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by effective workplace trainers

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The Qualifications and Competencies held by Effective Workplace Trainers

Key words adult education, characteristics, competencies, teacher, trainer

Abstract

Are appropriately qualified trainers educating the workforce? The purpose of this study was to investigate the qualifications and competencies of workplace trainers and, determine if there is a relationship between these attributes and their effectiveness.

Using a survey questionnaire, 303 trainers responded to an effective trainer model developed from the literature and validated in a Delphi study. The variables of interest were statistically tested using factor analysis, discriminant analysis, Pearson correlational analysis, and MANOVA.

The results of this research show that trainers who have formal teaching qualifications and who have been in training positions for more than 10 years, identify with the effective trainer model. This Australian research supports much of the previous research conducted in North America with some interesting differences.

Introduction

Training and development activities for staff in organisations are expensive exercises. The United States spends \$60 to \$70 billion a year in workplace education and training (Lynch, 1998). Australian companies spend \$5 billion annually on employee training (Allan, 2002). Despite the huge sums spent on training and development, the field of workplace training is still emerging as a discipline (Walter, 2002) and there is no single agreed definition of training (Bone et al, 2000). To further complicate the issue, the view amongst

academics and researchers is that there is *no* consensus about how people learn and the best way to train them (Tovey, 1997).

Such large expenditures on workplace training and the problematic definitional issues beg the need to understand what training 'is', how it 'should' be practised. By whom training should be practised is the focus of this article. The effectiveness of trainers who deliver the resource is known to be significant in the final return on training investment (Galbraith, 1998). Despite the critical role of the trainer in the delivery of this expensive resource, the research evidence to substantiate what qualifications and competencies an effective trainer should hold is lacking and it is "*still difficult to predict*" what these qualifications and competencies should be (Ye, 2000: 5).

No empirical research was found in the literature that investigated the relationship between a trainer's qualifications and competencies and related these attributes to the trainer's effectiveness. The issue, highlighted in the literature by Palmer (1989), for example, is that many employers are sending the message that anyone can be a workplace trainer or training specialist once they have some knowledge in a particular content area.

Therefore, the purpose of this study was to examine whether or not formal 'teaching' qualifications and/or particular competencies, are significant in defining an effective workplace trainer.

The competencies necessary for effective workplace trainers

Galbraith (1998) regards questioning as the single most influential teaching competency, because of its potential to impact learning. In contrast, Stolovich (1999) cited in Abell (2000) considers listening to be the most important trainer skill, because it allows the trainer to redirect the learner's attention or to deepen their thinking. Whereas, Wlodkowski (1993) considers feedback to be perhaps the most powerful trainer competency.

Four critical elements of learning that must be addressed to ensure that participants learn, cited by Lieb (2001:3) are:

- motivation (set a feeling or tone for lessons, set an appropriate level of concern and difficulty)—“*the truest measure of teaching effectiveness*” (Ishler et al, 1988: xix). The teacher with a high degree of presence (physical movement, nonverbal behaviour, lesson pace, and voice quality) is visually and auditorally dynamic (p 108).
- reinforcement (to encourage correct modes of behaviour and performance).
- retention (demonstrate correct performance by practice).
- transference (by the use of association, similarity, degree of original learning, and critical attribute element).

It is also important that trainers have the competencies to create a comfortable learning community (Olson & Pachnowski, 1998), as is providing feedback as a contributor to learning (Thornton & Wexley, 1972; Heinzmann et al, 1980). To keep refilling the wellspring of new ideas, trainers should be continuous learners themselves (Caudron, 2001).

Caffarella and Merriam (1999), cited in Caudron (2000), believe trainers should:

- use collaborative interaction to plan and organise learning experiences;
- foster a climate for learning in which learners and instructors support each other in the learning process, in and out of formal learning situations;
- use and encourage a cooperative communication style; and
- recognise that people’s feelings are critical to fostering relationships in any learning experience.

Communication is understanding emotions as well as ideas, the body as well as the mind (Lindeman, 1949 in Gessner, 1956).

Competencies of trainers in the area of problem solving techniques also

produce effective results for learners to enhance their ability to locate and solve problems (Bernstein et al, 1957).

Individuals do not learn from experience per se, they learn from reflecting on their experience (Knowles, 1975; Houle, 1996; Thiagarajan & Thiagarajan, 1999; cited in Abell, 2000). Taylor (1991) cited in McKenzie (1995: 74) believes that, the most effective means of ensuring skill transfer is for 'knowing how' (technique) to be properly underpinned by 'knowing why' (reflection). *"The language has changed over the years, but teacher educators have always argued that effective performance rests on the interplay of practice and reflection."*

A more detailed search of the literature concerning trainer competencies highlighted a range of competencies that contributes to trainer effectiveness. Table 1 lists a compilation of competencies of an effective trainer from a diverse selection of authors and researchers who are highly regarded internationally in the training profession.

Table 1: The Competencies held by Effective Trainers

Competencies of Effective Trainers	Authors										
	Leach (1996)	Olson (1994)	Thompson (2001)	Pinto and Walker (1978)	Jacobs (1987)	ASTD (1983)	OSTD (1987)	Knowles (1980)	Grabowski (1976)	Lindeman (1938)	Knox (1979, 1986)
Set Goals and Objectives	•							•			
Develop Lesson Plans	•										
Keep Current and Up-To-Date	•										
Conduct Needs Assessments	•			•	•		•				
Counsel Students about other Matters	•			•		•					
Provide Positive Reinforcement	•	•	•								•
Blend Different Training Techniques	•								•		
Use Questioning to Involve Participants	•	•				•		•			
Facilitate Group Learning Activities	•			•			•				
Attend to Individual Differences	•						•			•	
Evaluate Effects and Impact of Training	•						•	•	•		
Analyse Course Materials/Learner Information		•		•			•	•			
Assure Preparation of Instructional Site		•									
Establish/Maintain Instructor Credibility		•	•		•			•			
Manage the Learning Environment		•									
Possess Content Knowledge/Skill Taught		•						•			
Demonstrate Effective Communication Skills		•	•				•	•	•		
Demonstrate Effective Presentation Skills		•	•	•		•		•			
Respond to Learner Needs/Feedback		•				•		•	•	•	
Use Media Effectively		•				•	•		•		
Evaluate Learner Performance		•			•		•	•			
Evaluate Delivery of Instruction		•					•				
Report Evaluation Information		•									
Understand Programme Development		•		•					•		
Understand Training and Development		•		•	•	•	•			•	
Apply Research Skills				•	•	•	•		•		
Build Relationships				•	•	•					•

Source: Developed for this Research

Methodology

The methodology adopted for this research was primarily quantitative, because of the nature of the identified research questions. The quantitative method has previously been found to have particular relevance in the field of workplace training (Olson, 1994; Leach, 1996; Thompson, 2001).

Themes within the literature were identified and included both national and international research to develop a conceptual framework. Initial data to develop the constructs used in this research were obtained from a stage of convergent interviews with knowledgeable people (Armstrong, 1985; Perry, 1998a). Survey instruments used in similar studies by Olson (1994) and Leach (1996) were also adapted for use in this research study.

A list of competencies that were said to be necessary for an effective trainer to hold were derived from the literature review and then examined by a panel of experts for relevance and appropriateness to confirm the construct of 'trainer effectiveness'. The Delphi process enabled the emergence of a consensus among the panel experts and progressively, the survey instrument emerged from a model 'list' of competencies for refinement and inclusion in the survey instrument.

A self-administered questionnaire was then developed from the Delphi process and was mounted online, in the form of a survey questionnaire that became the primary data collection instrument for the study, utilising the electronic mediums of the Internet and email. The questionnaire consisted of two sections. Section A consisted of demographic questions that allowed any demographic differences between the respondents to be identified and compared.

Section B focused on Trainer Competencies and a final section for participants to list any extra issues that were not listed in the survey. Section B of the questionnaire used a five-point, Likert-type scale in the form of a radio buttons. All aspects of the questionnaire were tested (Malhotra, 1996; Zikmund, 2000) with similar respondents to the actual survey.

The targeted trainers were members of the Australian Institute of Training and Development (AITD) and its web site Bulletin Board, and the National Assessors and Workplace Trainers in Australia.

After the survey was displayed online, a cross-section of approximately 1000 trainers were emailed a letter to attract participation. A total of 303 useable responses were included in this research.

Initially, a Cronbach alpha (α) analysis was undertaken in order to determine the reliability of the data gathered. The result reported was 0.8414.

A process of exploratory factor analysis was then utilised in order to simplify the data by determining a nexus between the variables (Kline, 1994). Items, which measure the constructs (eg trainer competencies), were reduced to factors, to ensure reliability of subsequent analyses, and to make interpretation of the results clearer. The principal component technique was used to obtain a new set of constructs that explained the whole set of original variables that are incorrelated and ordered as a function of the variance explained (Gorsuch, 1983).

Results and Discussion

A total of 303 useable responses was included in this research. There was an almost identical participative response from males and females.

Respondents were requested to self-assess their own perceived effectiveness as a trainer on a scale from 'excellent' to 'poor'. Table II illustrates how trainers responded to the question of how they perceived their effectiveness as a trainer.

Table II: Self-Assessment Rating as a Trainer

	Frequency	Percent
Valid		
Excellent	51	16.8
Very Good	138	45.5
Satisfactory	100	33.0
Less than Satisfactory	6	2.0
Poor	8	2.6
Total	303	100.0

Source: Analysis of Survey Data

An overwhelming 95.3% of respondents consider that they are satisfactory or better as a trainer while surprisingly, only 62.3% of trainers rate themselves as better than satisfactory.

Respondents were asked to indicate how many years of experience they had in training positions. Table III illustrates the distribution of the respondents in relation to their respective years of experience as a trainer.

Table III: Years of Experience in Training Positions

	Frequency	Percent
Valid		
0-2 years	164	54.1
2-5 years	45	14.9
5-10 years	35	11.6
10-15 years	19	6.3
Over 15 years	40	13.2
Total	303	100.0

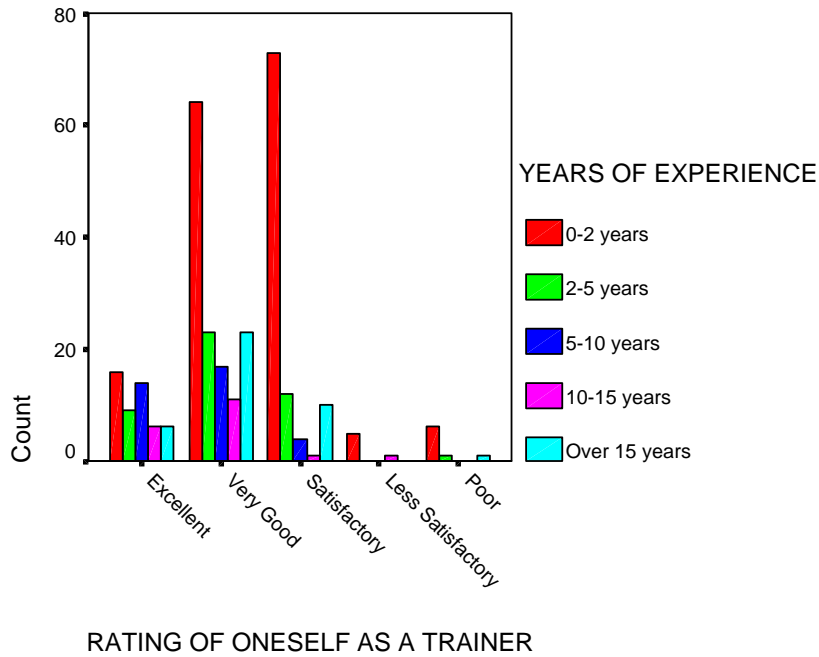
Source: Analysis of Survey Data

The statistics in the table are consistent with Leach's (1992:52) North American study, where a similar "75% of trainers had been in the field for ten years or less". It must also be noted that Leach's (1992) study revealed that the average age of this category of trainers was 41 years, suggesting that they did not begin their careers in the education and training field.

Figure I shows the comparison of 'years of experience in training positions'

with how trainers rated themselves.

Figure I: Rating of Oneself as a Trainer with Years of Experience in Training Positions



Source: Analysis of Survey Data

From the above figure a noticeable 10% of trainers with ‘less than two years of experience in training positions’ rated themselves as ‘less than satisfactory’ or ‘poor’. It is postulated that the reason for such responses is that these trainers are aware of their relative inexperience in the role. In contrast, such a rating was not the case with trainers with ‘over five years of experience in training positions’.

Leach’s 1996 study revealed that no trainers with less than two years of training experience were rated as excellent. Additionally, the majority (51.5%) of the excellent trainers identified in Leach’s 1991 study had been teaching for 10 to 20 years. These findings are consistent with the results from this research.

An important demographic question sought to distinguish trainers with formal teaching/training qualifications from those without. The qualifications held by the respondents are described in Table IV below:

Table IV: Qualifications held by Workplace Trainers

	University Teaching Qualifications eg Bachelor of Education	Other University Qualification (Social Science/Psychology or related Diploma/Bachelor's Degree)	Master's Degree from a University	Accredited Vocational Training Qualification
No	231	259	246	219
Yes	72	44	57	84
Total	303	303	303	303

Source: Analysis of Survey Data

Table IV indicates that a much greater number (76.2%) of respondents did not indicate any formal Degree qualification in teaching/training. Olson's (1994: 67) North American study revealed that, "*most trainers' degrees were in education*", as were "*postgraduate degrees*" for trainers. Fernandez (1982) and Davie et al (1986) also found that education was the most common Degree among industrial trainers, cited in Olson (1994). However, this Australian research found that most trainers do not hold teaching qualifications. This result is supported by the research by Bone et al (2000) and Blakeley et al (2001).

Because the disciplinary areas of 'Social Science' and 'Psychology' were deemed as including various core and elective modules about understanding human behaviour and characteristics, they were included as formal qualification areas that would attract many trainers to the training profession. Olson's (1994) research found that Degrees in social sciences and psychology, closely followed Degrees in education that were the most commonly held qualification by industry trainers.

However, Table IV demonstrates that a much lesser number of respondents had qualifications in these 'related' areas for this Australian study of workplace trainers.

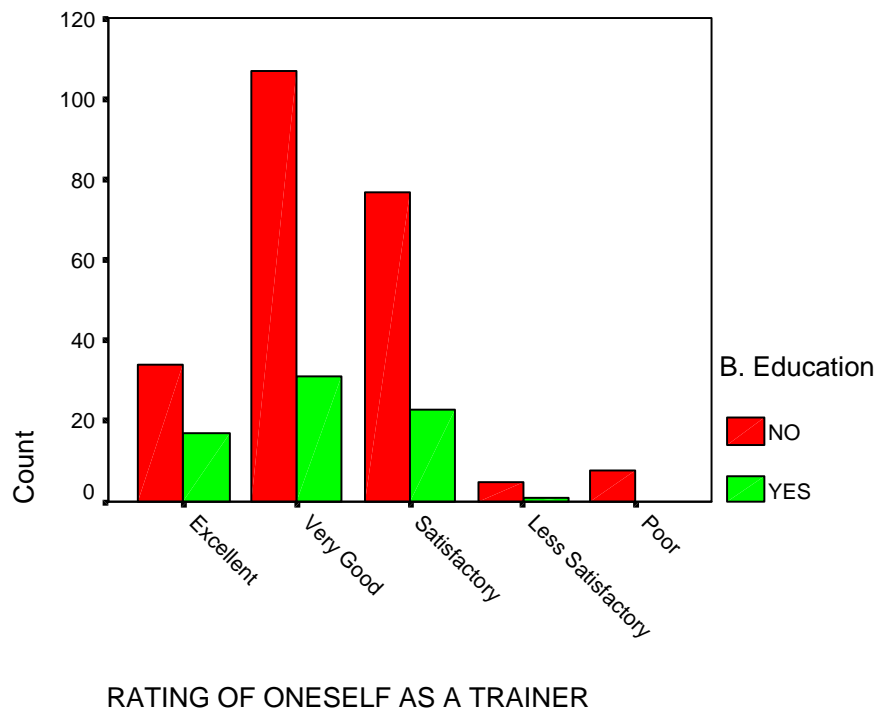
In contrast, Leach's (1992: 51) study of American trainers found that, "*Excellent vocational instructors in all three settings appear to possess similar*

educational attainment levels.” For example, “43.6% of the trainers identified in business and industry have earned master’s degrees” (ibid) and “8.9% had a Doctorate” (Leach, 1991: 67). These findings are consistent with Olson’s (1994: 67) research, where “89% of trainers in industry have a bachelor’s, 41% with a master’s degree, and 13% with a doctorate”, based on studies reported by McCullough (1987) that were undertaken in 1985. Olson’s (1994: 72) study revealed that, “The master’s in education (63.6%) was the most common degree for technical trainers [workplace trainers].”

The qualification demographic question also sought to determine how many trainers held the 'Certificate IV in Assessment and Workplace Training', a national vocational level qualification seen industrially as the minimum qualification for workplace trainers. This qualification is mandatory in many organisations throughout Australia, particularly training organisations registered with the relevant government authority responsible for workplace training. Only one-third of workplace trainers from Bone et al’s 2000, Australian study had ever heard of the national competency standards for Workplace Trainers.

As indicated in the figures below, there were some interesting outcomes when educational qualifications are compared with the trainers’ self-assessment of their effectiveness as a trainer.

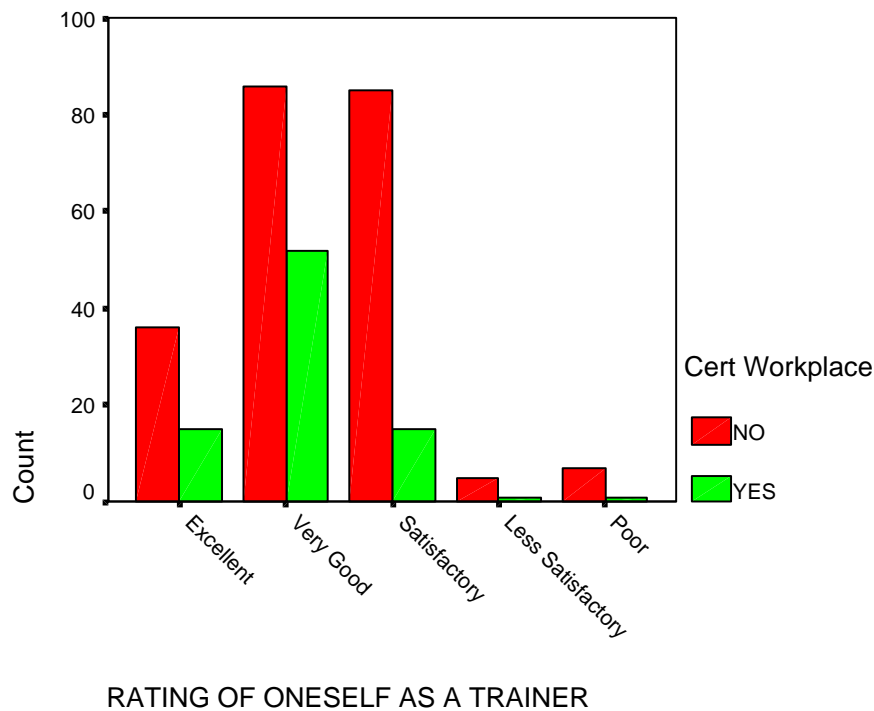
Figure II: Cross Tabulation of Bachelor of Education with Self-Rating as a Trainer



Source: Analysis of Survey Data

Figure II illustrates that although many trainers regard themselves as ‘excellent’ or ‘very good’ whether or not they have a University Degree to teach, it was only the trainers who did **not** have a University Degree to teach who regard themselves as ‘less than satisfactory’ with a greater number of trainers selecting ‘poor’.

Figure III: Cross Tabulation of Certificate IV in Assessment and Workplace Training with Self-Rating as a Trainer



Source: Analysis of Survey Data

Likewise, it was only the trainers without a Certificate IV in Assessment and Workplace Training who rated themselves as ‘less than satisfactory’ with a greater number of trainers selecting ‘poor’.

Sixty-seven percent of respondents, who had both a vocational training qualification and, a Bachelor of Education Degree, indicated that they were ‘excellent’ or ‘very good’.

Turning now to the competencies held by effective trainers, Table V presents the list of competencies that was rated in order of significance by participants as important for trainer effectiveness.

It should be noted that only the perceptions of trainers identified in this study as being ‘effective’ in their role as a trainer, that is, a total of 45 trainers who had been in training positions for more than 10 years and were formally

qualified as a trainer with at least a Bachelor of Education have been used to determine the competencies.

Table V: Trainer Competencies Deemed Important by Experienced Qualified Trainers

Trainer Competency	Frequency
Set Goals and Objectives	45
Reflect upon Work	45
Evaluate Effects and Impact of Training	45
Provide Positive Reinforcement	44
Facilitate Group Learning Activities	44
Fair in Assessment	44
Listen Actively	44
Conduct a Needs Assessment	43
Counsel Students	43
Use Questioning to Involve Participants	43
Demonstrate Vision	42
Write Effectively	42
Build Relationships	41
Attend to Individual Differences in Trainees	41
Know the Organisation's Needs	41
Keep Current and Up-To-Date	40
Have Research Skills	40
Develop Lesson Plans	39
Blend Different Training Techniques	39
Excellent Knowledge of the Subject	32

Source: Analysis of Survey Data

Conclusions

This research found that trainers, who were formally qualified as a trainer, identified with the competencies that are deemed as contributing to trainer effectiveness, as opposed to trainers who did not have a formal, University qualification to teach. In addition, formally qualified trainers become more effective with more years of experience in training positions.

Although knowledge in the content area was included as a trainer competency,

it was not seen as influential in determining trainer effectiveness, by one third of respondents. In particular, 71.1% of the trainers who identified as being formally qualified as a trainer and had been in training positions for over 10 years, did not agree that an excellent knowledge of the subject was needed, in order for them to be good at their role. This conclusion is supported by the literature. Dating back to the Smith-Hughes Act of 1917, vocational instructors in North America were to be competent in the trade they taught, rather than be qualified as professional teachers. However, since 1936, there were calls for all vocational teachers to have University Degrees as well as adequate trade experience (Olson, 1993).

Carnevale et al (1990) also acknowledge that it can take well over a year to “teach” technical personnel to develop and conduct training, if they are committed to doing so. Additionally, Cohen and Tichy (1998: 9) believe that it is not enough to have experience. Teachers must “*draw appropriate lessons from their experience and be able to make their tacit knowledge explicit*”. Put simply, the ability to articulate how one does something, requires different skills. For example, a good athlete is not necessarily a good coach. These authors' outlook is indicative of the overwhelming abundance of literature that supports the stance that effectiveness as a trainer is related to the qualifications and experience of the trainer (Lindeman (1938), Knowles (1980), DiGeorgio (1982), Draves (1984), Hiemstra and Sisco (1990), Olson (1993), Leach (1996), Birkenholz (1999), Thompson (2001), and Walter (2002)).

In contrast, 73% of trainers who identified as being unqualified as a trainer did rate content knowledge as being highly desirable, in order to fulfil their role. To state the obvious, these unqualified trainers believe that by simply having some knowledge of the subject matter, they will have an effective impact on a variety of adult learning styles.

Accordingly, 73% of trainers with less than two years of experience, and 69% of trainers with less than five years of experience in training positions thought that an excellent knowledge of the subject was needed, in order for them to be effective at their role. Whereas, 43% of trainers with over 15 years of

experience and 31% of trainers with over 10 years of experience in training positions believed that an excellent knowledge of the subject was not needed, in order for them to be effective at their role.

These research findings are also consistent with Bone et al's 2000 findings that reported that the trainer competency standards do not match the actions involved in informal training.

Implications for policy and practice

The results of this research have important implications for workplace training and workplace trainers.

Many employers are sending the message that anyone can be a workplace trainer or training specialist once they have some knowledge in a particular content area. Such a message does not accord with the views of experienced and educationally qualified trainers, who in this research, did not agree that an excellent knowledge of the subject was needed in order for them to be good at their role.

Therefore, there appears to be a dilemma for the training profession. How does the profession maintain its sense of professionalism and standards when there is an emerging trend to hire workplace trainers on the basis of content knowledge only? If the trend continues, can workplace training ever emerge as a professional field?

A question also arises for employers. There is an abundance of literature that supports the view that effectiveness as a trainer is contingent upon having trainers who are suitably qualified and experienced for the role (Lindeman (1938), Knowles (1980), DiGeorgio (1982), Draves (1984), Hiemstra and Sisco (1990), Olson (1993), Leach (1996), Birkenholz (1999), Thompson (2001), and Walter (2002)). Despite this, employers often prefer workplace trainers who do not have educational qualifications and experience. How can employers be sure that they are receiving the best return on their training dollar

and that quality training outcomes are being achieved when it is known that trainers who are not professionally qualified are less effective?

There are also theoretical issues that emerge from the research. This study sought to either substantiate or negate assumptions made in the adult education and training literature of what makes an effective trainer. Most of the literature uncovered for this study is based on experience, intuition, and observation, and not empirical research. The results of this study therefore provide a sound model to revise the current national competency standards for trainers to reflect a more rigorous approach.

It was intended that this research study would provide practical and actionable information for workplace trainers, as well as a theoretical perspective for understanding trainer effectiveness. This study reaffirmed that effective trainers possess specific observable attributes. The results of this study help to define and quantify the beliefs of what makes an effective trainer. The empirical support of this study from the results generated by this research, may be useful within private and public sector workplaces, in the areas of effective trainer evaluations, the recruitment and selection and, development of trainers.

Limitations of the research

There are a number of limitations to the generalising of the research findings. First, the survey undertaken was cross sectional and a longitudinal study of workplace trainers would be a better measure of the effectiveness of trainers. The research was undertaken on trainers in Australian workplaces and perhaps some similar research might be conducted in other countries to see if the findings are consistent.

In the context of the summary of findings and conclusions outlined in this paper, it is evident that a problem with workplace training (more specifically, corporate training) exists, because management appear to favour the appointment of unqualified trainers. The bias towards unqualified trainers might be that management is able to pay unqualified trainers less remuneration. This bias was also reported by Garrick (1998).

Finally, the results from the conduct of this study support the need for all human resource development practitioners, to bring the concepts of adult learning principles back to the table. Increasing the quality of knowledge and skill acquisition and, reducing the need for retraining, may decrease training costs and save organisations money.

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