Fully on-the-job training

Experiences and steps ahead

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Publisher's note

This report is based on the outcomes of a project undertaken as part of the National VET Research and Evaluation Program by DBM Consultants. Additional information relating to this research is available in *Fully on-the-job training: Experiences and steps ahead: Support document*. It can be accessed from NCVER's website <http://www.ncver.edu.au>.

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Key messages

✧ Fully on-the-job training theoretically does not involve any off-the-job training. However, it is very rare for 100% of training to take place as part of the productive work of the learner. In this study, and in reality, fully on the job refers to training—both theoretical and practical—where the majority is conducted in the workplace as part of the normal experience of the employee.

✧ Registered training organisations are aware of constructive measures to assure the quality of fully on-the-job training. This includes a good working relationship and regular contact between both the training organisation and employer, and the training organisation and trainee. The pastoral care and mentoring role of the provider is seen as particularly important. However, the majority of trainees felt that their registered training organisation did not maintain sufficient contact with them.

✧ While registered training organisations and trainees are generally in favour of fully on-the-job training, important areas for improvement must be addressed. Suggestions include: improving the level of networking among students, especially from outside the firm; the level of trainees' time management skills; the balance between work and study loads; the level of theory training; the breadth of trainees' skill base and work experience; employers' training capacity; and the way trainees are valued in the workplace.

✧ Fully on-the-job training is seen as a good way to learn. This type of training provides financial incentives to employers and flexibility for all concerned. With appropriate support systems in place for trainees, fully on-the-job training offers significant benefits, such as customised pace; incidental learning, encompassing real work experiences which lie outside formal training components; learning that is relevant to enterprise and individual needs; and the identification of employment opportunities for trainees and employers alike.

Executive summary

This report explores the concept of fully on-the-job training through the eyes of registered training organisations and trainees involved with this type of training. The Australian National Training Authority (ANTA) defines fully on-the-job training as 'training undertaken in the workplace as part of the productive work of the learner' (ANTA 2003). Up to 100% of this training may be delivered as part of the everyday working experience of trainees, although in reality this is rarely the case. For the purpose of this study 'fully on-the-job' merely refers to training, the *majority* of which is based in the workplace. Where reference is made to 'trainees', this may refer to a person undertaking either a traineeship or an apprenticeship.

Findings are presented from a research study examining factors of the training that may contribute to its effectiveness as well as ways in which fully on-the-job training may be improved. For this purpose DBM Consultants conducted a survey that identified registered training organisations' roles and responsibilities, the strengths and weaknesses of fully on-the-job training, mechanisms for quality assurance and student satisfaction.

The survey tool

At the outset, 36 semi-structured interviews were conducted with representatives of registered training organisations to gain an understanding of perceptions of the relevant aspects to be investigated. Of these interviews, 20 were conducted with private training organisations, six with technical and further education (TAFE) representatives, five with enterprises and another five with group training companies. The interviews assisted in identifying issues for inclusion in the main questionnaire survey. These issues were further defined by conducting focus groups with trainees to establish their view of critical aspects of their training.

The questionnaire survey focused on determining the level of satisfaction that students experienced both before they began training and during training in relation to the course content, role of the training company, assessment process and training usefulness. Some demographic information relating to the sample (in the year 2000) was also collected.

Registered training organisation and trainee views in a nutshell

Interviews with registered training organisation staff pointed to the need for a balanced approach to training. Registered training organisation mentors believed that trainees received a sufficiently broad and flexible learning experience. Regular contact and a good relationship between not only the employer and the registered training organisation (where the employer is not a registered training organisation), and also between the registered organisation and the trainee, were identified by both parties as essential components of effective fully on-the-job training. Key perceptions held by registered training organisations and trainees that may contribute to an understanding of how fully on-the-job training could be improved were identified as follows.

How registered training organisations view fully on-the-job training

Registered training organisations acknowledged their responsibility for the trainees' working conditions and the need for these to be conducive to a good learning environment. Areas of responsibility included:

✧ bridging any training gaps caused by a lack of skill or resources on behalf of the employer

✧ advising, supporting, motivating and mentoring trainees and employers

✧ monitoring the trainees' working conditions, including the awareness of responsibilities and requirements, on behalf of both the trainees and the employers.

Beyond these points raised by registered training organisations, the *Standards for registered training organisations* apply in all states and territories. As part of the Australian Quality Training Framework these standards seek registered training organisation compliance with a variety of requirements. Those of particular interest to fully on-the-job trainees include:

✧ negotiation of training delivery and assessment with employers and learners

✧ cooperation with employers to integrate on-the-job training components

✧ scheduling of workplace visits to monitor/review training and assessment.   (ANTA 2001)

Overall, registered training organisations were in favour of training that occurred predominantly on the job but expressed some concerns regarding the quality of training processes and content. They highlighted the following strengths and weaknesses.

Strengths and weaknesses

Where the employer is also the registered training organisation, an obvious advantage of fully on-the-job training includes financial benefits through government incentives. Employers also valued the fact that training (including its pace) could be customised to suit trainees. They felt that a significant amount of incidental learning occurred on the job, making training highly relevant to the job and industry. Furthermore, ongoing employment opportunities for trainees can be directly identified.

Registered training organisations raised concerns with trainees identifying themselves as 'workers' rather than 'students'. It was felt that opportunities to network with other trainees outside the company are limited. They also identified competing work and study loads as a problem. It was thought that these impinge on a trainee's efforts to complete their training. Weaknesses also included insufficient theoretical training, as well as employers' lack of commitment to training and training skills. A further concern was that learning may be specific to one workplace, rather than generally applicable.

Registered training organisations emphasised that trainee satisfaction was enhanced mainly by good-quality training, a good wage and a supportive employer. They showed an awareness of quality assurance measures which, if implemented, would enhance the effectiveness of training that is conducted chiefly on the job.

How trainees view fully on-the-job training

Overall, trainees reported satisfaction with their training, but raised some concerns regarding teaching materials, assessment and training providers. Trainees' perceptions were identified more in terms of their level of satisfaction in relation to various components of their training, rather than specific advantages or disadvantages. In general, the trainees' statements regarding training processes and content were less articulate than those obtained from the registered training organisations.

Strengths and weaknesses

In general, trainees considered that on-the-job training is a 'good way to learn'. In particular, it was significant to trainees that they are able to work/learn at their own pace. Trainees valued the fact that a certificate could be obtained while working a normal job.

Weaknesses were related primarily to organisational issues; for example, repetitive module content, lack of support from the registered training organisations and lack of feedback on performance. Trainees appeared particularly concerned with various factors relating to their interactions with the training organisations. Nevertheless, the majority of trainees were still willing to 'recommend their registered training organisation to a friend'.

Improving fully on-the-job training

One benefit of understanding the perceptions of stakeholders of fully on-the-job training is the opportunity to identify areas for improvement, aimed to increase training effectiveness. Registered training organisations' and trainees' reports of weaknesses as well as levels of trainee satisfaction are particularly constructive in this process. Findings from stakeholders, together with some secondary research of literature, have contributed to the following list of areas for improvement and possible solutions:

◇ *Facilitate networking among trainees*: trainees should discuss their progress and on-the-job training experiences via:

♦ computer-assisted networks; for example, computer-supported collaborative learning

♦ an organised schedule of regular meetings as part of the training.

◇ *Facilitate time management*: trainees should be assisted in preparing a realistic schedule, and training should include time-management skills.

◇ *Strengthen theory training*: theory training materials must be relevant and accurate and time must be allocated for this training to ensure trainees attain a universally applicable skill base.

◇ *Turn employers into trainers*: employers need to be provided by registered training organisations with an understanding of how to be a good trainer.

◇ *Value 'traineehood' in work culture*: trainees' special status of 'traineehood' should be appreciated in the workplace by employers referring to them this way and not as a fully equipped worker, as well as explaining the potential of the trainee to become an effective workplace asset.

Context

Introduction

Since its inception through the National Employment and Training Taskforce (NETTFORCE) in 1994–95, 'fully on-the-job' training has been distinguishable from previous training arrangements in that it does not *require* any off-the-job training (Robinson 2001). It has since been conducted in various forms in the workplace. A review of the quality of training in Victoria's apprenticeships and traineeships described fully on-the-job training as involving a structured arrangement:

> … whereby competence is acquired solely through the performance of normal work duties
> and for which the apprentice or trainee is given no release from their work duties to
> participate in either self-managed or facilitated training with the support of a teacher/trainer.
> (Schofield 2000, p.61)

However, initial consultation of literature, and with trainees and registered training organisations, revealed that the extent to which this definition in fact applies fully within training reality is limited. In effect, it is very rare for 100% of training to take place on the job. For the purpose of this study the following definition of fully on-the-job training will be used:

> Fully on-the-job training refers to theoretical and practical training of which the majority is
> conducted as part of the normal work experience by the employer and hence is conducted in
> the workplace. (Amended from Van Straaten et al. 2000, p.25)

It is apparent that such a training arrangement would hold advantages and disadvantages for both employers and trainees. Fully on-the-job training is attractive to employers because they receive a subsidy at the same time as employing a trainee/apprentice who is present at the workplace for all of the working week (Schofield 2000). Because trainees are fully on the job and do not have to leave the workplace to undertake training, it may be easier to organise the various components of the training. Whether this is perceived to be an advantage or disadvantage is open to question. Issues such as these may be viewed very differently by employers and trainees, and it is these perceptions that this study seeks to describe. With a major consideration in evaluating fully on-the-job training being the quality of the training, views of registered training organisations and trainees on this issue are discussed.

Findings presented in this report are drawn from a survey commissioned as part of the nationally managed vocational education and training (VET) research and evaluation program. The survey was conducted by DBM Consultants and reported by Van Straaten et al. (2000). It explored the perspectives of registered training organisations and trainees undertaking fully on-the-job training, with the aim of assessing training factors that have some bearing on training effectiveness and therefore quality. A true measure of training effectiveness is beyond the scope of this study.

Aims

The main purpose of this report is to illustrate both registered training organisation and trainee perceptions of those aspects of fully on-the-job training that influence its effectiveness. A secondary aim is to identify areas needing improvement and to suggest ways to improve practice. These aims are achieved by elaborating on training organisation and trainee views concerning: firstly, their roles

and responsibilities; secondly, the strengths and weaknesses of fully on-the-job training; and, finally, mechanisms for quality assurance.

Perceptions of registered training organisations and trainees

A survey was conducted to identify the views of registered training organisations on their roles and responsibilities, the strengths and weaknesses of fully on-the-job training and mechanisms for quality assurance. Trainees were questioned regarding their expectations prior to training and their satisfaction with the training. A further objective was to use these perceptions to identify ways in which fully on-the-job training may be improved.

The survey consisted of the following three main components:

1 semi-structured interviews with registered training organisations

2 focus groups with trainees

3 structured questionnaires administered to trainees.

Points 1 and 3 have supplied the findings presented in this report. A discussion of point 2 is therefore omitted.

The report focuses here only on the most relevant parts of the survey. Details on the semi-structured interviews with training organisations are presented in the methodology section.

The purpose of the questionnaires administered to trainees was to identify the following:

✧ the arrangements for trainees' on-the-job training, and whether respondents actually 'qualified' as fully on-the-job trainees and hence for inclusion in the survey

✧ training practices in more detail: what were trainees' training hours in and outside the workplace? What stage of training were trainees at? What were their interactions with their registered training organisations?

✧ trainees' expectations prior to training commencement and levels of satisfaction during training

✧ some demographic characteristics of trainees.

Methodology

The survey design, administration and analysis was broken down into three stages.

Stage 1: Sample preparation and defining fully on-the-job training

A survey undertaken by DBM Consultants involved the following stakeholder sample groups:

✧ trainees/apprentices with recent experience of fully on-the-job training

✧ registered training organisations providing fully on-the-job training.

A sample of 36 registered training organisation interviewees was invited for discussions in late 2000 and early 2001. Those interviewed were responsible for managing and coordinating fully on-the-job training. Examples of position titles included: New Apprenticeship coordinator, training coordinator, technical training manager, training skills manager and general manager. Four to six individuals were interviewed in each state or territory. Of these interviews, 20 were conducted with private registered training organisations, six with technical and further education (TAFE) representatives, five with enterprises and another five with group training companies.

While a larger number was initially anticipated, a sample of 860 fully on-the-job apprentices and trainees was ultimately included in analyses. Respondents were collated with the assistance of the state/territory departments of education, training and employment. Victorian and Tasmanian state

departments provided course types that were most likely to comprise trainees/apprentices fully on-the-job. All other state/territory departments used the '03' code to identify trainees/apprentices fully on-the-job. Trainees coded in this way are described to be 'employment-based (for example, industrial/ work experience, field placement, "fully" on-job training)' (NCVER 1998). In addition, the relevant South Australian department used the following question, contained in their contracts, to identify fully on-the-job trainees/apprentices: 'Is the training to be conducted on the job and therefore supported by mentoring arrangements with the RTO?'.

Stage 2: Identification of relevant issues for investigation and questionnaire design

Issues to be investigated by the study were identified through registered training organisation interviews (as discussed above), a literature research and four focus groups involving trainees.

The focus groups were undertaken in Melbourne during February 2001. For the purposes of recruitment for the focus groups, the operational definition of fully on-the-job training involved scenarios where, according to the training plan or actual practices, most of the theoretical training was to be undertaken by the employer as opposed to the registered training organisation. Trainees/ apprentices surveyed included both males and females undertaking a variety of course types at various stages of training.

The resulting questionnaire contained four sections. The first section asked 14 screening questions to determine whether or not the individual qualified for the interviews as a fully on-the-job trainee/ apprentice. The 18 questions of the second section explored trainees' fields of training, stages of completion and training procedures. The third section included six questions to establish trainees' overall training impressions, as well as six sets of eight to 14 Likert-style statements (7-point scale, Strongly disagree to Strongly agree), measuring levels of expectation and satisfaction concerning aspects of their training, including:

✧ pre-course expectations

✧ experiences during training

✧ course content

✧ performance of training company

✧ assessment process

✧ training usefulness.

The fourth section explored demographic characteristics (seven questions).

Stage 3: Administration of questionnaire survey

Questionnaires were administered via computer-aided telephone interviews by DBM Consultants. This involves 'the process of increasing the speed and accuracy (reliability and validity) of conducting telephone interviews by the use of computers' (Asia Market Research 2004).

Following a pilot study of six interviewees, 860 computer-aided telephone interviews were conducted nationally, as illustrated in table 1.

Table 1: **Number of computer-aided telephone interviews conducted per state per qualification type**

	NSW	Vic.	Qld	SA	WA	Tas.	ACT	NT	Total
Non-trade AQF I & II*	150	148	57	21	14	21	10	4	**425**
Non-trade AQF III+**	85	149	50	13	7	53	16	6	**379**
Trades***	8	5	13	0	5	15	10	0	**56**
Total interviews	**243**	**302**	**120**	**34**	**26**	**89**	**36**	**10**	**860**

Notes: *Non-trade (Australian Standard Classification of Occupations codes AQF I & II): professional/manager, advanced and intermediate white collar, intermediate production/transport, elementary white collar, and labour and related.
**Non-trade (codes AQF III+): professional/manager, advanced and intermediate white collar, intermediate production/transport, elementary white collar, and labour and related.
***Trades: mechanical, automotive, electrical, construction, food, horticulture and other.

Source: amended from Van Straaten et al. 2000, p.16

Stage 4: Data compilation and analysis

Data were collated and analysed using statistical software. Material used in this report is based on descriptive statistics, mainly derived from cross-tabulations.

Fully on-the-job training: Experiences and steps ahead

Findings and discussion

In combination, the interviews and focus groups with registered training organisations and trainees provided an insight into how participants feel about fully on-the-job training. The data set is particularly useful in demonstrating expectations and levels of satisfaction resulting from the experiences of a subset of Australian fully on-the-job trainees.

Registered training organisation roles and responsibilities

With the over-arching goal of quality assurance in mind, training organisation responses have shown their acceptance of responsibility for adopting various roles, including:

◇ explaining the responsibilities and requirements of fully on-the-job training to both the trainee and employer

◇ ensuring that the employer is able to teach the relevant competencies

◇ providing skills training to trainees which the employer is not able to provide and/or training the employer to train the trainee

◇ acting in a mentoring, coaching and supporting role for students (continuously raised by registered trainers as a critical part of their role)

◇ keeping the trainees motivated and enthusiastic

◇ monitoring working conditions of the trainee (for example, whether lunch breaks and holidays are available)

◇ advising and providing support to employers

◇ supplying resources—for example, learning materials—to trainees (where not made available by the employer)

◇ conducting assessments of competencies.

The degree to which such generic responsibilities are acted upon, as well as the way in which they are carried out, largely depends on the approach of each individual registered training organisation and can not be verified by this study. However, beyond the points raised by registered trainers, the standards for registered training organisations (ANTA 2001) apply to organisations in all states and territories. As part of the Australian Quality Training Framework these standards seek registered training organisation compliance with a variety of requirements, including:

◇ the maintenance of written policies and procedures for ensuring quality training

◇ documentation and implementation of customer grievance procedures

◇ collection and review of customer feedback followed by an appropriate response

◇ state/territory legislation

◇ dissemination and application of access and equity principles and procedures.

Of particular relevance to fully on-the-job trainees are the following registered training organisation obligations:

✧ negotiation of training delivery and assessment with employers and learners

✧ cooperation with employers to integrate on-the-job training components

✧ scheduling of workplace visits to monitor/review training and assessment.

Quality assurance measures

Registered training organisation interviewees provided the following concrete examples of methods they apply to assure quality in fully on-the-job training delivery:

✧ *Incorporating off-the-job training as required*: at times registered training organisations invited the trainee in for theory-based training in a classroom setting where active learning takes place, such as role-plays and discussions. Larger training organisations tended to invite groups of 15–20 trainees per workshop.

✧ *Introducing trainee 'exchange' programs*: trainees were moved around within a group of similar organisations in order to offer training; for example, in specialised equipment, which some companies may not have.

✧ *Training employers*: large registered trainers appointed one member of staff to train workplace supervisors, who, in turn, trained and assessed (to a limited extent) the trainees. This approach worked well, especially in remote areas where regular personal contact between the trainee and the organisation was difficult. It also opened up other opportunities for people; for example, some of the supervisors wanted further training in human resource development, which, in turn, had the potential to benefit the employer and the trainees.

✧ *Increasing site visits*: according to federal policy, registered training organisations are required to visit their trainees four times per annum. However, most of them pointed out that visiting the trainee at least every 4–6 weeks (depending on individual needs), especially in the early stages of the course, was vital to pre-empt any dissatisfaction and 'dropping out' from the course (which would result in a financial loss for both the registered trainer and the employer).

✧ *Counselling, mentoring and supporting the trainee*: registered training organisations emphasised the importance of mentoring, with some even referring to this as 'pastoral care'—something that is not identified in any national policy or procedure. For many trainees this was their first experience in the workplace, and they were more comfortable talking to the training organisation staff member than to their employer.

✧ *Assessing*: a number of registered training organisations had developed their own policy of assessing students continuously, using visits and diaries. Others assessed students at the end of the course and organised the employer to conduct continuous assessments. It seemed that continuous assessment was more prevalent amongst smaller registered trainers.

Trainee views

Nearly half of the trainees gave their registered training organisation an overall rating of 'very good' to 'excellent', with another 28% rating their registered trainer as 'good' (table 2). A similar level of satisfaction was expressed concerning the effectiveness of a number of aspects of the role of the training organisations. This majority of 'satisfied' trainees is put into perspective, however, when considering the training organisations' roles in assessment and personal contact with the trainees.

A little less than half of the trainees regarded their registered training organisations as an assessor rather than a trainer. Thirty-seven per cent considered that their training organisations did not really care about how they were going, giving the trainees very little feedback. This situation is not conducive to a healthy learning environment, since it is more useful for a trainee to feel supported than assessed (Patterson & Markotic 1999). This is particularly relevant in this sample, considering

that 34% of trainees believed that their training organisation did not help them sufficiently to work through their modules; an equal proportion thought their training organisation was not responsive enough to their needs; and, notably, 64% felt that their registered trainer did not contact them regularly enough to see how they were going. While registered training organisations considered it their responsibility to offer mentoring, support and increased site visits to their trainees, trainees clearly did not perceive the training organisations' commitments met their requirements in these respects.

Robertson et al. suggest that the 'roles of stakeholders seem to have become more blurred with the advent of New Apprenticeships, traineeships, training packages, user choice and other "innovations"' (2000). While the training organisations in this study gave a clear account of their roles and responsibilities, most appeared to have a lack of understanding or acceptance of their roles and responsibilities, which may well have contributed to the lack of satisfaction reported by the trainees.

Strengths of fully on-the-job training

Strengths or advantages of fully on-the-job training can be perceived and valued very differently by the stakeholders. The following summarises the most commonly mentioned qualities perceived by respondents to this study to be the major strengths of this type of training.

A good way to learn

Overall, registered training organisations were in favour of fully on-the-job training, with trainees concurring that this type of training was 'a good way to learn'. The receipt of financial incentives through the government is an obvious advantage for employers. In keeping with the focus of this report on experiences and perceptions, employers' material advantages are not further discussed here.

Overall, trainees claimed high levels of satisfaction with their training, employers and registered training organisations (table 2). They reported to be most satisfied with their employers, although ratings were too similar to suggest significant differences between training, employer and training organisation performances.

Table 2:   Trainees' ratings of aspects of their training (%)

Rating	Aspect of training		
	Training	Employer	Registered training organisation
	%	%	%
Poor	11	8	8
Fair/good	38	32	41
Very good/excellent	50	59	45

Note: Questionnaire items: Thinking about the [training/employer/registered training organisation] in general, how would you rate it overall? (Options: Poor, Fair, Good, Very good, Excellent, Don't know)

Particular strengths of fully on-the-job training were most clearly articulated by the registered training organisations. The degree to which trainees agree with these proposed strengths can be ascertained from trainees' indications of levels of satisfaction.

Customised pace

One strength emphasised by both training organisations and trainees was the scale of flexibility fully on-the-job training offered with regard to the pace of training. Related to, and resulting from, this reported advantage of 'customised pace' are findings by Harris et al. (1998), who offer a list of contributions of on-site training to trainees' learning, including:

✧ independence of apprentices both as learners and workers

✧ development of apprentices as self-directed learners

✧ opportunities to learn in a more naturalistic manner (in a way that mirrors the rhythm of the workplace.

<div align="right">(Harris et al. 1998, p.151)</div>

Customised pace is therefore not only an advantage perceived by registered training organisations and trainees, but also acknowledged by research to be beneficial to trainees. Nevertheless, 37% of trainees agreed that the pace of their training was too slow. It is possible that trainees who had a lot of control over the pace of their training executed a degree of self-sabotage, slowing their pace unintentionally. Where setting the pace relied largely on communication or cooperation between trainees and trainers (both employer and registered training organisation), the pace of training may have been slowed by an inability to communicate openly and effectively. The data do not provide a reliable cause for the reported slow pace effect.

Incidental learning

Trainees emphasised their involvement in a 'normal' job while obtaining a certificate as a major strength. This is supported by Harris et al. (1998), who report the 'actual experience of working' to be the greatest asset to be taken from on-the-job learning by trainees. The theme is expanded upon by comments from the registered training organisation sample, where it is claimed that trainees profit from a significant amount of incidental learning. This effect may also provide trainees with the opportunity to demonstrate their increasing competence on the job and to earn appropriate levels of work responsibilities (Strickland et al. 2001). Similarly, Patterson and Markotic (1999, p.30) found in their study that trainees valued the attainment of self-confidence, work experience, and time management and occupational skills as an outcome of their on-the-job training. Linking in with this are discoveries by Strickland et al. (2001, p.36) who report that trainees appreciated:

✧ observing more-experienced workers perform tasks to be learnt

✧ consulting with 'older' colleagues in the workplace.

It was also mentioned that opportunities arose to participate in workplace committees. This type of activity expands trainees' learning potential to include not only their work skills, but also other broadly applicable 'generic' occupational skills.

These findings amount to a very convincing case for improved training by incidental learning.

Relevant training

Sample registered training organisations consider that fully on-the-job training is highly relevant to the job and industry. In a South Australian study investigating on-the-job training, 71% of employers noted that their direct influence on trainees ensures that the trainees' skill base was relevant to their business (Department of Education, Training and Employment 1999). Nearly three-quarters of trainees felt that all the module material was relevant to their job. This may be true for the majority of this sample and in many individual cases. However, Patterson and Markotic (1999, p.87) highlight the narrowness of training received through on-the-job arrangements as a major *dis*advantage. This suggests that skills and knowledge acquired through fully on-the-job training may not be applicable on a sufficiently general basis. The extent to which on-the-job training is truly 'relevant' in a widely applicable sense is therefore relative to each employer's training capacity and various aspects of training arrangements.

Linking in with 'relevant learning', as well as the previous point 'incidental learning', is the concept of *authentic learning*. This is described as 'learning from experience that is grounded in reality' (Misko, Patterson & Markotic 2000, p.275). This 'reality' not only involves on-the-job experiences with real tasks and their deadlines, materials and people, but it also entails coping with the

responsibility and, importantly, the consequences of decisions or mistakes. In short, authentic learning—on-the-job learning—offers experience in work culture.

Employment outcome

The registered training organisations reported the potential for employment opportunities to be identified in the trainee's workplace as an important strength of fully on-the-job training. It was found that, in some instances, trainees were encouraged to fulfil training tasks or supervisory tasks themselves. This became possible because trainees were learning on the job, with supervisors/ employers being able to observe their progress continually.

Actual employment outcomes can not be verified for this sample. However, 71% of trainees expected to gain permanent employment as a result of their training. It must be noted that gaining employment may not be the prime driver for all trainees involved in fully on-the-job training.

Strengths of fully on-the-job training were more clearly recognised and expressed by the training organisations. A sample of trainee perceptions supporting the identified strengths is contained in table 3.

Table 3:   Strengths of fully on-the-job training by trainee levels of satisfaction (%)

Strength	Relevant trainee perception*	%
A good way to learn	Overall I would rate the traineeship/apprenticeship as good/very good/ excellent	76
	Pre-course I was given a clear idea of what the training would cover	84
	Learning on the job is the best way to learn	94
	I would make the same decision about the training again	77
	I would highly recommend my traineeship/apprenticeship to a good friend	74
Customised pace	At work I had every chance to practice what I learned in the modules	83
	The ability to work 'at your own pace' is a real benefit	88
Incidental learning	The employer ensures that you get exposed to a lot of interesting experiences	79
	I learned more about the job from my co-workers than from the training program	61
Relevant training	All module content was relevant to my job at the employer	74
Employment outcome	The certificate at the end of the training will assist me greatly in my career	76

Note: *Wording amended from questionnaire

Weaknesses of fully on-the-job training

Concerns pertaining to various aspects of fully on-the-job training were largely raised by the registered training organisations, but trainees identified some concerns. These included training processes, content, teaching materials, assessment and the role of registered training organisations, and are discussed in more detail in the following paragraphs.

Training in isolation

Trainees participating in fully on-the-job training enjoy few opportunities to exchange views and experiences with other trainees. The registered training organisations in this study expressed concern with the lack of networking among trainees. Strickland et al. (2001, p.41) found that on-the-job trainees would appreciate opportunities to 'share experiences' with other trainees. It is clearly desirable for trainees to be exposed to other trainees' problems and mistakes in order to learn from them. It can also be of help to gain support from other trainees by realising that problems are

shared. Robertson et al. (2000) refer to a body of literature supporting the view that one factor of effective traineeships/apprenticeships is:

> … interaction and interpersonal relationships where apprentices and trainees have opportunities to discuss their work with others. This interaction provides the basis for facilitating apprentices and trainees to 'make the connections' between what they have learned and the implications it has for their work. (Robertson et al. 2000, p.2)

Visits by training organisation members are also an important way for trainees to clarify issues and air difficulties. As a result, trainees who were visited more than once per month were significantly more likely to rate their registered training organisation as 'excellent' than those visited less frequently. However, only 14% of sample trainees reported having this advantage.

Competing workloads

A problem identified by the registered training organisations and trainees relates to the competing demands of work and training which must be managed by the trainee. Thirty-nine per cent of trainees claimed that they did not have time during work hours to complete their modules. Twenty-nine per cent maintained that they were forced to work through their modules at home or during lunch breaks. Less significant, yet noteworthy, were 22% of trainees who stated that the only training they got was an hour spent with the trainers when they came to visit; and 16% of trainees affirmed that they had been provided with no training at all. The main concern raised by the registered training organisations, in this regard, is that trainees may not be as likely to complete their training under such circumstances. Indeed, 31% of trainees in the sample did not complete their traineeships/apprenticeships owing to dismissal/ redundancy for 8%, with the remainder (24%) being trainee-initiated terminations (table 4).

Table 4:   Trainee reasons for terminating their traineeship (%)

Reason	Percentage of trainees
Resigned (no details)	9.3
Dissatisfaction with job itself	4.0
Personal reasons (e.g. illness)	3.1
Dissatisfaction with employer	2.8
Dissatisfaction with traineeship/apprenticeship	2.8
Other	1.8
Total trainee-initiated terminations	**24.0**

Problems with competing work and training demands may well have contributed to trainee-initiated terminations. However, this can not be verified by these data.

Lack of theoretical knowledge

The registered training organisations are concerned that the theoretical framework that trainees acquire in fully on-the-job training may not be as sound as in other training arrangements. A South Australian study by Misko, Patterson and Markotic (2000, p.269) seems to confirm this concern, where 20% of trainees reported to 'work through their manuals individually as a principal method', and 2.9% had not received their theory materials by the time the study took place. The researchers also found that over 75% studied their theory 'when they had a spare minute, or in their own time at home', a situation that is less than ideal. The national sample in this survey showed a marked difference in the proportion of trainees who felt their theory training was somewhat lacking: 29% were forced to study at home or during their lunchbreak. It was also found that 24% thought that they would learn a lot more if the theory was taught in a traditional classroom, and that 17% had received no reading materials to study. Despite these concerns, 80% believed their employer had good knowledge of the topics they had to learn.

Employers are not trainers

The registered training organisations believed that one important problem lay with the employers' commitment to training as well as with their training skills. In this context, the difference between an employer being competent in their work and being competent in instructing trainees adequately must be realised. However, in the workplace environment trainees generally have access to a group of competent co-workers, as opposed to just the one trainer. Trainees in a study by Strickland et al. found that 'experienced colleagues … facilitated most learning on the work site', and that they 'were the best people to learn from' (2001, p.36). In contrast, trainees in the same study pointed at the downside of learning from work mates; for example, experienced co-workers who had a negative attitude towards either the trainee(ship) or the work itself were unable to provide worthwhile support and/or training. Trainees also felt affected by negative attitudes in their work environment (Strickland et al. 2001, p.38).

Trainees in this study had no particular complaints about their employers as trainers. This may be a true reflection of their training experiences; however, this type of issue can be difficult to establish because of the potential for trainees to feel 'obliged' to report positively on their work environment. This is therefore a complex issue, and a vast body of literature already exists concerning 'ideal' learning environments. It is sufficient here to highlight the problematic situation that can result from the confusion between work and study, worker and learner and employer and trainer, inherent in on-the-job training arrangements.

Trainee: Worker or student?

The registered training organisations raised the concern that trainees were identifying themselves as 'workers' rather than 'students', this potentially affecting their attitude towards learning. This is an understandable point of view from a training organisation which, naturally, considers study to enhance a person's capacity to work. To have study at the forefront of their minds appears to be a productive strategy for fully on-the-job trainees who may otherwise conduct menial tasks, forgetting the overall goal of attaining a qualification. Just like the employer–trainer dilemma, the dual role of worker and student is also problematic. It must be understood that being identified as a 'student' can cause a trainee to suffer a degree of pressure, placed in a work environment which perhaps equates 'student' with 'novice' (Boud & Solomon 2003). Trainees enjoy being regarded as legitimate work colleagues. At the same time, it is useful for them to have their 'traineehood' recognised. According to employers and trainees, learning on the job is beneficial because of the direct exposure to real-life experience, as well as the opportunity for trainees to impress their skill level on colleagues and superiors. Boud and Solomon (2003) found that a 'worker' is more likely to be regarded as an adequate, competent worker. To what degree this labelling becomes a disadvantage for the trainee depends on the social dynamics and hierarchy in each workplace.

As with identifying the strengths, most weaknesses were more clearly recognised and expressed by the registered training organisations. A sample of trainee perceptions supporting the identified weaknesses is contained in table 5.

The lack of available trainee perceptions regarding the weaknesses of fully on-the-job training provides a framework for possible future investigation. It would be valuable to explore further issues that are less tangible and specific to the trainee's role and perceptions. These would include trainees' needs for networking with their peers, as well as trainees' self-image as 'worker' or 'student'. The issues of 'lack of theoretical knowledge' and 'employers as trainers' require a more analytical approach with assessments of trainees' theory attainment and employers' training skills.

Table 5: Weaknesses of fully on-the-job training by trainee levels of satisfaction (%)

Weakness	Relevant trainee perception*	%
Training in isolation	I would have learned a lot more if the theory was taught in a traditional classroom (24%)	24
	The RTO visits when they said they would (31%)	31
	The RTO calls regularly to see how I am going (36%)	36
	The RTO should spend more time with me during visits (30%)	30
Competing workloads	I have time during work hours to complete my modules (61%)	61
	I am being forced to do my modules at home or during lunch (29%)	29
	The only training I get is an hour spent with the RTO when they come to visit me (22%)	22
Lack of theoretical knowledge	[Trainee perceptions are not evident in the survey.]	
Employers are not trainers	The employer did not have all I needed to complete my modules properly (17%)	17
Trainee: worker or student?	[Trainee perceptions are not evident in the survey.]	

Note: *Wording amended from questionnaire. RTO = registered training organisation

Possible improvements to fully on-the-job training

While fully on-the-job training adds to the flexible approach sought by the Australian VET system, it results in advantages and disadvantages for trainees as well as registered training organisations and employers. Ultimately, the purpose of traineeships/apprenticeships is to produce competent employees. With this in mind, it is critical to acknowledge that 'the prongs of the apprentice's tuning fork of learning are not always resonating in harmony' (Harris et al. 1998, p.23). The strengths and weaknesses illustrated in this study aid in recognising the following six areas for improvement.

Facilitate networking among trainees

The benefits of peer networks for isolated learners have long been recognised, with innovations often aimed at geographically isolated individuals such as those in remote and rural populations. These methods can be used for fully on-the-job trainees as well, with the aim of increasing not only contacts among peers, but also with mentors. Derived from a Dutch study by Lutgens and Mulder (2002), the following method is just one of many technologically aided networking methods.

✧ A virtual classroom can be established by employing computer-supported collaborative learning. This system can facilitate communication and collaboration among trainees and trainers, while providing a link between theory and practice. Trainees can discuss their task and its learning objectives and, as a consequence, gain feedback and develop their problem-solving skills. Computer-supported collaborative learning can be accessed at the workplace with the appropriate facilities, from home or from a designated facility in the registered training organisation. This approach can be applied to issues encountered on the job or during module training. A collaborative approach transforms individual traineeships into a type of team learning environment, facilitating mutual support and building greater knowledge for all students.

A variety of similar computer-assisted software programs are available, including freely available online chat and forum facilities. The use of computer-supported collaborative learning given above is merely one example.

✧ Where computer-assisted networking is not feasible, it is imperative that meetings among trainees and with mentors are scheduled to take place at regular and frequent intervals. Meetings can be structured loosely around informal 'coffee, biscuits and chat' arrangements, although it is more advisable that a large portion of a meeting is dedicated to a structured committee-style approach. A trainee-chaired meeting will ensure that relevant work and module issues are addressed, and time can be allocated to informal activities at the end of meetings.

Facilitate time management in traineeship

✧ To counter the detrimental effects of competing work and study loads, time should be carefully allocated to work and training tasks. A prepared schedule should accommodate the employers' needs and should allow trainees to complete their modules without fear of compromising their work commitments. Adherence to an established schedule should be monitored and enforced by trainees, registered training organisations and employers alike.

✧ Time management is a skill that is formally taught in many professional and higher education environments. People in vocational education and training should not be expected to be competent time managers without training. It would therefore be sensible to include time management skills along with the other skills imparted by employers when they take on trainees, as well as in the trainees' training plans.

Strengthen theory training

✧ Theory training materials must be relevant and accurate. Some employers and trainees consulted by Patterson and Markotic (1999) stated that training materials were frequently inadequate or incomprehensible, a complaint also documented by Smith (1999). This can be avoided by maintaining communication between training material producers, registered training organisations and employers. In a time when many work practices are progressively changing in line with technological advances, it is vital for training materials to be kept up to date and complete.

✧ As highlighted by Schofield (2000–2001, p.57) it is important to remember that fully on-the-job training is not to be equated with 'accidental or incidental' learning. Fully on-the-job training must be structured, with identifiable training, instruction and mentoring components. This will, in turn, enforce the significance of theory in the job.

The need to pro-actively provide for theory training in the workplace is emphasised by the fact that work culture is often such that theory training is frowned upon and considered as out of touch with the real world (Harris et al. 1998, p.196). Fully on-the-job trainees, in particular, become immersed in the culture and are at risk of believing that 'theory is not worth having'.

Ensure trainee attains universally applicable skill base

✧ Plan for trainees to 'go on exchange' to other workplaces. This could occur for a week or more at a time. If an 'exchange network', comprising a small group of trainees is established, then more than one exchange can be facilitated in different workplaces within the network. This allows trainees to expand their knowledge of 'real' work practices, and newly attained skills are brought back to their employer.

✧ Materials provided for theory training must be kept up to date with current workplace realities. They must also be made available to trainees at an appropriate time.

Turn employers into trainers

✧ A capacity to train is nurtured more by knowledge of how learning occurs than by competence. This has long been realised by researchers, and as a result, in many teacher-training programs teachers are trained to 'facilitate learning' rather than 'teach'. It is said that no one has ever been 'taught' anything; the student must want to attain the knowledge and be assisted with their own mental processes to facilitate this. This theory has been applied in undergraduate medical courses for many years, implemented as 'problem-based learning'.

Fully on-the-job trainees are inadvertently participating in a form of problem-based learning on a daily basis. They are given tasks at work which are unfamiliar to them and, hence, involve a degree of problem-solving. The difficulties encountered by trainees at that time can be smoothed over by employers who are aware of the 'learning' processes involved. Ideally, employers would be trained themselves in the 'art' of facilitating learning. This requirement is recognised by nationally accredited qualifications for trainers (Kilpatrick, Hamilton & Falk 2001, p.5), but quality 'teaching' in vocational education and training is still a concern (Elson-Green 2003).

Value 'traineehood' in work culture

Attaching importance to the 'traineehood' in the work culture should come from two sources: the employer and the colleagues.

✧ As illustrated in the point above, employers who are trained in the skills of facilitating learning are more likely to appreciate the state of being a trainee than an employer who is not a skilled trainer. An employer who identifies with being a trainer is equipped to recognise the potential of a trainee to become a competent worker—a workplace asset.

✧ Work colleagues are likely to feel less threatened by the competition a new trainee entails, if they recognise the value of training. This can be achieved by activities that nurture interpersonal relationships between workers and trainees. A further method would be to include existing workers in some of the training provided for the trainee. This will temporarily put them into the same position of traineehood.

Conclusion

This study of registered training organisation and trainee perceptions of fully on-the-job training makes clear that stakeholder experiences vary. There is an overall tendency to be in favour of fully on-the-job training, with major advantages perceived to be financial incentives for employers and flexibility in how training is organised. A further strength is the acquisition of skills relevant to the trainee's workplace, with incidental learning adding to this effect. For trainees, an important beneficial outcome of this kind of training is the increased potential for employment opportunities to be identified in the place of their training. Inevitably, employers are likely to value a trainee trained by them because the trainee's relevant skills would already exist. The trainee's personality and generic skills would not represent a gamble to the employer because the trainee is a 'known quantity'.

Inherent in these obvious strengths is the fact that skills that are highly relevant in one workplace may not be relevant in another. In fact, it is possible that employers consider the training of fully on-the-job trained applicants not to be universally applicable, and that therefore there is increased risk in taking them on. Further impinging on trainees' positive training outcomes are the compounding factors of limited peer networks and competing work and study commitments. Their experience of learning on the job with little opportunity to communicate with other trainees, while also being treated as a novice in the workplace, can be highly stressful and disheartening.

For fully on-the-job training to outgrow its prolonged infancy, some determined steps must be taken. The negative effects can be overcome by the consistent implementation of quality assurance measures, some of which are already acknowledged by the registered training organisations in this sample, and almost certainly by some employers as well. A number of suggestions for improvements to the system of fully on-the-job training have been given in this report and highlight areas of importance. Further research would yield occupation-specific requirements for successful fully on-the-job training. Universally applicable, however, are the needs of trainees in their dual roles of students and workers: scheduled work/training tasks, peer networking opportunities and trainee exchange programs. Without such measures to deal with these issues, fully on-the-job training will continue to pose difficulties for registered training organisations, employers and trainees alike, and effective training can not be achieved.

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