TRAINING TRANSFER:
The What, How and Wherefore Art Thou?

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Issues relating to training design, evaluation and transfer are relevant to the Australian alcohol and other drugs (AOD) field due to their virtual absence from the literature. Whilst the AOD field has attempted to identify the composition and roles of frontline AOD workers, efforts to identify, measure and respond to workplace factors that may enhance or inhibit the transfer of training outcomes to the workplace have been largely ignored. With problems in recruiting and retaining experienced staff, and increasing interest in developing the capacity of both organisations and the AOD workforce to respond to AOD issues, it is appropriate to investigate strategies by which to achieve the greatest impact from AOD learning and development strategies. Similarly, it is time to shift the focus and responsibility from individuals, and encourage organisations to support sustainable outcomes from their training investment, including investigating training methods other than traditional face-to-face “one-stop” workshops, and strategies that stay when workers leave.

INTRODUCTION

Obtaining “value for money” from the investments organisations make in training has become a major priority of the National Strategy for Vocational Education and Training (1998-2003) (ANTA, 1998). This is significant considering that Australia invests a substantial $2.5 - 2.9 billion per annum on vocational and educational training (or $4 billion if wages paid for time in training are considered) (ANTA, 1998). However, it has been suggested that only 10% of training expenditure can be expected to transfer to the workplace (Baldwin and Ford, 1988). There is also considerable evidence to suggest that training alone will not guarantee changes in work practice, or result in long term sustainable outcomes in the workplace (Baldwin, 1988; Brethower, 2001).

The past 10 years have witnessed a veritable explosion in training research literature, highlighting significant developments in training methodology, evaluation and theory (Salas, 2001), and in defining what training actually means and is designed to achieve. It was once considered quite acceptable to perceive training as a one off, independent event. In more recent years, training practice has increasingly acknowledged training as having a strategic focus, as an event that occurs within existing organisational frameworks, and is custom designed to achieve specific organisational goals (Salas, 2001; Goldstein, 2002).
There are also increasing expectations for trainers to demonstrate the link between training and organisational outcomes (Church and Waclawski, 2001; Hesketh, 1999), to evaluate training (Warr, Allan and Birdi, 1999), and to justify organisational investment in training (Baldwin and Ford, 1988; Salas, 2001; Warr et al, 1999).

The training literature is characterised by a multidisciplinary (organisational psychology, business and management literatures) approach to training design, practice, research and evaluation. Only recently has this research turned to concerns over the “transfer of training problem” (Salas, 2001), specifically the failure to translate newly gained knowledge, skills and abilities (KSA’s) into the workplace. Goldstein and Ford (2002) identify four main barriers to the transfer of training into work practice:

1. Failure to consider trainees’ personal characteristics when designing training
2. Conducting training in isolation from the job trainees perform
3. Failure to consider strategies that may potentially enhance or detract from the trainee’s ability to translate new skills into practice
4. Failure to consider the role or aims of the organisation.

In addition, the empirical measurement of training outcomes (eg the degree of transfer into work practice) presents significant methodological and practical challenges. Few trainers tend to complete (or report) evaluations beyond those assessing changes using reaction, knowledge or attitude measures. This continues despite strong evidence that these measures are poorly related to subsequent or sustainable changes in behaviour on the job (Foxon, 1989; Ewan and Whaite, 1983; Warr et al, 1999). To combat difficulties surrounding the design and evaluation of training programs, trainers are increasingly encouraged to develop skills in research and evaluation, instructional design and organisational development to enhance skill retention in the workplace (Holton, 2000; Goldstein and Ford, 2002; Tharenou, 2001).

Issues related to training design, evaluation and transfer are relevant to the AOD field by virtue of their “virtual absence” from the literature, with few exceptions (eg O’Donovan and Dawe, 2002; Roche, 1998). The field has expended considerable effort in recent years in attempting to:

- identify the composition and training needs of the AOD frontline workforce (NCETA, 1998)
- develop education and training programs (Allsop, 1995; Bush, 1987; Novak, 1995), including static education packages (eg Helfgott, 1996; Pead et al, 1996)
- develop national AOD competency standards (CSHTA, nd).

The general focus of these strategies is on increasing the legitimacy and range of KSA’s of frontline AOD workers to respond to AOD issues. However, there is little evidence that these strategies alone will result in returns for clients, practitioners or the organisations in which they work (NCETA, 1998). There have been some efforts to address the role of training transfer and organisational issues in AOD education and training (Allsop, 1995). However, with problems recruiting and retaining staff in AOD agencies (Pitts, 2001) and growing interest in developing the capacity of organisations and the AOD workforce to best respond to AOD issues (NCETA, 1998), the time is ripe to investigate strategies for eliciting the utmost from existing AOD training. Similarly, it is time to shift the focus and responsibility from individuals towards encouraging organisations to support sustainable outcomes from their training investment, including investigating training methods other than traditional face-to-face, “one-stop” workshops and strategies that stay when workers leave.
Why Focus on Training?

Training in AOD work has traditionally held quite a narrow focus, with primary conceptions of training involving face-to-face delivery, ranging from a few hours, to a semester’s work. Training interventions and learning experiences may incorporate a range of strategies, including offering:

- competency based approaches
- on-the-job (OTJ) training
- assessment centres
- apprenticeships
- team self management
- challenge education and adventure learning approaches
- development of employee capabilities (orientation, newcomer socialisation)
- embedded training (which incorporates new technologies, practice opportunities and structured experiences on the job)
- action learning
- applied learning
- experience centred learning
- cross training
- interpositional training
- enterprise team building training
- leader development behavioural role modelling.

This paper explores workplace training, or more specifically, learning and development in the workplace. It is intended to encourage trainers, supervisors and other relevant individuals within organisations to consider issues beyond instructional design and training delivery, specifically to place training in the broader picture of organisational and workforce development. As Goldstein and Ford (2002, p22) explain, training needs to be understood as:

> a systematic approach to learning and development to improve individual, team or organisational effectiveness. A systematic approach refers to the idea that the training is intentional. It is being conducted to meet a perceived need. Learning and development concerns the building of expertise as a function of these systematic training efforts. Learning outcomes can include changes in knowledge, skills or attitudes (KSAs). Improvement is measured by the extent to which the learning that results from training leads to meaningful changes in the work environment. Therefore, a critical issue is the extent to which the KSAs are transferred to the job and improve individual effectiveness. Finally, employee training can also be viewed from a broader, more macro perspective, as a mechanism for enhancing work team and organisational effectiveness. In this way, training is seen as integral to facilitating larger scale organisational change and development issues.

(Goldstein and Ford, 2002, p22)

A second aim of this paper is to encourage readers to identify barriers to training transfer strategies that may equip students with skills to overcome these barriers on return to their workplace.

What Is Training Transfer or “Transfer of Learning”?  

Transferability of learning is an outcome aspired to by most trainers. However, many educators assume that transfer is both a possible and probable outcome of their training efforts (Hall, 1994). Defining
training transfer and achieving the aims of transfer may contribute to resolution of the “transfer of training problem”, for example:

[Training transfer may be viewed as] the effective application, generalisability and maintenance of new knowledge, skills and abilities to the workplace, as a result of undertaking an educational strategy.
(Holton, 2000)

Further:

...from theoretical point of view, transfer of learning occurs when prior knowledge or skills affect the way in which new knowledge and skills are learned and performed. When later acquisition or performance is facilitated transfer is positive. When later acquisition or performance is impeded, transfer is negative. Transfer can be general, affecting a wide range of knowledge and skills, or specifically affecting only particular knowledge and skills within a circumscribed subject matter.
(Taylor, 2000, p4)

How To Achieve Training Transfer?

Setting Conditions for Training Transfer

Transference of information from training to the job is meaningless unless an individual learns effectively. Establishing conditions for effective transfer is therefore fundamental. There are many complexities underlying transfer that raise questions (Goldstein and Ford, 2002), such as:

- what behaviours (or newly acquired KSA's) do you expect learners to apply to the job?
- in what settings do you expect the learner to apply newly acquired KSA's?
- how long do you expect the acquired KSA's to be maintained over time?
- what factors can enhance knowledge and skill development on the job?
- what barriers exist that may prevent or disrupt application of newly acquired KSAs to the workplace?
- what strategies might be appropriate to enable the worker to respond to these barriers?

The first step in developing training is to facilitate learning and transfer. Goldstein and Ford (2002) define three critical areas to be investigated by the trainer in relation to the learning environment:

1. Instructional Design:
   - objectives
   - instruction plan
   - learning principles

2. Trainee Factors:
   - readiness and motivation to learn

3. Work Characteristics:
   - opportunity for practice
   - organisational climate that values the training
   - supervisor support to ensure trainees can access resources and strategies that will facilitate transfer of learning to work practice.
Goldstein and Ford (2002) also propose a model of learning and transfer outcomes (see Figure 1), which further demonstrates links between critical areas necessary for transfer outcomes.

As shown in Goldstein and Ford’s (2002) model, learning outcomes (trainee learning and retaining material) are influenced by both:

- the quality of instruction
- a trainee’s readiness and motivation to learn.

These factors indirectly affect transfer outcomes because they impact on learning outcomes occurring during the training session. The extent of transfer of learning outcomes to the workplace (transfer outcomes) also depends on factors within the workplace (work characteristics).

While this model provides an overview of key strategies relevant to learning and training transfer, research has identified additional factors that, when implemented, may influence or enhance transfer of training outcomes to the workplace. The following tables provide an overview of additional factors that may influence training transfer at the individual, training program, workplace and organisational level.

A common theme of the transfer strategies above is the importance of teaching trainees transfer strategies, such as:

- identifying and developing strategies for responding to barriers to training transfer (eg dealing with unsupportive colleagues, obtaining supervisor support to enhance transfer)
- assessing and increasing trainees’ readiness and motivation to learn
- setting goals for using new skills in the workplace.

The message here is clear. In order to develop effective training transfer, trainers must set aside training time for teaching these concepts and measure the outcomes at various post-training points.

The effectiveness of transfer strategies has received varying degrees of support. For example, trainees taught relapse prevention (RP) and self-management (SM) strategies tend to achieve better outcomes when compared with groups who are just taught goal setting (GS) methods. Some authors (eg Burke, 1999) note that the context in which RP strategies are used is also important, whereby effectiveness may be tempered or reduced according to the level of support trainees receive within their organisations following training. For example, RP strategies have been found to be more effective in organisations which have unsupportive work conditions, and can be detrimental to workers who have an otherwise supportive working environment. The explanation is that RP encourages trainees to look for and respond to barriers to transfer. It has been suggested that a modified RP module is more effective in supportive work environments.
Table 1: Trainee Characteristics Likely To Influence Training Transfer

<table>
<thead>
<tr>
<th>Trainee Characteristic</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Readiness to change</td>
<td>identifying the trainees’ capacity to recognise that transferring trained skills is central to performance. Unless skill transfer is perceived by trainees and their supervisor as crucial to job performance and they are rewarded in the work setting, training is unlikely to be effective (eg Taylor, 2000; Rossett, 1997)</td>
</tr>
</tbody>
</table>
| Pre-training motivation / motivation to learn | training motivation affects learning outcomes  
post training motivation is linked to behavioural change (Noe, 1986) |
| Individual characteristics eg intelligence, ability, personality, motivation | general cognitive ability is a reliable predictor of job and training performance  
personality traits (such as locus of control) and job attitudes (such as measures of job involvement) have been found to be linked to training motivation (see Salas, 2001)  
increased age of trainees is associated with poorer learning performance (Warr et al, 1991) |
| Previous experience and attitudes           | trainees are considered barriers to transfer when they lack motivation, if they have a poor attitude, if they are facing time constraints, or lack confidence  
trainees need refreshers, especially if the training task is complicated (Taylor, 2000) |
| Development of transfer strategies          | goal setting, relapse prevention and problem solving skills have been shown to help workers transfer KSA’s learned in the training environment  
goal setting has been shown to provide useful cues for enhancing self efficacy and individual effectiveness (Gibson, 2001)  
relapse prevention training has particular relevance in preventing long term skill decay (Tziner, 1991), particularly for complex tasks (Gist, 1990; Gist, 1990; Gist, 1991)  
behavioural self management techniques eg self monitoring of work performance, have been successfully employed in enhancing training transfer (eg Bowne, 1999; Haccoun, 1994)  
mental practice has been shown to enhance transfer of training in areas such as communication skills (Morin, 1999) |
| Higher self efficacy (self belief regarding one’s ability to perform a task) | trainees with high self efficacy before and during training are more likely to perform better, to seek out opportunities to practice, and attempt more difficult jobs (Gibson 2001) |

Table 2 identifies several major strategies that further investigate factors associated with training programs that may enhance training transfer at an individual level.

A range of workplace and organisational factors have also been identified as central to the effective transfer of training into work practice. The degree to which an organisation supports training transfer has been found to impact employees’ ability and motivation to translate learning into job performance (Huczynski, 1980; Rouiller, 1993; Tracey, 1995; Warr et al, 1999 etc). Table 3 identifies some of the workplace and organisational factors that have been demonstrated to enhance effective training transfer.
Table 2: Characteristics of Training Programs Likely To Enhance Training Transfer

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<tr>
<td>Perform a Training Needs Analysis (TNA)</td>
<td>- training needs analysis ensures that training is the most appropriate solution to a problem and will increase the likelihood that trainees receive information that is relevant to their needs and practically oriented. - involving trainees and their supervisors increases motivation to learn and enables supervisors to identify both training content and means of supporting trainees on their return to the workplace (Goldstein and Ford, 2002; Hesketh and Ivancic, 1999; Salas and Cannon-Bowers, 2001)</td>
</tr>
<tr>
<td>Ensure training is consistent with job requirements</td>
<td>- examine job descriptions, undertake workplace visits, discuss potential training activity with workers and supervisors on the job (Hesketh and Ivancic, 1999)</td>
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<tr>
<td>Ensure strong transfer design</td>
<td>- develop training tasks that are similar to transfer tasks and ensure that content is consistent with job requirements (Scroth, 2000)</td>
</tr>
<tr>
<td>Behavioural modelling</td>
<td>- incorporate opportunities to model desired training outcomes where possible (Tziner and Haccoun, 1991)</td>
</tr>
<tr>
<td>Incorporate self management</td>
<td>- include strategies for trainees to identify and respond to potential barriers to transfer. Other methods include work diaries, learning contracts with trainers, supervisors, team members (eg Tziner and Haccoun, 1991; Atell and Maitlis, 1997)</td>
</tr>
<tr>
<td>Aim for mastery to promote over learning, and practice, practice practice.</td>
<td>- training alone is sufficient to develop procedural and declarative knowledge, but does not ensure adequate development of automatic responses required for trainees to practice new skills in the training environment. - participants need to overlearn material (ie theory) well before attending training, so training (over several rather than one or two sessions) can provide a forum for practice and skill development. - mastery development requires organisational and supervisory support (see also Ford et al, 1998; Salas and Cannon-Bowers, 2001)</td>
</tr>
<tr>
<td>Examine learning strategies as legitimate style of training</td>
<td>- utilise a variety of learning strategies in order to account for different learning styles, for example: - cognitive (eg rehearsal, elaboration, mental organisation of material to be learned) - behavioural (help seeking, application of learning) - self regulatory (emotion control, motivation, monitoring) strategies (Warr et al, 1999)</td>
</tr>
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</table>

The overview provided above highlights the complexity of factors likely to influence a trainee’s capacity to effectively transfer training outcomes into everyday work practice. It is clear that the responsibility for effective training extends beyond the trainer or educator alone. However, it is also increasingly evident that AOD trainers may need to reconsider their role to extend beyond training provision and evaluation, and to include supporting organisations to identify and respond to the range of factors that may influence work practice. These factors may include issues such as organisational development and strategic alignment of learning strategies, developing strategies for enhancing training transfer, identifying and responding to workplace climate, and enabling team development. It is also crucial that managers, supervisors, and organisations as a whole recognise the key role they play in providing opportunity, support, recognition and incentives to trainees to ensure sustained improvements in work practice.
Table 3: Aspects of the Work Environment Likely To Influence Training Transfer

<table>
<thead>
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<tbody>
<tr>
<td>Supervisor support</td>
<td>supervisor behaviour is one of the most important determinants of training transfer (Xiao, 1996) encouraging supervisors to coach trainees prior to training enhances training transfer (Montesino, 2002)</td>
</tr>
<tr>
<td>Peer support</td>
<td>negative peer attitudes may inhibit transfer (Taylor, 2000)</td>
</tr>
<tr>
<td>Antecedents and consequences for training</td>
<td>situational cues (ie reminders) and consequences (ie rewards vs punishment) can significantly impact training transfer (Roullier and Goldstein, 1993; Salas, 2001)</td>
</tr>
<tr>
<td>Context of work environment</td>
<td>develop policies and procedures that support transfer in a non supportive workplace where workplace pressures or lack of procedure inhibit transfer and workers are too busy to practice, trainees lose both opportunity and knowledge, therefore skill decline is likely to occur (Baldwin and Ford, 1988; Tharenou, 2001; Bennett et al, 1999)</td>
</tr>
<tr>
<td>Identify organisational context or climate to identify support for training and trainees</td>
<td>trainees perform better when the transfer climate is more supportive when trained employees lack supporting strategies they may actually perform worse than untrained workers this may occur because trainee expectations are raised, and the dissonance between new ideals and reality adds to their stress (Bennett et al, 1999; Rouiller, 1993)</td>
</tr>
<tr>
<td>Ensure consistency of training with organisational goals or strategic direction</td>
<td>trainees’ self reports indicate higher level of training usage in organisations that have implemented strategies to support training (Montesino, 2002)</td>
</tr>
<tr>
<td>Endorse training, reward trainees, and maintain interest in training outcomes</td>
<td>development of continuous learning culture promotes positive transfer climate (Hesketh and Ivancic, 1999; Tracey et al, 1995).</td>
</tr>
</tbody>
</table>

The factors described in the discussion above clearly indicate the need for the AOD field to develop networks of communication and support between trainers, supervisors, organisations and trainees themselves. Only then will we begin to move towards effective training programs that bring concrete and sustainable improvements to work practice.

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REFERENCES


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Diversity in Contexts

An important consideration in workforce development is the need to acknowledge the diversity of contexts in which people work, and also the diversity of cultural and political backgrounds of people and organisations. This section brings together a set of papers that reflect this wide range of diversity. The papers highlight important considerations that can easily be overlooked in workforce development initiatives.

The first paper in this section is Susie Purcell and Mark Harris. They explore other types of workplace differences and examine the challenges of attempting to bring together various services to offer shared care for people who use illicit drugs. Rob Wilkins and Catriona Elek’s paper highlights the challenges of introducing less familiar issues, in this case hepatitis C, into the workplace. The paper describes a range of educational principles, planning tools and workforce development strategies. The paper by Katrina Wolinski, Margaret O’Neill and Ann Roche reports on initial work of one of Australia’s few AOD workforce scoping exercises which involves an analysis of the alcohol workforce, the services provided and the issues faced in the management and treatment of alcohol related problems. The final paper is by Raymond Selvaraj. He speaks personally about being an Indian working in New Zealand and within Maori contexts. He highlights a range of issues that emerge when one is different, and what can be done to maintain and respect such differences in the workplace.