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“Modern” learning methods: rhetoric and reality – further to Sadler-Smith.

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Abstract

Working in the UK, Sadler-Smith, Down and Lean, in their article “‘Modern’ learning methods: rhetoric and reality”, Personnel Review, Vol. 29 No. 4, 2000, pp. 474-90, have shown that distance learning methods are neither favoured nor perceived as effective by enterprises pursuing training that yields a competitive edge. They have suggested that these methods need to be integrated with other more conventional on-job training methods. This paper, based on Australian research, shows a tension between the requirements of flexible training methods based on distance learning methods, and the characteristics that typify learners and their workplaces. That identified tension is used to suggest how an integration of training methods may be effected in workplaces.

Article Type:

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Keyword(s):

Distance learning; Flexible learning; Self-directed learning; Industry; Workplace learning.

Introduction

Sadler-Smith et al. (2000) usefully review what they have called “modern” learning methods, with some emphasis on the application of distance education techniques to training in industry. Suggesting there is a gap between the rhetoric surrounding the supposed value of these methods, and the reality in terms of outcomes, they draw attention to the work of Stewart and Winter (1995) who have traced an interest in distance learning applications and their growth in popularity in the 1980s. As Stewart and Winter have observed, the impetus for growth in the interest in distance education techniques for industry training has come from a perception that training and training methods need to be more responsive to modern changing work requirements within industry; from government enthusiasm for distance education methods; and the capacity for new information technologies to deliver relevant training in a responsive and interactive way.

Sadler-Smith et al. (2000) review the arguments that have been made both in the research literature and in government and industry policy statements in support of the adoption of “flexible modes of training delivery” (Sadler-Smith et al., 2000, p. 475) as part of the pursuit of competitive advantage. They also speculate that the enthusiasm for these methods has
been possibly greater among “converted and privileged groups (such as managers)” (Sadler-Smith et al., 2000, p. 475) than among employees themselves. Additionally, they have observed that this flexibility in delivery is a crucial issue for small firms where viable training solutions are required in a context of less capacity for the release of employees from their tasks for training courses, and where a training infrastructure is not available in-house. Similar comment has been made in Australia by Evans (2001).

An interesting component of the Sadler-Smith et al. (2000) paper has been their attempt to investigate the correlation between perceived effectiveness of a number of different training delivery options and their frequency of use. Using a set of training delivery options that include off-site courses, on-site courses, on-job training, video, distance learning, computer-based learning, work shadowing, and job rotation, Sadler-Smith et al. (2000) have shown distance learning to be used less widely and to be considered less effective in contrast to at-job methods which were used widely and seen to be effective. It is suggested here, though, that it is quite artificial to separate distance learning from other methods of training. Indeed, distance learning methods and materials can be used on-the-job, as part of a suite of training methods, and can reduce the need for learners to be removed from their workplace to pursue learning needs. Acknowledgment of this is provided in their paper when Sadler-Smith et al. argue that “integrated mechanisms are required which utilise and exploit client-focused learning opportunities in the workplace” (p. 489). The present paper is intended to explore that notion of integration further, and to suggest mechanisms that may be used within workplaces to enhance the use of distance learning methods within a context of other supporting methods of training delivery.

The Australian experience

Our experience in Australia largely mirrors the observations made by Sadler-Smith et al. (2000). For example, Evans and Smith (1999) have noted that, over the past decade, flexible delivery of training has been enthusiastically embraced not only by vocational education and training (VET) authorities, but also by Industry Training Advisory Boards (ITABs), and by individual enterprises. Through geographical necessity of vast distances and a small population, Australia has had a long and successful history and experience with distance education, such that the deployment of its methods towards flexible training in the workplace is hardly surprising.

There has been widespread recognition of the part that flexible delivery can play in industry training, to the point where it has become the policy preference of VET authorities such as the Australian National Training Authority (1996). It has become commonplace for ITABs to champion flexible delivery in the workplace in the various Industry Training Plans (Australian National Training Authority, 1996, p. 85). For example, the Australian Light Manufacturing Industry Advisory Board (1997) refers to flexible delivery as a preferred training method. The development of Training Packages (Australian National Training Authority, 1999) is a more recent policy direction recognising the importance of flexible delivery in industry training. In the United Kingdom, Calder and McCollum (1998) have also observed an increase in interest in flexible learning for training in British enterprises. Each of Evans and Smith (1999), Henry and Smith (1998), and Calder and McCollum (1998) have commented, though, that what is meant by “flexible learning” at the enterprise level is unclear. Indeed, in
their research with a wide number of Australian enterprises, Henry and Smith (1998) observed that, although there was unanimous enthusiasm for flexible learning, no two enterprises had the same concept of it, while some enterprises had no concept at all — even though they expressed enthusiasm.

In the VET sector, Evans and Smith (1999) observe, the tools and processes of distance education have been clearly seen as available to flexible delivery (Australian National Training Authority, 1996) and part of the armoury, but certainly not as the same. Instead, the drive towards flexible delivery has resulted from the belief that the consumers of training can be better served with a product that is more relevant if they are viewed as clients of training providers, with all the privileges clients should have of professional services. Largely, those privileges have been associated with delivery of the right service in the right place, at the right time and at the right price. For example, the National Board of Employment, Education and Training (1994, p. xvii) report on small business employment and skills has stated, “A major issue is flexible delivery in terms of both timing and delivery mode.” The Board particularly drew attention to the need for training to be available at times and in places convenient to the client. Flexible delivery has been seen by government and industry in Australia as important to national skill development and economic competitiveness, in much the same way as Calder and McCollum (1998) have described the UK experience. It is important to note here that flexible delivery is seen as including components of distance learning as part of an integrated strategy, but it is not seen as the same as distance learning.

**Learner engagement with flexible delivery**

There is evidence in Australia to support the Sadler-Smith *et al.* (2000) suggestion that it may be converted groups of privileged people, such as managers, who embrace distance learning methods with enthusiasm, rather than their employees. Official policy and planning documents from ITABs and training authorities (e.g. ANTA), reviewed above, show the enthusiasm at that level for flexible delivery that includes distance learning. Twyford (1999), though, has identified among learners the common lament that lack of instructor support is a disadvantage of these methods; while James (2000) has pointed to the difficulties created for some groups of learners. Warner *et al.* (1998, p. 8) have commented that, in their survey of 542 vocational learners, “Over four fifths chose face-to-face modes of delivery as their overall preferred mode of instruction.” These same authors have also questioned the readiness of learners for the self-directed and independent learning required for successful engagement with distance education-based flexible learning.

Although the term “flexible delivery” has a number of origins and conceptualisations (see Evans and Smith, 1999; Peoples *et al.*, 1997), both Boote (1998) and Evans (2000) have observed that each conceptualisation includes the notion of independence and self-directedness in learning. In her qualitative study of adult vocational learners and their teachers, Boote (1998) has concluded that the skills of metacognition required for effective self-directed learning are not well developed in VET learners. She has suggested that, “A presumed level of self-directedness is apparently being relied upon to allow the educational initiatives and flexibility in VET to be implemented …” (Boote, 1998, p. 80). Evans (2000) has asserted that for flexible delivery to be effective, it is important to identify learner needs.
and characteristics in a systematic way to serve them in a way that enables learners to engage with, and gain value from, a flexibly delivered program of instruction. Research focussed on the learning characteristics of students has been identified by Jegede (1999) as a high priority among distance educators anxious to better serve their clients. Kember’s (1995) two-dimensional model of open learning argues that success is related to the ability of learners to move towards a more independent, self-directed style of learning, and providers moving to greater openness in access and delivery, while Boote’s findings indicate that this transition is not an easy one for VET students to make.

In an extensive empirical study of vocational learners across different States in Australia, Warner et al. (1998) have also shown that self-directed learning is not favoured by the large majority, who express higher preference for forms of instruction that involve interaction with the trainer and with fellow learners. More recent research by the present author (Smith, 2000a) has also shown empirically that these learners neither prefer self-directed learning, nor have they typically developed the learning strategies required to engage with it successfully (Smith, 2000b).

In an extensive study of 1,252 vocational learners undertaking apprentice training, or vocational programs in technology, business and health, my research (Smith, 2000a) has provided further evidence to support the findings by Boote (1998) and Warner et al. (1998). In that research I used the standardised Canfield Learning Styles Inventory (Canfield, 1980) in a factor analytic study of vocational learner preferences. The factor analysis indicated two major dimensions of preference. The first factor has been interpreted as describing a Verbal-Nonverbal preference where, at one end of that dimension, students would have a preference for presentation modes that involve qualitative material presented through verbal forms such as reading or listening. At the other end of that dimension are students whose preference is for learning from watching or directly using equipment, tools, or processes. The second factor has been interpreted as a Self-directed-Dependent preference where, at one end of the dimension, students would be characterised by a preference for setting their own goals and working independently. The other end of the factor represents students who display a preference for knowing the detail of the learning program, who prefer instructor-led delivery where the instructor provides considerable and directed guidance over the instructional sequence and the presentation of material.

The VET learners in that large sample were largely placed towards the Nonverbal end of the first factor, with the detailed subscale scores from the Canfield Learning Styles Inventory showing preferences towards learning about inanimate objects or processes through direct experience. On the second factor, the sample of VET learners was largely placed at the Dependent end of the dimension, supporting the Warner et al. (1998) finding that these learners prefer a learning environment structured and led by the trainer, and providing a social environment for learning together with others. The tension between my empirical findings and the requirements of flexible learning based heavily on a distance education model is easy to understand through Figure 1. The two-dimensional factor space of learning preferences identified in my research (Smith, 2000a) indicates that VET learner preferences typically lie in a quadrant diametrically opposed to that in which they would need to be for successful engagement with flexible delivery that is based on a distance education model.
which assumes self-directed learning, and which provides learning materials that are substantially textual.

My research (Smith, 2000a) also showed that there are differences between the VET learner groups investigated with, as may be expected, apprentices showing a higher preference than business students for nonverbal forms of learning, such as demonstration and hands-on experience. Additionally, technology and business learners, together with apprentices, showed lower preference for self-directed learning than did learners in health training programs. However, those results also showed that these differences between the groups are only within a context that all groups were typified by their preference for nonverbal learning, and for learning in a dependent relationship with the instructor and their peers. While the results from these research projects provide a considerable insight into the learning preferences of different groups of learners, it is acknowledged that, although the sample was large, it did not capture by any means the complete range of learners engaged in flexible delivery. Given that the research indicated variability among different groups of learners, there is a case for suggesting that other groups, not investigated in those projects, will exhibit characteristics that may be different from those discussed here.

These findings do not, however, indicate that distance education techniques may not be used within a framework of flexible delivery of training to these learner groups. What they do indicate is that these techniques, where used, need to be carefully integrated into a wider mosaic of training delivery, as hinted at by Sadler-Smith et al. (2000). While these latter researchers have identified little support in enterprises for training that is delivered only through distance learning techniques, there is little reason to suggest that any training program should be delivered only through that mode. I have suggested (Smith, 2000c) that these methods need to be used in conjunction with other on-the-job training methods such as practice, demonstration, mentoring, and techniques also identified by Sadler-Smith et al. (2000), such as off-site and on-site courses, job rotation and work shadowing.

Distance education techniques can be very useful though in the provision of learning materials, and the provision of a structure to the learning. In an earlier investigation (Smith,1997) I have suggested that these methods can be effective where there is a learning relationship established on-the-job between the learner and trainer such that both use the distance learning materials to structure activities, to access content knowledge, and to determine sequences and progression of learning. It is important that learners are not left alone to structure and utilise the distance learning materials by themselves. Rather, what is needed is support from a trainer who is available and accessible to them at the workplace, and where the learning materials are used as part of the mosaic of training delivery methods. Cornford and Beven (1999) have advocated that trainers need assistance in developing these skills, and that care needs to be taken in the selection of other workers as mentors etc. They accurately point out that bad practices can be developed from other workers and trainers, as well as effective practices. Additionally, they point out that poorly chosen mentors can develop among learners a cynicism towards training. The report by the Australian National Training Authority (1999) also expressed concern that training personnel need assistance in the effective integration of packaged learning materials into the provision of flexible training.
Workplace support of learners

Successful training in any enterprise requires a supportive environment, and particularly so where the training methods require a level of self-directed and independent learning on the part of the learner. The development of an ability among workplace learners to effectively engage with self-directed learning has been observed by several writers (Edwards, 1995; Calder and McCollum, 1998; Morris-Baskett and Dixon, 1992; Robinson and Arthy, 1999) as an objective worthy of pursuit by organisations wishing to achieve knowledge and skill development for a competitive edge in a rapidly changing industrial context. However, the evidence that such training is not well supported in the workplace is disappointingly compelling.

Recent work by Brooker and Butler (1997) has shown that there is room to doubt the effectiveness of support for apprentice learners in the workplace. Through interviewing apprentices and their trainers in Australian workplaces, Brooker and Butler (1997) have shown that apprentices rated highly those pathways to learning that involved structured learning and assistance from another more expert worker. Feedback on their work from more expert workers was highly valued. Brooker and Butler showed that learning or practising alone were not favoured pathways. These findings are consistent with Smith’s (2000a) findings that VET learners prefer structure and a social context for learning, but assign a low preference to independent learning, and emphasise the need for learner support to be provided in flexible delivery environments.

Brooker and Butler’s (1997) work also involved a detailed analysis of the learning structures put into place by six varied workplaces that employed apprentices. The findings of that part of their analysis indicated that only one of the six enterprises was able to outline a complete structure of training for their apprentices. Although all of the other five enterprises had incorporated some support structures for apprentice learners, there was considerable diversity in a context in which none had well-developed structures. A summary of the interviews with trainers identified that workplaces were characterised by unstructured training, an expectation that the initiative to learn would come from the apprentice, apprentices work alone, that production imperatives often overtake learning objectives, and that feedback is only given on a completed job. There is other research from both Australia and the UK (Calder and McCollum, 1998; Cornford and Gunn, 1998; Harris et al., 1998; Unwin and Wellington, 1995) that provides evidence for at least an inconsistency for training support across enterprises. The indications here again are that distance education-based flexible learning in workplaces needs a structure of support to be implemented. There is a need for identifiable and responsive trainers who can be asked to facilitate demonstrations and to enable practice of skills to occur in the workplace. Also required is the provision of a framework within which learners can pursue their learning with assistance in connecting learning from materials that are provided for self-study with workplace expectations and practices.

A clear tension here is that between training requirements and production requirements. Evans (2001), working with small enterprises in rural Australia, identified the conflict that exists in small firms between the need for time to be taken to develop new skills, and the time lost from important production imperatives. Similar comment was made by Harris et
al. (1998), where they observed that in the majority of cases this tension was resolved in favour of production. Calder and McCollum (1998) noted that training through flexible learning was often interpreted by management and other workers as “time out” from the job.

Smith (2000b) has identified that for distance education-based flexible learning to be effective in workplaces there is not only a need for it to be integrated with other forms of training delivery, but there is need for workplaces to develop the policies and processes that result in learner support. Specifically, these developments need to focus most particularly in the areas of:

- Development of clear and articulated training policies that indicate management support for training and for flexible learning;
- Development of training structures that provide in-plant support for training design, delivery, and record keeping;
- Development of trainer skills to support the development and support of self-directed learning, the acquisition of knowledge and skill, and the facilitation of new learning to be acquired in a community of practice (Lave and Wenger, 1991).

Smith (2000b) has additionally drawn attention to a number of strategies that can be used to develop these training support policies and processes, and to develop skills in learners to enable them to become more self-directed. Those suggestions require further research to validate their effectiveness in the workplace.

Conclusions

The present paper largely concurs with the views and findings of Sadler-Smith et al. (2000). The paper suggests that distance learning methods are unlikely to be successful in workplaces when they are used without adequate trainer support, or where they are used as the only training method. Nevertheless, the gap between rhetoric and reality identified by Sadler-Smith et al. (2000) can be narrowed considerably. The evidence supports the view that for distance learning methods to be successful, they must form part of a mosaic of integrated training methods where support and structure are available to the learner.

However, the present paper has argued that flexible delivery methods that use a component of distance education have a clear place in industry training, and can provide considerable advantage as part of an overall training strategy. Flexible delivery methods that are at least partially based on distance learning methods have a place where workforces are distributed geographically, or across time in terms of different shifts and time zones. The capability of these methods to be embedded within the situated learning context and community of practice at the workplace (Billett, 1996), and into its production schedules (Calder and McCollum, 1998), have also been commented upon. To be able to provide learning opportunities without the removal of workers from their worksite has also been seen as a significant advantage (Evans, 2001). Additionally, there is considerable commercial value in encouraging employees to become effective self-directed learners such that they can develop and pursue their learning goals and outcomes that contribute to
competitiveness without the need for all learning to occur only when there is direct training by an instructor.

Finally, though, the paper has argued that preparedness for effective flexible training, comprising elements of distance learning, requires not only change and development on the part of learners, but also change and development on the part of enterprises. For these forms of flexible learning to be valued, and to be successfully prosecuted in workplaces, enterprises need to develop the policies, structures and the skills to support learners who are undertaking training through flexible delivery methods that comprise an element of distance learning. Development of practical strategies to achieve those outcomes for learners and workplaces requires further research to identify them, and to validate their effectiveness in industrial workplaces.

Closing the gap between rhetoric and reality requires moving the two opposing quadrants in Figure 1 closer together. Flexible training methods need not be so dependent on learning resources in the conventional distance education sense; and learners can develop skills that result in greater willingness to engage successfully in self-directed learning, and greater competence with textually based learning materials.

![Figure 1. Two-dimensional representation of factors describing VET learner preferences](image_url)
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