitute this big picture. One candidate explained how they worked with the assessor to build this picture:

when you work with them they can see what you're like as well so when it comes to an assessment they can take the whole picture, not just particular week or day or whatever it is. (D1)

The assessors needed to review the criteria described in the unit standards, in order to be able to make well-founded judgements about the performance of the colleague working alongside them. Most significantly, the assessor is looking for competencies *and* competency. The presentation of this argument is furthered by the construction of a model of the process of interplay between atomistic criteria and holistic tasks.

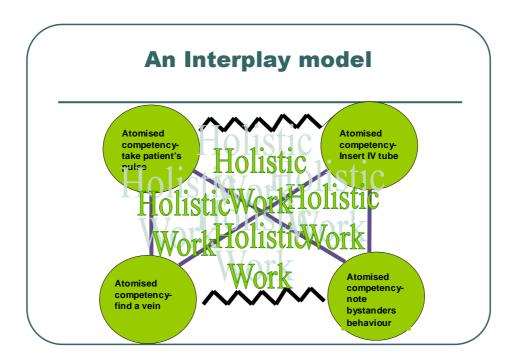


Figure 1: An Interplay Model of the Assessor/Candidate Relationship

In the model depicted in Figure One; as the candidate/ambulance officer works at the scene of an accident, several tasks are undertaken. However there is concurrent consideration given to the holistic 'big picture' by both the assessor and the candidate. An example related by several candidates was assessment of the insertion of an intravenous (IV) tube into a patient's airway or vein. A

holistic awareness of the total accident scene interplays with technical criteria such as running fluids into a tube or taking the patient's pulse, flicking back and forth between whole picture and competencies. It is this interplay that the assessor makes a judgement about, integrating the atomised parts into the whole. Knowledge and skill were integrated, as in this example related by a candidate:

: He'd question me from, on certain procedures, (we have our procedures), he'd like to know if I had a certain patient, what would I do? How much fluid would I give? Why would I be cannulating a patient? Why would I be trying to put an IV into a patient? What's the rationale behind doing that? So he wanted to know what the rationale was and those sorts of things.

In this case, the whole is more than a sum of the parts. In a Habermasian sense, I would argue therefore that the ambulance assessments described in these interviews are not instrumental, but are rather interpretive, or hermeneutic. The technical actions of the candidates are not to be seen as a simple list to be 'ticked off'; rather the actions are interpreted by the assessor in an integrated way. To simply move through a list of performance criteria could be justifiably dismissed as a positivistic, instrumentalist view of assessment of performance. The interplay model is not necessarily merely binary; performance assessment being neither simply atomistic nor holistic. This assessment is a combination of many different criteria which are simultaneously taken into consideration when the assessors check the work of their colleagues.

Distance and closeness: findings on relationships between assessors and candidates

The interview findings showed that there was a link between the way that candidates felt about their relationship with the assessor and how they felt about the assessment.

Positive Closeness

A 'positive closeness model' was developed to help theorise about the relationship between the degree of closeness or distance between the assessors and the candidate and the candidates' degree of preparedness for the workplace assessment, as well as the likelihood of their acceptance of feedback from the assessor. Like the interplay model, it is not binary, mainly because any assessor or candidate relationship may find itself at any place along a continuum. When candidates appear to have a closer relationship with their assessor, they appear to be better prepared for assessment events, from their own accounts and those of the assessors, as in this example of a candidate and assessors who were both permanently employed men:

You're being assessed by people you know and trust and like X [the assessor] and I go back for years and I've never had any issues with him. Even when we're just working it's always just good fun and it's lots of black, sense of humour stuff and we'll chat away and we're always good friends anyway. So it's not like you're being assessed with someone with the clipboard, you know. And all of our assessors are like that. I don't really know anyone that

would make me feel uncomfortable. (R1)

Candidates also find it easier to accept feedback on their performance when they feel both closeness and respect for the assessor's high level of knowledge and experience in ambulance work.

This closeness is influenced by multiple identities of the assessors and the candidates, women candidates and men assessors may feel some distance, which in some instances may be dispelled by conscious efforts on the part of the assessors.

On the lower end of the continuum, differences in gender appear to impact negatively on distance possibly because assessors do not consider the effect that this may have on the relationship. On the higher end of the continuum, where candidates feel well prepared and comfortable with feedback, there may be fewer differences. In these cases, either both assessor and candidate were male, or possibly the assessors have approached women candidates differently. Volunteer ambulance officer candidates may feel less close to assessors than permanently employed candidates, who feel part of the system. However at the higher end of the continuum, assessors have possibly attempted to organise the assessment events to meet the needs of volunteers. This positive closeness model is depicted in Figure Two below.

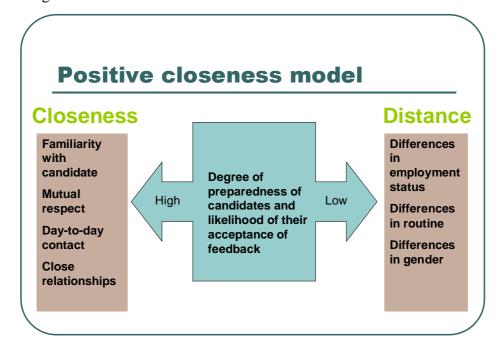


Figure 2: Positive Closeness Model of Assessor/Candidate Relationships

Negative Closeness

In contrast to positive closeness there is negative closeness or not giving the candidates space to get on with the job. Negative closeness is a kind of subject suffocation felt when performance is perceived as closely and unsympathetically monitored. Closeness does not automatically engender candidate confidence, as in this example related by a woman volunteer candidate:

That's probably where I find it most difficult because yes, these assessors have seen you. They've seen you working. They've seen you doing it in a practical scenario and then on the day this is your assessment and you think, we aren't getting the work and I can't prove it on this particular time (J1)

The negative closeness model theorises about how intrusive practices by assessors may result in candidates feeling less confident about assessments. For example, the interviews indicated that there were ways in which assessors did not always prepare their candidates for the assessment. If candidates felt that a question was 'sprung' on them their confidence tended to drop. If however they were well prepared for the process and the assessor had taken the time to go through things with them, their confidence level was higher. The model also describes the relationship between "negative closeness" or attempts to unduly control the assessment, and how relaxed and confident a candidate may feel about the assessment. The assessors who behave in a more unobtrusive way are more likely to have confident candidates.

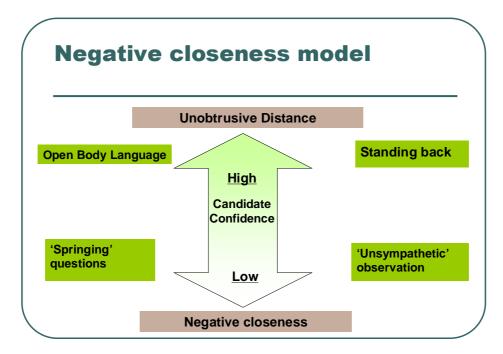


Figure 3: Negative Closeness Model of Assessor/Candidate Relationships

The two models of closeness and distance, when seen singly, may be said to be existing in binary opposition. However, they are rather a continuum of degrees of engagement experienced by candidates and the influence exerted by the interpersonal behaviour of the assessors, differences in gender and employment status. This hierarchy is not necessarily bounded at either end; it has complex possible permutations and no endpoint where an absolute level of closeness or distance is reached between assessors and candidates. Other factors, which may influence how the work of a candidate is perceived by an assessor, include cultural or ethnic background, prior educational experience, and relative ages and backgrounds of assessors and candidates, although these have not been considered in this research. However, some conclusions may be drawn from the applications of the models, as they indicate the importance of creating an

environment where there is an opportunity for an equitable exchange, something approaching Habermas's 'ideal speech act' (1981). When feelings of mutuality, fairness and ease with the assessment environment are created through conscious efforts on the part of the assessor, this may create opportunities for the application of critical reason in the assessment process. The assessor judgements become part of a mutual interchange between themselves and the candidate, and less an expression of their own 'will to power'. The two models may be examples of reciprocal participatory practice envisaged by Billet (2002).

Caveats and limitations of the research

There were several limitations to the potential to generalise the results of this research. The first is the very specific context of the ambulance service with a significant proportion of volunteer workers, who were only loosely connected to the labour market. The strong social service motivations of assessors and candidate/learners revealed in the research may not be present in other workplaces. The special combination of knowledge and skill in ambulance work may be less prevalent in other more practical jobs that use NQF workplace assessment. Although semi-structured interviews were selected to provide a framework to develop the interviews around, the loosely structured nature of the ambulance interviews is a limitation, as well as strength.

Recommendations for practice

This article has focussed on technical prescriptions for holistic workplace assessment practice in New Zealand, and how these stated intentions have been realised in a case study. Through an examination of the counternarratives told by those involved in workplace assessment, it may be noted that there is much to commend in the practice of the ambulance workplace assessments, especially the validity and directness of the evidence used in the assessments. Whilst the practice of WPA within the ambulance service is not operating (or intended) as critical knowledge in the Habermasian sense, it constitutes valuable hermeneutic or practical knowledge for assessors. This communicative, interpretive or hermeneutic knowledge derives from ways in which the assessors work with their candidates and how they approach their decision-making processes. The ambulance assessors found practical solutions for the problem of integrating performance checklists with their own holistic understanding of ambulance work. And importantly, these solutions did not inhibit the candidates in their ordinary work; they encouraged them to operate in a business-as-usual mode. The training of workplace assessors would benefit from discussion of the three models: Interplay, Positive Closeness and Negative Closeness, as well as the challenges faced in gathering direct, valid and sufficient evidence of performance.

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