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Case studies of organisations with established learning cultures

Robyn Johnston

Geof Hawke

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Contents

Executive summary

That organisations should demonstrate a commitment to learning, or, that is to say, the importance of a learning culture orientation has become a common theme in much popular management literature as well as in government policy positions and some more academic organisational writing. Despite the prevalence of such a view and the prescriptions of management gurus about the process, we have little understanding of this concept from the perspective of organisations. The research reported in the following pages set out to explore how the concept of a learning culture or a commitment to learning is currently understood by Australian organisations. In so doing the research investigated the approaches and strategies that organisations, which claimed to be on a trajectory to achieving a learning culture, had used to establish and maintain such a culture within their enterprises. Identification of consistently successful strategies or approaches may provide insights for other organisations seeking to move along this pathway.

The research for this study was conducted by a team of researchers from the Research Centre for Vocational Education and Training (RCVET), University of Technology, Sydney and the Centre for Research in Education, Equity and Work (CREEW), University of South Australia. This study was funded by a National Research and Evaluation Committee (NREC) grant.

This report provides an overview of literature. It describes the context which has generated an awareness of the need for organisations to promote a culture of, and make an increased commitment to, learning. It also discusses some recent research that has examined the nature of learning initiatives implemented by Australian organisations and describes some of the organisational behaviours and structures which various writers have prescribed as being the fundamental features of 'learning organisations' or organisations with learning cultures. The report provides case studies of six organisations which are seen as having a learning culture orientation. These case studies illuminate the various factors that have contributed to building and maintaining learning cultures in organisations. A cross-case comparative analysis providing insights into the conditions which have been catalysts to the growth of this orientation to learning and the strategies and approaches that have contributed to the building of such cultures in each organisation is included. This comparison highlights similarities and differences between the organisations and is the basis for drawing some implications for the purpose of future policy formation or transfer of practice between organisations.

In planning this study the research team rejected the frequently unstated assumption that a learning culture is a homogenous concept which manifests itself uniformly within organisations. The team saw the phenomenon as both socially and contextually constructed and therefore sought to conduct research that would capture insights about practice from a variety of contexts.

Perspectives of the phenomenon were gathered from very different organisations and from a range of potentially differing viewpoints. Participating organisations were from metropolitan or regional areas in New South Wales and South Australia. Some of the organisations were globally based; others primarily operated within a local environment. Organisations came from a variety of industries and were of varying size. Opinions were sought from employees at different levels within these differing participating organisations.

Rather than deliberately targeting organisations characterised by 'best practice learning culture' features, organisations were selected because they identified themselves as having a

learning culture. No attempt was made to select organisations with any predetermined learning culture characteristics other than, firstly, the self-identification of a commitment to learning, and secondly, that the organisation was on the journey of building a learning culture. This approach created the opportunity to determine how each organisation had constructed its understanding about the establishment of a culture of learning.

Information was gathered using a loose research protocol. This provided a degree of consistency in the data gathering and later became a mechanism for reporting data coherently. Using this protocol researchers both gathered and analysed data concerning:

❖ the organisation—its size, structure, recent history, present challenges

❖ strategies or approaches which the organisation believed demonstrated a commitment to learning and indicated progress in building a culture of learning

❖ factors assisting or limiting achievement

❖ outcomes emerging from the approaches used

Case studies were compiled from individual and focus group interviews and organisational document analysis. Each participating organisation was provided with the opportunity to review and amend the final case study.

Cross-case analysis was then conducted which yielded the following general findings:

❖ **Organisations understand the concept of a learning culture in different ways and attempt to implement such a culture accordingly.**

In some organisations the prime characterising feature of its commitment to learning is the evidence of a highly structured learning system. Some of these systems are closely aligned to the Australian Qualifications Framework or other initiatives resulting from a government policy position on skill formation. In other organisations, the systems and approaches are completely non-aligned. In yet other organisations, a prime feature is the promotion of a more communicative and collaborative environment in which individuals learn from each other and through collaborative work endeavours. Such environments frequently provide employees with regular feedback on performance or information about organisational development and changes in organisational direction.

❖ **Organisations respond to the need for more effective production of goods and provision of services when new systems, structures and processes designed to enhance production or service provision also increase learning opportunities.**

Learning and the development of a learning culture are part of various organisational changes generated by the pressures of the external environment. The changes are managed in a way that promotes and often rewards a learning orientation. A commitment to learning therefore develops as part of the introduction of changed systems rather than from the exhortation of managers or the goodwill of employees.

❖ **Building and maintaining a learning culture orientation is fostered by an increased capacity of employees to contribute to decision-making if not at the policy-making level, then at the work process level about practices in the workplace.**

Frequently decision-making is supported through consultation opportunities and performance feedback technologies or systems.

❖ **Often a learning culture orientation is associated with the development of systems and structures that support learning.**

These systems include more visible documentation about work processes, work roles, formal learning and development programs or performance data provision and performance review systems and formal meetings for review of work processes.

❖ **Often, building a learning culture is associated with working with a range of external stakeholders or other partners.**

These partners include supply chain partners, or other educational or consultancy providers.

In summary, this study indicates that the development and maintenance of a learning culture is a response to organisational needs for enhanced production or service provision rather than a more specific response to policy initiatives related to skill formation. Organisations embark on this pathway in response to immediate pressures and implement approaches and develop systems which best meet their own needs. Such systems vary considerably. Some adopt an education program approach, while others are more aligned to new ways of working and often provide more opportunities for employees to make decisions collaboratively and to learn from each other, through exposure to the work processes and from work performance data or new work structures. The model emerging from the diversity of strategies used by participating organisations suggests that future policy initiatives aimed at encouraging organisations to make a greater commitment to learning could achieve increased levels of buy-in of workplace employee training programs if they provided opportunities for diversity in approach. It is important to avoid a 'one size fits all' approach especially one that primarily promotes a training classroom model of employee development. Similarly, in addition to using traditional training and development methodologies, there is a need for organisations seeking to foster a learning organisation orientation to examine the systems and structures that govern the way work is carried out and people are managed.

Introduction

Background

A recurrent discussion in the rhetoric of organisations, industry and governments throughout the developed world for almost two decades has been the need for more highly skilled workforces. In the Australian context, this discussion, with its focus on the danger of the erosion of the nation's skill base and the need to confront the accelerating rate of change in knowledge has prompted significant restructuring of the workforce and a major revision of vocational education and training systems and skills formation policies.

As part of these discussions about the need for more highly skilled workforces to achieve more competitive positioning, there has also been a call for organisations to make an increased commitment to fostering ongoing learning in their employees and within the organisation itself. This can be seen in government policy positions, research papers as well as in much organisational literature which have argued the need for organisations to establish or strengthen their claims to having 'a culture of learning' as a method for achieving 'cultures of productivity and performance'. While there is some evidence that a commitment to learning has been a core part of the corporate culture and organisational identity in some organisations for many years, in other organisations there is little evidence of such commitment. Furthermore, strategies for establishing such a commitment to learning, which are easily transferred from one organisation to another, are not readily apparent.

This difficulty may at least partially be explained by the diversity of strategies that are being used to promote learning in organisations, as well as by the elasticity with which the term 'learning' is used to describe an array of organisational practices. It may also be explained by the growing realisation that the learning that occurs in various workplaces is framed by the features and structures of the work and the work practices in which the learning is embedded (Ostenk 1995). As a result strategies effective in promoting learning in one organisation are not necessarily effective in another.

In the search for strategies that may be transferable from one organisation to another for the achievement of a culture of, or a commitment to learning, it is therefore appropriate to examine a range of organisations that have created and maintained such culture over a period of time. In examining such organisations there is a need to consider both the formal on- and off-the-job learning strategies that have been established by such organisations as well as instances of informal learning that occur as part of the normal course of work. It may also be profitable to examine other organisational characteristics or using Ostenk's (1995) terms, the features and structures of the work and work practices which frame such learning.

A number of studies has identified skills and training required by industries, and differences between organisations in the ways they support learning and skill development of their employees (Harris, Simons & Bone 2000; Field 1997a, 1997b; Hayton et al. 1996). The focus of many of these studies, however, has been on documenting learning which occurs from structured and systematically delivered training. Such studies, while yielding some perspectives about aspects associated with learning in organisations, have tended to reveal insights about training strategies adopted by organisations rather than insights relating to the organisations as learning cultures. There is a need therefore to further identify and examine features and strategies which can be seen as characterising a commitment to ongoing learning and the establishment or maintenance of what could be seen as a learning culture within organisational contexts.

This research study focusses on illuminating more than the training programs and systems that have been established within organisations. It considers other features of the organisational context which contribute to the penetration of a culture of learning or illustrate the degree of commitment to promoting ongoing learning within individual organisations.

This research provides case studies of six organisations in different stages of developing 'training/learning cultures'. Through cross-case analysis the study identifies the common factors of organisations that see themselves as having successfully developed, or, being on a trajectory to successful development of such a learning culture. It also seeks to identify factors in the organisations' structure, culture and operating environments which have resulted in the culture developing in different ways. Analysis of organisations which have created and maintained what they identified as being a 'learning culture' over time provides one method for making more transparent some of the strategies which have, or are contributing to building a learning culture at an enterprise level. In-depth analysis and comparison of the multiple cases allows for the surfacing of differences in organisational understandings of the notion of what constitutes a learning culture. The research also identifies forces shaping the nature of the learning culture of each organisation.

This approach therefore could be seen as rejecting the often unstated assumption that a 'learning culture' is a homogenous concept which can be applied uniformly to any organisation. The six organisations examined as part of this research differ in terms of their size, organisational structure, the industries in which they operate and the nature of the learning culture which the organisation is attempting to foster. In taking this approach, which foregrounds difference, there is also the opportunity to reveal similarity or prominent trends or factors and features. Through a presentation of similarities and differences, other organisations may be able to select more judiciously the strategies that are likely to work for them.

Project objectives

The principal purpose of this study was to identify the features and strategies that have been adopted by organisations to develop and then maintain a learning culture within their organisation. The study identified factors in the structure, corporate culture and operating environment of the organisations which resulted in the learning culture developing in different ways.

Thus the objectives of the research project were to:

❖ provide advice to the Australian National Training Authority (ANTA), State training authorities (STAs) and to key industry bodies on effective strategies for developing and maintaining a 'learning culture' within Australian enterprises

❖ provide advice to Australian enterprises on effective strategies for developing and maintaining a 'learning culture'

❖ identify the benefits organisations achieve through the development of a 'learning culture' or an ongoing commitment to learning

❖ develop an understanding of principles which underlie successful strategies for developing 'learning cultures'

Research questions

The research questions driving this project included:

❖ To what extent, and in what ways, has each of the case study organisations developed a learning culture?

❖ What benefits has the organisation obtained from the development of such a culture?

❖ What factors have operated in the organisations and their environments to enhance or hinder the development of this culture, including systems, strategies and activities undertaken by them?

❖ What factors, features or strategies are common across the six organisations? Which are different and what appear to be the reasons for this?

❖ What general principles and conclusions can be drawn from these case studies for wider application by the key audiences?

Some definitions

For the purposes of this study a 'learning culture' was defined as the existence of a set of attitudes, values and practices within an organisation which support and encourage a continuing process of learning for the organisation and/or its members. In some organisations this may be manifested by specific policies, corporate goals or documentation. In others it may be more a matter of leadership style. It was not our intention to specify any particular manifestation as 'best' or essential. Rather it was our intention to explore the range of ways in which such a notion might exist and why and how it came to exist.

A commitment to learning on the part of the organisation was seen as encompassing formal and informal initiatives implemented within the organisations, or behaviours displayed which encourage learners to acquire new skills, to adopt new ways of practice, and to share knowledge on work and work practice.

Working from the above understandings it is seen that these concepts are overlapping and socially constructed contextual phenomena, and as such, may be manifested in non-uniform practices and patterns.

Methodology

As indicated above, this research project was based on the collection and analysis of data from six organisations. In selecting cases appropriate for this study the project team sought to study organisations which identified themselves as being committed to learning or having a learning culture. Gathering data from organisations which could be seen as having nominated themselves as fitting the project was seen as appropriate for this study given that one of its aims was to identify the ways in which organisations understand and implement the notion of a commitment to learning as opposed to the ways in which this notion is described by some of the 'best practice' prescriptive literature. The project also sought to study organisations that had potential for generating difference in practice.

For this reason the research team decided that the study should be based on organisations which:

❖ represented a range of industries

❖ were of varying size and structure

❖ were located in two States and included organisations based in both metropolitan and regional areas

❖ identified themselves as having a commitment to learning/learning culture

❖ were willing to provide access to a range of employees for the data collection

During the initial project discussions the project team members considered various prescriptive models detailing major characteristics associated with the notion of 'a learning culture'. Through these discussions team members came to general understandings of how the phenomenon might present itself in the organisations and some of the elements or characteristics that might become apparent. In so doing the project team also confirmed its view that the research should reveal each organisation's perceptions about why it could be seen as having a commitment to learning.

The team identified the categories of employees that could be interviewed as part of the process. Team members saw it was important to gain the perspectives of senior managerial staff members who would have access to organisational information as well as the capacity to provide access to other members of staff. Gaining insights of how non-managerial staff

perceived the organisation's commitment to learning was seen also as a necessary component if the research was to gauge the degree of penetration or depth of 'embeddedness' of such commitment. No predetermined number of required interviews was established, given the anticipated variation in organisational size and structure.

The team also established the following loose set of organising principles to guide the interviews and as a basis for initial data analysis:

❖ the organisation's context—description of the organisation and issues/challenges being addressed by organisation

❖ initiatives contributing to learning culture—strategies the organisation used/has acquired; information, values, knowledge and skills and the structures/processes used to support this

❖ successes, failures and outcomes of training/learning experiences of the organisation

❖ impact on individuals, systems and structures of approach

Each researcher then located an organisation which saw itself as meeting the requirement of having a commitment to learning and either having, or being in the process of building a learning culture. Initial discussions were held with a key project contact in each organisation about the organisation's capacity to participate. This discussion was supported by letters of introduction and written documentation about the nature of the project and a broad outline of the type of information being sought through the project. Details about interviews and interviewees and focus group participants were also negotiated.

Data were gathered for each case study using a loosely structured interview format. Most interviews were of approximately one hour's duration and conducted on site allowing for some site inspection. All studies involved interviews with at least four senior staff members, focus group meetings with groups of staff and in some cases, individual meetings with participants from focus groups. Documentary evidence (for example, annual reports, training documents and newsletters) was also collected.

The second phase of the research was concerned with cross-case analysis. Initially data were analysed using the organising principles outlined above, and from this, common themes and features as well as variations were revealed. Findings from this part of the research were considered against a backdrop of findings from some of the extant literature as a further basis for both developing a model to explain the phenomenon with its inherent tensions and contradictions, and for drawing implications for organisations seeking to further their commitment to learning within the organisation as well as contributing to current policy thinking.

Review of literature

The context for this research study is the increasing consensus about the need for employees as individuals and organisations generally to engage in ongoing learning for their survival in the changing economy. This consensus can be seen in the substantial literature advocating the importance to individuals of the need to engage in lifelong learning to ensure their ongoing employability in the changing world of work. It can also be seen in a growing literature that argues that organisations need to display a commitment to learning, or move towards achieving what some have termed a 'learning organisation' orientation within their organisations to ensure survival in the competitive market place. These positions are confidently advanced in much prescriptive literature as well as through government policy throughout the world. However, the issue becomes more problematic when the discussion turns to how to translate such advocacy into practice. Part of this problem, particularly for this project with its focus on learning in organisations, arises from the elasticity with which terms such as 'learning', 'organisational learning', 'learning cultures' and 'a commitment to learning' are used and understood. Similarly, there is some inconsistency associated with understandings of the enabling and disabling conditions associated with establishing learning within organisations.

The following section will consider some of the findings, ideas and questions emerging from the diverse literatures that have attempted to explain the conditions creating the impetus for organisations to embrace an enhanced learning orientation. It will also consider the various approaches adopted in response to these conditions and prescriptions of appropriate organisational responses to achieve desired organisational outcomes.

The changing nature of organisations and work

A major thread in much literature examining the need for learning in contemporary organisations is the discussion about the changing nature of work and workplaces. It is widely argued in this literature that increasing economic globalisation and rapidly accelerating technological sophistication have been significant catalysts in the changes taking place in production processes and service provision. These changes in turn are impacting on the nature of work, the structure of workplaces and employment conditions and the skill mix required in organisations to meet the challenges of a post-industrial society.

With the introduction of new downsized organisational structures and automated work practices, opportunities for unskilled and semiskilled workers have diminished as have the demands for traditional and craft skills. In such an environment the use of more flexible employment practices is prominent, with security of employment becoming less certain for both low-skilled and some expert highly skilled workers. Frequently foregrounded in much of the literature addressing such changes is a position initially advanced by Drucker (1969, 1959) that work is becoming increasingly knowledge-based. A consequence of this phenomenon is that workers are required to become knowledge workers and increasingly they require more abstract technical knowledge to carry out their work tasks and a capability for ongoing learning for the mastery of new disciplines (Casey 1999; Tavistock Institute 1998; Tessaring 1998; Handy 1995; Reich 1991).

Much of this literature also notes that, in the contemporary workplace, the rules and management of the employment relationship and the experiences and expectations of

employees are undergoing significant change, with the introduction of new production and information technologies and the need to satisfy more sophisticated customers. As a result there is a general recognition that organisations are becoming more demanding places in which to work, as work roles, responsibilities and relationships become more ambiguous. There is also an increasing advocacy in much of this literature of the need for individuals to accept more responsibility for ongoing learning, learning which can be accomplished within the workplace or through 'learn active' jobs to ensure future employability as the nature of work, employment and organisations change (Casey 1999; Hilltrop 1995; Arnold 1996; Handy 1995). Booth and Snower (1996) sum up a widely held belief about the nature of the new work environment arguing that:

> *The forces of technological change and trade have transformed the labour market, continually changing the nature of jobs and raising the rate at which skills become obsolete. Employers are demanding more than a well defined stable set of skills: they are demanding adaptability, the ability to adapt one's skills to ever changing circumstances. And there is no easy way for workers to become adaptable in this sense, other than going through a continual process of training and retraining.* (Booth & Snower as cited in Tavistock 1998, p.13)

Enthusiasts for the changing contexts suggest the new forms of workplace design give employees opportunities for exercising new forms of skills, knowledge responsibilities and commitment. Such enthusiasts argue that, through the changes occurring in workplaces, employees can gain new skills and actively participate in workplace decision-making as a result of the growth of more collaborative, participatory workplace cultures. They suggest that, in such new work environments, employees have greater autonomy and responsibility for work outcomes which foster maximum performance from employees. Casey argues that:

> *Advanced management information systems and attention to the generation of organisational cultures of team productivity and mutual care lead to a high degree of social integration within the organisation that surpass the need for bureaucratic control. The work conditions associated with more traditional technologies and industrial relations have been definitively altered by the de-differentiation capacities of advanced information technology. This has led, in some cases to a reduction in the level of industrial conflict and to the appearance at least of closer relationships between management and the work force.* (Casey 1999, p.26)

While some of this literature projects a more highly skilled employed workforce for the future (Castells 1996), other commentators and researchers are less optimistic. A report prepared by the Tavistock Institute (1998) refers to research that has revealed a growing disparity between the skills and working conditions of professional, managerial and technical jobs on the one hand, and those of the growing peripheral forms of employment on the other. Further, Ostenk (1997) from his studies of companies in The Netherlands reports that, where lean production prevails, it appears that the learning that is encouraged is restricted to learning a series of low-level, short cycles just by mere repetition. Although continuous improvement is actively pursued in this type of organisation, there is no real rise in skill level but rather a broadening of the available range of low-level skills which enhance the flexibility of production and usability of labour power but not the level of competence (or the market value) of the employee (Tavistock 1998, p.14). In a similar vein, Rifkin (1995) in his discussion of the growing divide between the knowledge rich and the knowledge poor, argues that the new information technologies have been designed to remove:

> *Whatever vestigial control workers exercise over the production process by programming instructions directly into the machine, which then carries them out verbatim. The worker is rendered powerless to exercise independent judgement either on the factory floor or in the office and has little or no control over outcomes dictated in advance by expert programmers.*
> (Rifkin 1996, p.182)

In summary, while much of this literature highlights the need for both individuals and organisations to be active in the process of continuous learning and upskilling for sheer survival in both the present and the future, there is also some questioning about whether the conditions associated with the new knowledge economy and the post-Fordist workplace are actually benefitting all workers. Implicit in this discussion is also some questioning about

what a commitment to learning on the part of an organisation means for individuals within organisations.

Research examining learning in the Australian workplace

Another strand of literature which provides insights into how Australian organisations are making a more overt commitment to learning reports research that has examined training practice in Australian organisations. Much of this research has been generated in response to government policy shifts that have resulted in changes in the Australian vocational education and training system and the linkage between employee development and workplace reform. Such developments in policy have provided enterprises with opportunities to become more directly involved in the skill formation process and have re-legitimised the workplace as a site of learning. Initial moves in this direction included placing more responsibility in the hands of industries and enterprises for developing, endorsing and implementing competency standards on which training could be based with a quality assurance approach replacing rigid central regulation. There was, however, little in the early documentation relating to these changes that showed an awareness of the full scope of learning in the workplace (Hager 1997). Hager (1997) in arguing for the advantages of workplace learning, has highlighted the need for research studies which identify the range of variables impacting on learning in the workplace. He claims:

> Good research on learning in the workplace needs to take proper account of the diversity of variables in the workplace environment/culture. (Hager 1997, p.4)

The industry training studies (Hayton et al. 1996) project is one large study conducted over the past decade that has to some extent, brought to the surface the diversity of variables influencing the nature and the degree of commitment to learning by a range of Australian organisations. This two-year research project, conducted by researchers from Charles Sturt University (Group for Research in Employment and Training) and the University of Technology Sydney (Research Centre for Vocational Education and Training), gathered case-study data from 42 private sector enterprises from five industry sectors and from a national survey of 1760 enterprises over the mid-1990s.

Findings from the case study component of the research clearly revealed that various training arrangements were used at the enterprise level in Australia. In all enterprises researchers found examples of both formal and informal training practices, on-the-job and off-the-job delivery and internal and external resourcing for training at all levels, with enterprises often from the same industry adopting radically different approaches to their training. From these studies it could also be seen that technical skills training appeared to be disappearing in favour of more generic and behavioural skills training which was seen as critical for encouraging employees to take greater responsibility for the quality of their work. In discussing the importance of the development of generic and behavioural skills such as team work, problem-solving and communication for enterprises, Smith (1997) argued:

> These were essential to the new forms of work organisation that were often being introduced into the case study enterprises and to the pursuit of quality service and production that was the most common innovation that the research team found in the enterprises. (Smith 1997, p.145)

Smith further argued that training was often valued for its communication benefits rather than for the technical contents of training, and in small-to-medium-sized enterprises, training sessions were often used as a form of communication.

This study also showed that training played an important part in the development of the culture of many of the enterprises studied, with training sessions being used for the transmission of culture as well as in attempts to change the culture. However, much of the technical skill training was being outsourced to equipment vendors who undertook to train employees in the operation and maintenance of machines as part of the purchase contract for equipment.

The study revealed that senior managers recognised that a skilled work force was essential for the long-term survival of their enterprise and that the skills of their workforce offered a means of differentiating themselves from their competitors. At lower management levels within enterprises however, attitudes were more short-term in focus. Taking time for training or sending staff to training was frequently viewed as threatening the achievements of daily targets or even creating unrealistic expectations for promotion on the part of employees thereby making the depth of commitment to learning more questionable.

Despite what could be seen as a fairly wide array of approaches being utilised, and a degree of acceptance that training was providing part of the solution for dealing with the increasingly competitive environment, an important finding from the cases was that training was primarily an operational not a strategic issue in enterprises. The report argues that 'although training might be considered at senior management levels to be necessary to survival it was viewed as an enabler of strategy rather than a driver of strategy' (Smith 1997, p.iv).

Similar findings were also reported by Kane, Abraham and Crawford (1994) who, in a study of the 53 of the top 500 revenue organisations, found that there was little relationship between training and development activities and other human resources or organisational variables. They also found that, even when organisations were extensively involved in training and development, these activities tended not to be an outcome of organisational strategy formulation (1994, p.130).

The survey component of the industry studies project appeared to confirm a view well established in statistical surveys conducted by the Australian Bureau of Statistics (ABS 1991, 1994a, 1994b, 1994c) that employees in smaller enterprises do not receive the same amount of training as their counterparts in larger enterprises. However, the qualitative case studies component provided what could be seen as contradictory findings. Smith (1997) argues the smaller enterprises in the study were highly committed to training with some smaller enterprises forming networks with similar enterprises and using their combined resources to access the specialised or customised training they needed. In other instances smaller organisations linked up with larger enterprises to take advantage of their stronger resources.

The study also showed that training took place through staff meetings, problem-solving sessions and close day-to-day contact between employees. Such findings about small enterprises training has been further confirmed through studies specifically examining training practice in small organisations. Field (1997b) argues that, while there is certainly evidence from both Australian data as well as the United Kingdom of the lack of participation in structured training on the part of small organisations/businesses, this does not mean that learning is not taking place. His study indicated, at an individual level, employees learn from discussions with product representatives, supplier-run seminars, completing innovative projects, helping others to learn to use computers, participating in review meetings, one-to-one coaching, asking questions, experimenting, or watching someone more experienced. At the firm level, learning approaches included knowledge introduced by staff recruited from competitors or from customers, new approaches learned from previous business allies, transfer of technical products and knowledge through amalgamations or subsidiaries, learning new work practices as a result of severe financial difficulties and during restructuring, and from takeovers or changes in management. Field suggests that in the small business sector learning often occurs as a result of relationships between the business and customers, suppliers, business partners and allies, other members of industry associations and subcontractors.

Other researchers examining practice in small business have also challenged the notion of a lack of training and or learning in the small business sector with Gibb (1999, p.58) stating of small business, 'a training and learning culture does exist but it may not be the one the VET system has in mind' (Harris, Simons & Bone 2000; Gibb 1999).

A second large study using survey, focus groups and interview methodologies to gather the views of 350 companies was conducted by the Allen Consulting Group for the Australian Industry Group in 1999. This provides further, more recent insights about the extent of

training in Australian organisations and has implications for understanding the level of commitment of organisations to ongoing learning. Key findings of this study reveal that the key training drivers are competitiveness, innovation, flexibility and customer orientation. While the study shows a shift in the demand to higher skills at all occupational levels, with an increasing premium being placed on generic skills (both hard and soft), there is also some evidence of a growing emphasis on recruitment as a means to obtain generic technical and personal attribute skills. The study reveals that industry is focussing on key skills required for productivity of the enterprise and restructuring its workforce in order to maximise the use of skill, for example, through the use of self-managed work teams and multi-skilling. It also shows there is a preference for training sponsored by the company to be delivered within the enterprise. Furthermore, it is anticipated that greater uses will be made of online training. This report suggests:

> *The picture that emerges on the actual practice of company-based learning and investment in employee knowledge and skill development is mixed. Many companies strongly prefer recruiting as a means to acquire the skills they need and while the majority expect more knowledge and skills to be needed throughout the work force, fewer expect to be training strongly in the future. Companies that are global and competitive, larger companies and those that are restructuring their activities are more likely to train. Levels of investment in training, as far as can be measured, appear to have fallen off in recent years for small and medium sized companies (those with 100 employees or less) but have remained about the same for larger companies.* (AIG 1999, p.85)

This study also developed models of company 'types' from their research. The model advanced of the 'high performance company' type had the following four characteristics:

❖ They draw from the community pool of knowledge and skills in a demanding and critical way through exhaustive and focussed recruiting. When recruiting they seek a mix of key generic skills needed in a modern workplace—the 'hard' skills of language, mathematical, IT and systems understanding, and the 'softer' interpersonal, creative, analytical and problem solving capabilities—along with specific technical skills related to particular jobs or processes. More and more they believe that the skills they are after in their people will have been learned through programs that mix work and study.

❖ Second, they use the formal education and training systems at all levels, schools, vocational training and universities with the understanding that programs build the overall knowledge and skill pool and focus on needs of business. By and large they are most interested in meeting their company learning needs by accessing particularly focussed programs or designing them in partnership with a like-minded education and training provider.

❖ Third, these high-performing companies recruit and build the knowledge and skills of their people in the context of a mix of activities designed to build the competitive performance of the company. The capability of their employees is inextricably linked to their research and innovation practices, investment in new equipment, introduction of advanced technology, company restructuring to emphasise particular parts of the value chain, re-organisation to build team-based work or other strategic change.

❖ Fourth, these companies invest in the knowledge and skills of their employees and encourage them to learn. Company-driven learning, conducted both in-house and externally using company trainers and external experts, is an important part of their culture. They also provide incentives (financial and other), to encourage individual employee to advance their knowledge. These companies tend to invest more than the average in employee learning.

The report concludes that the process of enabling high-performing companies to emerge involves pursuing a policy mix which expands and improves the quality of community knowledge and skill pool, continually reforms the education and training systems, and establishes the appropriate climate for company-based learning. It argues that to assist middle performing companies to achieve high performance is more than an education and training task. For some the breakthrough issue may be new technology investment, a restructure, or industrial relations and from there training will follow. For others training may be the central issue. Integrated advice and assistance which understands the business

and brings in the links with education and training when appropriate will be needed (AIG, 1999, pp.93–4).

On one hand this study could be seen as revealing data which make questionable the degree of commitment to ongoing learning at an organisational level given findings on recruitment as the major approach to developing the knowledge base of the enterprise. On the other hand the study also establishes that organisations acknowledge to some extent the importance of a commitment to learning as part of establishing an appropriate organisational culture for the achievement of high performance.

Research about learning organisations and organisational learning

Insights into characteristics of organisations seeking to build a culture of learning and conditions which either enable or disable such development are also available from the literature that addresses the related notions of organisational learning and the learning organisation. In this substantial body of literature there is a growing acknowledgement that, in Edwards and Usher's words, organisations:

> as well as individuals are required to become reflexive, needing to learn in order to keep up or be ahead of the bewildering pace of change and casting themselves as 'learning organisations. The workforce at all levels needs to 'think' change, to have a positive attitude towards and be prepared to accept change. (Edwards & Usher 2000, p.96)

Some of the ideals and behaviours that have been identified as characterising a learning organisation or productive organisational learning could also be seen as indicators of an organisation with a culture of learning or a commitment to learning. Schuck (1996) for example, draws attention to the need to foster an environment of inquiry in which people talk to each other, play with ideas and are able to recognise and use learning opportunities at work as being microfactors in organisations with learning cultures. Similarly Skruber (1987) highlights the importance of a learning climate or culture that encourages, rewards and provides mechanisms for learning. These characteristics, as will be shown later in this section, are also strongly advanced as major characteristics of a learning organisation. While it is acknowledged there is little evidence in many of the empirical studies available of the uptake of 'learning organisation' ideas and ideals in driving the training activities in organisations (Tavistock Institute 1998), this dearth of evidence may also be explained by the focus on hard training activities in many of the empirical studies rather than the absence of these characterising features. This literature therefore provides a fertile source for insights into the softer or more covert dimensions/practices or conditions enabling (or limiting) the development of a learning culture within an organisation.

The organisational learning strand of this literature is frequently concerned with the types of learning that exist in organisations and how various types of organisational learning influence an organisation's behaviour. The two of types of learning most frequently cited in discussions of organisational learning include adaptive learning and generative learning (Argyris 1987; Leonard-Barton 1992). Adaptive learning, sometimes referred to as single-loop learning, is seen as a more basic form of learning which occurs within a set of recognised and unrecognised constraints that reflect the organisation's assumptions about its environment and itself. The constraints can limit an organisation's learning to the adaptive variety which is usually sequential, incremental and focussed on issues within the traditional scope of the organisation's activities or within the enterprises' pre-existing track record of successes. Generative learning or double-loop learning is seen to occur when the organisation is willing to question long-held assumptions about its mission and capabilities, and seeks to develop new ways of looking at the world based on an understanding of systems and relationships that link key issues and events. It is argued that generative-type learning is frame-breaking and transformative and more likely to lead to an organisation's competitive advantage than adaptive learning (Slater & Marvin 1995).

Early thinkers about learning in organisations have argued that individuals are agents of generative organisational learning when they engage in a form of collaborative inquiry (Argyris 1987; Argyris & Schon 1981). Such learning requires moving beyond single-loop learning where errors are detected and corrected to double-loop learning which involves questioning norms and priorities underpinning behaviours and the restructuring of such norms and assumptions. Much of the literature on organisational learning highlights the importance of critical questioning as a core component and some of this literature suggests that this is fairly easily achieved in organisational settings. This focus on critical questioning can also be seen in literature that advocates the use of action learning and enterprise learning strategies (Coles & MacDonald 1993) as part of individual and collective learning strategies. Despite a widespread enthusiasm for generative approaches, some writers have questioned the view that this form of learning is easily assimilated into the organisation's culture. Such authors argue that the ways in which organisations learn are highly intricate and complex. They further suggest that vital skills and knowledge are often acquired in hidden and unnoticed ways and that behaviour is often shaped by unconscious systemic defenses and established power relationships which become questionable when norms are challenged and are not easily changed (Field 1997a,b; Coopey 1996; Long & Newton 1996; Pettigrew & Whipps 1991).

The learning organisation strand of this literature has more directly sought to identify the organisational culture and climate variables that contribute to an organisation becoming recognised as a learning organisation. An overview of several models delineating such variables follows. Watkins and Marsick (1996, 1993) for example have identified seven dimensions associated with achieving learning organisation status. They argue that learning organisations create continuous learning opportunities, promote inquiry and dialogue, encourage collaboration and team learning, establish systems to capture and share learning, empower people towards a collective vision, connect the organisation to its environment, and have leaders who model and support learning. Slater and Marvin (1995) suggest the culture elements of a learning organisation consist of a market orientation and entrepreneurship and is characterised by facilitative leadership, an organic and open structure and a decentralised approach to planning. Coopey (1996) in a summary of the work of Pedler, Boydell and Burgoyne (1988, p.89) proposes a model which suggests the following 11 organisational characteristics as being associated with a learning organisation.

❖ learning approach to strategy: policy and strategy are structured as a learning process

❖ participative policy-making: all organisational members contribute to major policy decisions

❖ informating: new ways of using information technology to not only provide models of organisational processes required for control but also widely available to enable competent participation in processes associated with making things

❖ formative accounting and control: accounting and budgeting meet the information needs of all internal clients of those systems so as to strengthen the 'ethos of self-responsibility' fostering semi-autonomous individuals and groups

❖ internal exchange: all departments and units relate to each other as potential customers and suppliers; collaboration rather than competition are the keynote yielding positive-sum instead of zero-sum outcomes

❖ reward flexibility: flexibility in the types of rewards used and in the way in which systems of financial rewards are structured and delivered. Assumptions underlying reward systems are made public and reviewed collectively

❖ enabling structures: structures take temporary forms which, while catering for current needs, can be shaped through experimentation to respond to future changes in the internal and external environments

❖ boundary workers: all are environment scanners, not just those who have been accorded a scanning role

❖ inter-company learning: the learning ethos is carried through to suppliers, customers and even competitors through, for example, joint training, shared investment and research and development

❖ learning climate: a cultural template is designed around a questioning frame of mind, tolerance of experiments and mistakes, the essential need for differences and the idea of continuous improvement

❖ self-development opportunities: these should be available to all, sufficient to allow people to take advantage of the enabling climate

A further model of nine closely related variables has been advanced by Denton (1988, pp.90–1) who suggests that the three primary characteristics establish the context or framework within which the remaining six exist to a greater or lesser degree. The three primary characteristics identified in this model are the possession of:

❖ a learning strategy (learning becomes a deliberate and conscious part of the strategy)

❖ a flexible structure with reduced bureaucracy and restrictive job descriptions and which encourages cross functional co-operation

❖ a blame-free culture in which learning is valued and encouraged and the environment itself is blame-free

The six secondary variables include:

❖ vision: a clear vision for the future which is shared in all quarters

❖ external awareness: providing an improved understanding of the environment which allows the organisation to anticipate change and prepare its response

❖ knowledge creation and transfer: the creation and transfer of knowledge and new product and processes

❖ quality: the organisation focusses on total quality management and strives for continuous improvement

❖ supportive atmosphere: commitment is seen as a two-way street and the organisation that treats its workers with respect can expect respect in return

❖ teamworking: includes both small groups of people working closely together and networks operating outside the organisation

It is evident from the models advanced as explanations of both organisational learning and the learning organisation, that notions about fostering learning in the organisational context extend beyond the concept of a well-established orthodox training system, and link closely to the behaviours, attitudes, values and structures operating in organisations. This literature in its adoption of learning as a fundamental component to organisational sustainability in the contemporary marketplace environment and the knowledge-driven society suggests new definitions of learning which allow it to fit with the diverse array of recent approaches to achieving greater flexibility in the workplace (Coopey 1996). Such inclusion has led Mabey and Salaman (1995) to suggest that the learning organisation is often a piece of shorthand to refer to organisations which try to make a working reality of such attributes as flexibility, team work, continuous learning and employee participation and development.

Such positions advanced by this body of literature indicate that there is a need for an exploration of a range of variables related to organisational functioning. Such a study should examine features of organisations that see themselves as having established or being on a trajectory to establishing themselves as learning cultures or being committed to learning.

It would seem that these variables are the potential indicators of a commitment to learning in a study such as this. However, the potential also exists for the learning 'actuals' of the variables to be less obvious than those not operating from a 'learning' work paradigm within the organisation despite their existence. Candy and Matthews (1998) point to this phenomenon in discussing some of the difficulties encountered when researching learning in the workplace. They state:

> … *people working within one paradigm frequently use different terminology to describe what is essentially the same phenomenon; even more problematic, however, people often employ the same terminology when they actually mean something different.* (p.13)

Thus, the themes from the literature cited above provide the context of this research undertaking. They reveal a rhetorical consensus about the need for organisations to make an ongoing commitment to learning for survival in a knowledge-based, highly competitive, commercial environment. Some of the literature which provides the context for this research highlights policy and enterprise-driven initiatives designed to enhance both the technical and behavioural skill formation processes. At the same time questions exist about the degree to which such commitment is ongoing and closely aligned to the strategy of the organisation. Much of this literature reveals a lack of clarity about to what is meant by the term 'learning culture' and what in turn should be measured or documented when examining the notion of an organisation's commitment to learning. While there is a substantial literature documenting initiatives concerning the development of training initiatives within organisations, this literature yields less about the organisational variables which reflect or have contributed to the development of the 'learning cultures' in various organisations, or signs and perceived effects of the level of commitment to learning.

These are questions and gaps that this study is attempting to explore. It is also attempting to examine the ways in which such commitment may be implemented within different organisations given the differential features of organisations (size, structure, market, maturity, geographical location) and debate about what constitutes learning in organisational settings. Some of these questions and gaps are addressed in the following section.

Findings from cross-case analysis

Introduction

Each of the organisational case studies compiled as part of this research provides elements of a complex picture depicting what a commitment to fostering learning by an organisation resembles. Analysis of each case study shows that many factors in each organisation act as catalysts in the development of various attitudes, values and organisational practices which foster learning on the part of individuals and the organisation more generally. Similarly, a variety of differing organisational features can be seen as supporting learning in each organisation. From each case study it can be seen that these factors and features have acted as what Ostenk (1995) refers to as the 'frames' of the learning cultures developing in each organisation and have influenced what is being learned and how learning is occurring.

Cross-case analysis provides additional insights. Such analysis allows for the identification of similar features in the participating organisations that have either contributed to the building of cultures of learning or can be seen as indication of an organisation's commitment to learning. Foregrounding such features also provides a way of illuminating the dimensions of organisational practice potentially transferable or applicable to other organisations seeking to achieve similar outcomes.

The following section of this study reports findings from a cross-case analysis of case studies included in the appendix of this report. The section briefly overviews significant differences between the organisations. It then describes in more specific detail findings related to the common challenges these organisations face, the similarities in approaches being used and the conditions that contribute to the growth of a learning culture.

About the organisations

Differences between participating organisations

As indicated in the methodology section of this report, it was our deliberate intention to select a diverse group of organisations, the only feature common to all being that each should see itself as having a commitment to fostering learning and being an example of an organisation which has, or least is in the process of developing, a learning culture. As such, participating organisations could be seen as being either 'high valuer' employers or 'here and now' employers, utilising the terminology of the ANTA *Workplan 2001* marketing strategy. This marketing segmentation of employers/organisations suggests that 'high valuer' employers value all forms of learning—on and off the job, work-related or otherwise. Learning becomes the way they deal with the challenges of globalisation, competition and new technology. However, they also value the productivity and efficiency benefits of learning. An over-representation of established medium-sized firms in the city are included here. The 'here and now' employer segment was identified as being focussed on keeping ahead of the competition. These organisations deal with new technologies and high turnover; they also value on-the-job training. Furthermore, they have little interest in learning not directly productive in the workplace and are characterised by an over-representation of large, established businesses (ANTA Plan 2001).

As table 1 demonstrates, the organisations or divisions of organisations examined in this study were located in either New South Wales or South Australia and represented enterprises based in both metropolitan and regional areas. Several operated either as part of multinational organisations or within multinational markets. Others primarily serviced either regional or State customer bases. While most operated as profit-seeking organisations (including one publicly listed organisation), there were some not-for-profit organisations which could be seen as working within the community services sectors. The size and structure of the participating organisations also varied. Some were subsidiaries of large multinational entities; others could be described as small-to-medium-sized organisations. It should be noted that, in the case studies portraying larger organisations, the focus was primarily on a smaller component of the organisation either at operating division level, for example, the Manufacturing Division of AstraZeneca Australia or a site, for example, the Hanwood site of Bartter's and the Banrock Environmental and Wetland Centre of BRL Hardy. The features characterising the smaller units of a larger organisation have been the major focus of this study; however, some aspects of the culture of learning identifiable in the smaller units can be perceived in the larger organisation.

Table 1: Characteristics of participating organisations

Organisation	Industry	No. of employees	Profit/not-for-profit	Market	Recent restructure
New South Wales *Metropolitan*					
AstraZeneca Australia Manufacturing Division	pharmaceutical manufacturing	400	profit	international	amalgamation
Novell	information technology	150	profit	national (part of multinational)	
Regional					
Bartter Enterprises	agriculture	1500	profit	national	acquisition and restructure
South Australia *Metropolitan*					
Royal District Nursing Service	community services & health	400	not-for-profit	state-based	restructure
Regional					
Banrock Wine and Wetlands Centre	agriculture	14–20	profit	international	amalgamation and restructure
BRL Hardy		1400			

There were also differences in direction being pursued by organisations. Several could be seen as operating within a climate of growth and as such were actively and aggressively engaged in seeking new markets and hence in an expansionary phase. The not-for-profit organisations were also experiencing growth in demand for their services and embarking on provision of new services. This expansion was not necessarily accompanied by increased public sector funding or an increase in employment levels.

All organisations had been established for a relatively long time, with one of the not-for-profit organisations having a very long history. Several organisations had experienced a recent organisational change as a result of mergers and acquisitions. Others in recent years had undergone significant re-organisation.

Similar challenges facing organisations

Despite the diversity of purpose, of industry sector, of history and size, analysis across the cases revealed a degree of consistency in the challenges confronting the organisations and similar to those identified in the literature on the changing nature of organisations and work discussed earlier (for example, Casey 1999; Castells 1996; Handy 1995; Hilltrop 1995; Reich 1991). All organisations were facing challenges resulting from a more competitive environment, the implementation of new work practices and the need for appropriately skilled staff. More detailed findings in relation to these themes follow.

Challenges resulting from operating in a more competitive environment

All organisations, perhaps not unexpectedly, indicated that they were facing the pressures of an increasingly competitive economic environment although these differed slightly for organisations most directly affected by the forces of globalisation. The manufacturers, AstraZeneca Australia, Bartter's and BRL Hardy, must achieve effective or efficient production and distribution to ensure they maintain their position in the highly competitive expanding markets in which they operate. AstraZeneca Australia competes with other pharmaceutical manufacturers in Australia as well as with the various AstraZeneca manufacturing sites located throughout the world. This practice accommodates the policy of the AstraZeneca parent company which specifies that production should be located at its most efficient pharmaceutical sites worldwide. Bartter's, although operating in a steadily growing industry, needs to keep abreast of the expanding range of chicken product lines being produced within this industry sector to remain competitive. It also faces the possibility of imports of competing lines, a situation likely to challenge the long-term viability and structure of this industry in Australia. BRL Hardy, as a wine producer, and Novell as an information technology and technology (IT and T) vendor also face the ongoing pressures of extending their reach in aggressive national and global markets.

For the not-for-profit, more locally oriented service organisations (Unley City Council and the Royal District Nursing Service [RDNS]), the competitive environment has taken a different form. For Unley City Council, challenges arise from the introduction of national competition policy, and the general pressure for public sector reform, including more business-oriented models of administration along with government funding cutbacks. Competition between service providers for local government functions has increased with the policy of competitive tendering being applied to local government. These competitive pressures have created the possibility of one local government administration bidding competitively for services traditionally provided by another local government administration, thereby increasing the imperative for cost-effective delivery of services.

Pressures resulting from reduced public sector funding along with increasing demand for services are also relevant to the Royal District Nursing Service, creating the need for 'knife edge financial management' and new models of management for this service. In the past five years this organisation has introduced a new administrative system, re-organised its core business and expanded its commercial activities to achieve efficiency.

Challenges associated with acquiring appropriately skilled staff

Another commonly experienced challenge faced by several of the organisations was a shortage of appropriately qualified or skilled staff. This challenge is felt most directly by Novell, AstraZeneca Australia and Bartter's. Novell, as an IT and T operator, faces the challenge of finding and retaining skilled staff—a problem experienced by virtually all IT and T organisations throughout the world. For AstraZeneca Australia, staffing has been an ongoing problem. Given the regulatory requirements of the *Therapeutic goods acts* which govern the manufacture of pharmaceutical products in Australia, all operative staff in manufacturing require high skills levels even though the work processes they undertake can

often be fairly routine and repetitive. Recruitment for appropriately skilled staff can be difficult and retention of such staff can also be a problem.

Bartter's has also faced difficulty in attracting entry-level trainees for work in specific production divisions. This difficulty arises from the organisation's location in a region where there is high demand for entry-level employees in a number of industries. This shortage is further exacerbated by a perception amongst potential employees that the poultry industry does not provide viable career opportunities. Staffing pressures also exist for BRL Hardy. While this enterprise has recently downsized its staffing levels, it still perceives there is a need to acquire staff with a sense of personal entrepreneurship and a capacity to learn to be different and to think laterally and imaginatively.

Changing mindsets about practice

Most of the participating organisations have also been challenged by the need to create, amongst their current employees a changed mindset about the nature of their work practice. This could be seen in both the 'for profit' and 'not-for-profit' sites.

While there is no shortage of skilled staff in the Royal District Nursing Service, within this organisation there is nevertheless a need for employees with an enhanced understanding of how the service is to be provided and a willingness to accept greater autonomy in their work. This is particularly necessary for senior nursing staff who, working within a new structure and with changed procedures, are expected to be more entrepreneurial and more involved in regional management, especially as a degree of budgetary control has been devolved to regions. AstraZeneca Australia has also required staff to develop new approaches to their work. It has required its manufacturing employees to take greater responsibility for their skill development as well as to accept greater autonomy in decision-making relating to production issues.

Bartter's faces the challenge of trying to develop a belief amongst employees that, through active engagement with skill formation processes, they have a career path and a future within the organisation and in the industry itself. At farm management level Bartter's now requires managers who recognise the importance of management and business skills as well as effective husbandry practices. At BRL Hardy there has also been pressure to find staff able to operate in a competitive organisation and to embrace 'an attitude of adventure' and a sense of personal entrepreneurial responsibility.

Approaches to building a learning culture

Some differences between participating organisations

Cross-case analysis reveals that quite different strategies have been utilised to generate both what is being learned and how it is being learned (within the participating organisations). For some organisations the major identifier nominated as characterising the organisation's commitment to learning was the establishment and expansion of formal on- and off-the-job training or learning programs (AstraZeneca Australia, Bartter's, Novell). For these organisations a commitment to learning involved providing employees with increased training opportunities. One outcome of the commitment to formal training programs was a workplace culture displaying an educational orientation.

Other participating organisations nominated enterprise-specific initiatives which, although designed to improve organisational performance, had generated new levels of informal learning and had become features of the emerging learning cultures (for example, Unley City Council, Royal District Nursing Service, Banrock Wine and Wetland Centre).

The Banrock Station Wine and Wetland Centre case study presents a quite different model of an organisational commitment to learning. The parent organisation has a well-established training system for employees, particularly in areas such as occupational health and safety as well as other general and job-specific training. BRL Hardy however, sees the Banrock Station Wine and Wetland Centre as providing another dimension of its commitment to learning and

the building of a new culture of learning. This project links the environmental work BRL Hardy has been undertaking with Wetland Care Australia with the global marketing strategy being used to promote Banrock Station wines. Therefore these activities were used to promote sales of the Banrock Station wine label as well as raising ecological awareness in the community. While they could be seen as primarily a marketing strategy, the organisation was nevertheless concerned with fostering a specific type of entrepreneurial learning and performance. The initiative involved significant environmental work on land that had been degraded, the establishment of an environment reinterpretation centre and the appointment of an environmental educator. It also involved creating a climate for operations that fostered in staff the capacity to seize and expand upon opportunities while adopting an enterprise action learning approach.

Similarities across cases

Despite differences in features associated with learning, analysis of the cases reveals a number of broadly similar features characterising a commitment to learning by these organisations.

There is evidence that employees in all of the participating organisations require new types of working knowledge. In all cases innovative systems or structures had been established to support or drive the required learning. In addition, in all cases, a more communicative workplace environment is emerging. This requires employees to possess enhanced communication capacities in order to liaise and network with other member of the organisation, or to contribute more actively than previously to the decision-making about the work processes. Thirdly, there is evidence that each organisation is more aware of other stakeholders or strategic partners, a factor which impacts on the learning initiatives of the organisation. All of these features contribute to the growth and the depth of the culture of learning within the organisations. The following section considers these similarities in more detail.

Innovative systems and structures enabling the building of a learning culture

Training and learning assessment systems

The establishment of new organisational structures or systems by the participating organisations enabled either new types of learning or contributed to new levels of learning. Some of the organisations expanded their formal training and development systems and the structures supporting them.

Bartter's, for example, has become a more active participant in the national vocational education and training (VET) system. It established itself as a registered training organisation, accessed public funding for the development of workplace training programs, and participates in the new apprenticeship system and as an employer of trainees. It has also implemented processes and programs to allow workers to learn both on the job and off the job in training classes and through self-paced modules in order to acquire nationally accredited skills. Formal recognition of prior learning (RPL) systems have been established. Bartter's has also established opportunities for some staff at farm managerial level to gain qualifications through an RPL project managed by the Rural Training Council of Australia (RTCA) and there is increasing attention being given to the development of all supervisors and managers.

AstraZeneca Australia has been actively involved in establishing a work-based learning and assessment system linked to career progression and remuneration strategies. Learning systems staff at AstraZeneca Australia have been involved in clearly defining skills required for the four levels of manufacturing practice. Manufacturing staff members are able to have their performance and skill level assessed against these defined skill standards. While much of the learning of required skills occurs somewhat informally (for example on the production floor or through team meetings with more experienced colleagues, or through employees

completing self-paced learning modules), a formal and systematic assessment process by which employees' skills acquisition is measured, has been implemented. Unlike Bartter's, AstraZeneca Australia has not formally linked this skills acquisition program to the national accreditation framework or generic industry standards. However, skills standards established by this enterprise are closely if not formally aligned to general manufacturing standards. More recently, the Manufacturing Division has established a work-based management development program to better equip manufacturing managers for their managerial role.

Novell is further developing several certified skills acquisitions programs established to enable learners to work with Novell products within the industry. This approach to skill formation was pioneered by the Novell parent company in the 1980s and has subsequently been adopted by many other IT and T vendors throughout the world. Those who complete these programs gain Novell certification rather than a nationally accredited qualification. Novell's skill formation activities are currently expanding in response to the unmet demand for employees with IT and T skills. Increasingly in Australia, VET providers are becoming the main suppliers of generically skilled IT and T personnel. The industry, including senior representatives from Novell, was involved in the development and overseeing of industry packages, including components of specific vendor training, to be used as the basis for training within the VET sector. Such aspects of Novell training will be linked more closely to national qualification frameworks in the future.

Novell also established, in conjunction with a partner training organisation, a training program to develop competencies required by Novell and their channel partners. The program was also designed to help overcome the shortfall in IT and T staff being experienced in the industry. This 12-month program involves participation in an off-the-job program as well as a series of placements within different business units across Novell to give participants the opportunity to develop a holistic understanding of the work of the parent company and its products. Through a mentoring approach, participants are exposed to a range of experiences, develop both technical and generic skills, are expected to undertake a self-study program to certify them as Novell systems engineers, are regularly assessed and given feedback and support about their performance.

Changing roles of staff supporting learning

Development of new learning and training and assessment systems required a degree of role change for training and development staff in these organisations. In at least three organisations training and development staff act primarily as internal organisational consultants rather than as deliverers of a program of face-to-face training events (for example, Bartter's, AstraZeneca Australia, Novell).

New organisational structures/services

In other participating organisations it is the new *organisational* structures that have been implemented in recent years rather than new or existing *learning* structures or systems that have created the learning opportunities. In the Unley City Council, organisational restructuring involved a resizing exercise and the reduction of a three-divisional structure to a two-divisional structure. This required employees to engage in more collaborative team work activities which generated new forms of learning.

In the Royal District Nursing Service and Banrock cases what could be seen as new or revised service or product lines foster the building of a learning culture. Implementation of new fee-for-service arrangements was identified as significantly contributing to the development of a culture of learning in the latter organisation. Similarly, processes used by RDNS to increase the efficiency of the service, such as the establishment a centralised call center, were nominated as contributors to the growth of a culture of learning. The centre is a fully automated electronic facility and provides measurable data on performance. Performance benchmarks have been set and call centre operators receive regular feedback on their performance. This information has become a source of considerable learning about the nature of clients, their needs and the effectiveness of work practices by staff from the service. At BRL

Hardy the need for effective marketing of a new product line—Banrock Station wine—has created the impetus for new forms of learning within the organisation.

Performance review systems

Several organisations (Unley City Council, AstraZeneca Australia, Novell, Bartter's) nominated the implementation of formal performance review systems used on managerial and supervisory staff as processes contributing to the building of a culture of learning within these organisations. At performance review sessions individual training needs are discussed and strategies organised to assist staff members to gain desired or required new skills or competences. Performance review systems are seen as improving the performance of the organisations and as a development strategy by staff members.

Development of documentation and data to support learning

Initiatives contributing to the growth and spread of the various learning cultures also include the development of various forms of organisational documentation; for example, Bartter's documented quality systems and procedures in order to receive recognition as a registered training organisation. This company has also embarked on a process to develop written work procedures for all employees in the organisation. This written and public job standardisation is the first step in the articulation of career paths for Bartter's employees and a basis for promotion and selection decisions. These procedures will be used for the identification of benchmarks for acceptable work performance in the future. Similarly, the Manufacturing Division of AstraZeneca Australia has, over the past five years, been concerned with developing and making accessible skills profiles for operational staff positions. These are the basis for skills-based career progression and remuneration. Successfully negotiated enterprise-based industrial agreements had initially contributed to the development and implementation of skill-based pay frameworks in both of these organisations. The Royal District Nursing Service also makes greater use of systems that supply data to various work teams about their performance. The data are used for benchmarking as well as a basis for decision-making about possible improvements needed.

Establishment of a more communicative work environment

Establishment of work environments where greater communication occurs is a further common feature of the participating organisations and can be seen as contributing to their growth as learning cultures. In some of the organisations this environment has resulted from providing staff with performance-related information which enables them to more actively participate in decisions about workplans and processes. In other organisations the more communicative environment has emerged from increased consultation between staff and clients and the establishment of formal and informal structures that allow for more collaboration in resolving work issues. The importance of managers and supervisors as role models and mentors in establishing such collaboration is highlighted in a number of cases.

Increased opportunities for decision-making based on information sharing

In at least half of the organisations studied, the provision of work-based and work-related information to staff was linked to a growing culture of learning and continuous improvement. This information was often made available to help staff to make informed decisions about the work process.

At AstraZeneca Australia manufacturing teams are now being provided with quality assurance data available through advanced IT systems. Teams are expected to regularly analyse this data to identify work team and production problems to determine more effective ways of working. The learning that occurs as part of the team discussion and problem analysis is a fundamental component of the formal system of upskilling and performance improvement used at AstraZeneca Australia. Workers at AstraZeneca Australia believe that

their contribution to team discussions is important and that they are learning from the process.

At the Royal District Nursing Service the comprehensive consultation associated with new initiatives, such as the introduction of fees is cited as an example of a commitment to learning on the part of the organisation and can be seen as an example of effective information-sharing. Through consultation and a survey of customers and staff and feedback of data which took place as part of the implementation process, employees learned more about the nature of their customers' needs. Similarly, the provision of benchmarking data on performance provided to those operating in the recently established call centre is also nominated as a method by which staff become aware of clients' complaints and subsequently act to prevent future occurrences. Information-sharing generates learning about client needs, work processes and improvements in performance. The technology used in the call centre provides opportunities to establish performance standards for a benchmarking approach. It also provides employees with the information that can be used for planning for improved performance. In much the same way the quality data provided at AstraZeneca Australia provide work teams with feedback which contributes to employee and organisational learning.

At a very different site, Unley City Council, similar approaches to learning from each other have been reported and are seen as contributing to the emerging culture of learning. Successful resistance by Unley City Council to a threat of amalgamation and an organisational restructuring accompanied by the shift to a business model of local government administration involved extensive information-sharing and increased participation in decision-making by employees. The processes involved in the reconfiguration of work roles resulting from the restructuring, while difficult, were largely managed by the teams themselves. Similarly, information-sharing within Unley City Council teams assisted the shift towards a business model of local government. Teams within this new council administration structure often co-operatively determine their learning needs and undertake training as a team to develop the job or task skills required as a team. Similarly, considerable informal learning is reported as occurring at Unley City Council through informal mentoring, team-working, informal meetings and information-sharing. A team member at Unley City Council stated:

> We usually come up with an idea about how it should be done and then if we hit a wall, we'll always bring it up in team meetings. So it's absolutely brainstorming and bouncing ideas of each other.

In Novell there is evidence of departments and units working collaboratively and systems and procedures in place to facilitate the exchange of information and input into cross-functional and individual planning processes.

At Bartter's, a large family-operated business, where there is not the level of autonomy in decision-making and problem-solving as in the preceding sites, there is some evidence of more collaborative work practices and work team development.

A similar situation exists in the Banrock Station case study where it is a general expectation that staff and teams will share information and ideas and act on opportunities that emerge as a result of particular situations. To some extent this involves staff taking risks with ideas and generating new and improved ways of operating. At Banrock Station there is an emphasis on team action and open communication and generally any member of the team is expected to take leadership when the project calls for his or her specific expertise.

Working with partners and other stakeholders

Several initiatives contributing to the culture of learning reported by a number of the participating organisations involved an increased awareness of the need for collaboration with supply chain stakeholders or other strategic partners or internal customers.

AstraZeneca Australia, for example, began investigating the operation of its supply chain relationships recently. This has required the various functions within the organisation to

examine their relationship with each other, and has also involved closer scrutiny of relationships with suppliers and customers. One immediate outcome has been an increased awareness of the interdependency of the various functions within AstraZeneca and an increased knowledge of the operations of the various functions and how each contributes to overall organisational outcomes.

Increasingly, Novell has worked with channel partners to develop skills required by those who work with Novell systems. This has been undertaken as part of the process of addressing the skills shortage experienced by Novell itself as well as by others in its supply chain. Two specific programs have been developed to remedy this and there are already some outcomes that suggest that channel partners are changing procedures on the basis of the training provided by Novell.

Bartter's, although an organisation that values its high levels of self-sufficiency, is working in partnership with other industry training bodies and relevant providers to build its skills base and to assist in establishing career pathways for employees.

The Royal District Nursing Service is in the process of extending its partnership network to improve the quality of its service. Currently in partnership with Flinders University of South Australia, the RDNS has established a position to develop a research agenda to improve the health of the community and a more strategic orientation towards partnerships for co-ordinated care. Furthermore, the RDNS has signalled an intention to explore possibilities for working more closely with, or co-locating with pharmacists and general medical practitioners to significantly extend the on-site service in care planning and case conferencing for clients. The service is also embarking on a promotional drive to persuade other agencies to share its call centre referral and enquiries systems. These initiatives are seen as a way to carry the learning ethos of RDNS to other health provider partners and to create synergies for cross-fertilisation of learning between providers.

Perhaps the case which most clearly illustrates the potential for partnership is provided through the Banrock project. This project established what could be seen as an unlikely internal partnership in that it brought together the marketing activities of the organisation and an environmental program in which BRL Hardy was actively involved. Building a wine and wetland interpretation and marketing centre at Banrock Station and recruiting an environmental scientist and community educator to head up the environmental and wine marketing program based at the centre has enhanced the organisation's standing as an ecologically responsible corporate citizen and provided a sound marketing strategy for Banrock Station wines. It also provided the organisation with a model for bringing new approaches into traditional organisational functions thus generating the new types of learning actively sought by the organisation. This partnership has also assisted in the promotion of 'a culture of adventure' sought by the organisation and its leaders. The organisational expectation is that managers and their work teams respond quickly to a changing local context, identify and follow up opportunities and engage in a form of action learning to resolve difficulties.

Ethos of self-responsibility for learning

A further similarity in the various attempts to foster learning revealed on the part of many of the case studies is the encouragement of employees to take greater responsibility for their own learning. This is particularly apparent in the case of AstraZeneca Australia where systems which promote learning through established assessment systems based on clearly defined skills requirements and opportunities to learn from colleagues have been made available for employees. An attempt to encourage greater self-responsibility for ongoing learning and skill formation underpins many of the training initiatives being introduced at a number of the organisations, including Bartter's, Novell and also the Unley City Council. It is a major expectation of employees at the Banrock Station Wine and Wetland Centre where teams and individuals are encouraged to adopt an action learning approach which sometimes involves taking risks in reading the situation and taking responsibility for dealing with the immediate challenge.

Table 2 (page 30) provides a summary of some of the learning centre features nominated by participating organisations. (See the case studies in the appendix for further detail.) It should be noted that not all of the features listed were highlighted in interview by all organisations.

As a result some boxes in the following table may be blank because those interviewed from the organisation failed to highlight the feature when describing their organisation—rather than the feature not existing.

Reported outcomes

Each organisation has reported multiple outcomes as a result of a commitment to learning. For some organisations outcomes were mainly reported in terms of success in establishing more formal or sophisticated training and education systems. While quite diverse in format, many of these systems provided employees with more established career pathways. Furthermore, there is evidence of successful attainment of skills development or at least more active engagement in development programs by employees.

For others, the reported outcomes resulting from the organisation's commitment to learning included perceptions of increased success in addressing the problems arising from a shortage of skilled staff. The study of Novell indicates some success in creating a work environment with the lowest degree of turnover within the industry and an increased capacity to provide its resellers and channel partners with skilled support. AstraZeneca Australia reported a reduction of staff turnover and some examples in staff returning to AstraZeneca Australia after recognising advantages to employees in this organisation.

Other reported outcomes relating to learning include the reshaping of processes and positions within the participating organisation and to some extent with customers or suppliers. For example, Novell witnessed a number of their channel partners reviewing various roles within their organisations as a result of working with staff skilled through Novell training programs. Novell also reported that education was prominent in managing relationships with channel partners and as a result, return business has suggested that a learning ethos in their supplier chain may be developing as a result of the program. AstraZeneca Australia found that, as a result of the performance review process, position descriptions of employees changed regularly in response to changing workplace demands and changing learning needs. Similarly, AstraZeneca is willing to allow operator teams to access data gathered for the quality process to use in re-arranging work scheduling. There is evidence that this contributes to improved performance. In a similar vein learning initiatives in a small group of farm managers in the boiler division enabled the establishment of process benchmarks, a situation likely to contribute to a more explicit benchmarking program for use across Bartter's farms in the future to improve performance further.

All organisations reported significant outcomes resulting from the increased informal learning taking place within the workplace. For some organisations learning on the job (from the problem-solving and from colleagues) was seen as the major vehicle for fostering the learning sought by the organisations.

Another major outcome was the improvement in workplace relationships as a result of the more communicative environments that were emerging in many of the workplaces. Most organisations reported increased workplace collaboration and several commented on the use of teams for the resolution of work-based problems. In a number of the participating organisations collaborative opportunities were integrated formally with the process of work; in other organisations they occurred on an ad hoc basis, but certainly were appreciated as a way of doing things. For Novell, like the Banrock Wine and Wetland Centre, these outcomes are linked to the organisation's sales and marketing initiatives.

A further significant outcome is the perception of increased confidence in employees in relation to their capacity to learn. In some organisations this outcome is achieved through the role being played by team leaders, managers or training and development staff. While no organisations reported quantitative data indicating a growth of market share, all participants confirmed that the development of a growing culture of learning had contributed to the various successes they were experiencing.

Table 2: Features characterising learning culture emerging in participating organisations

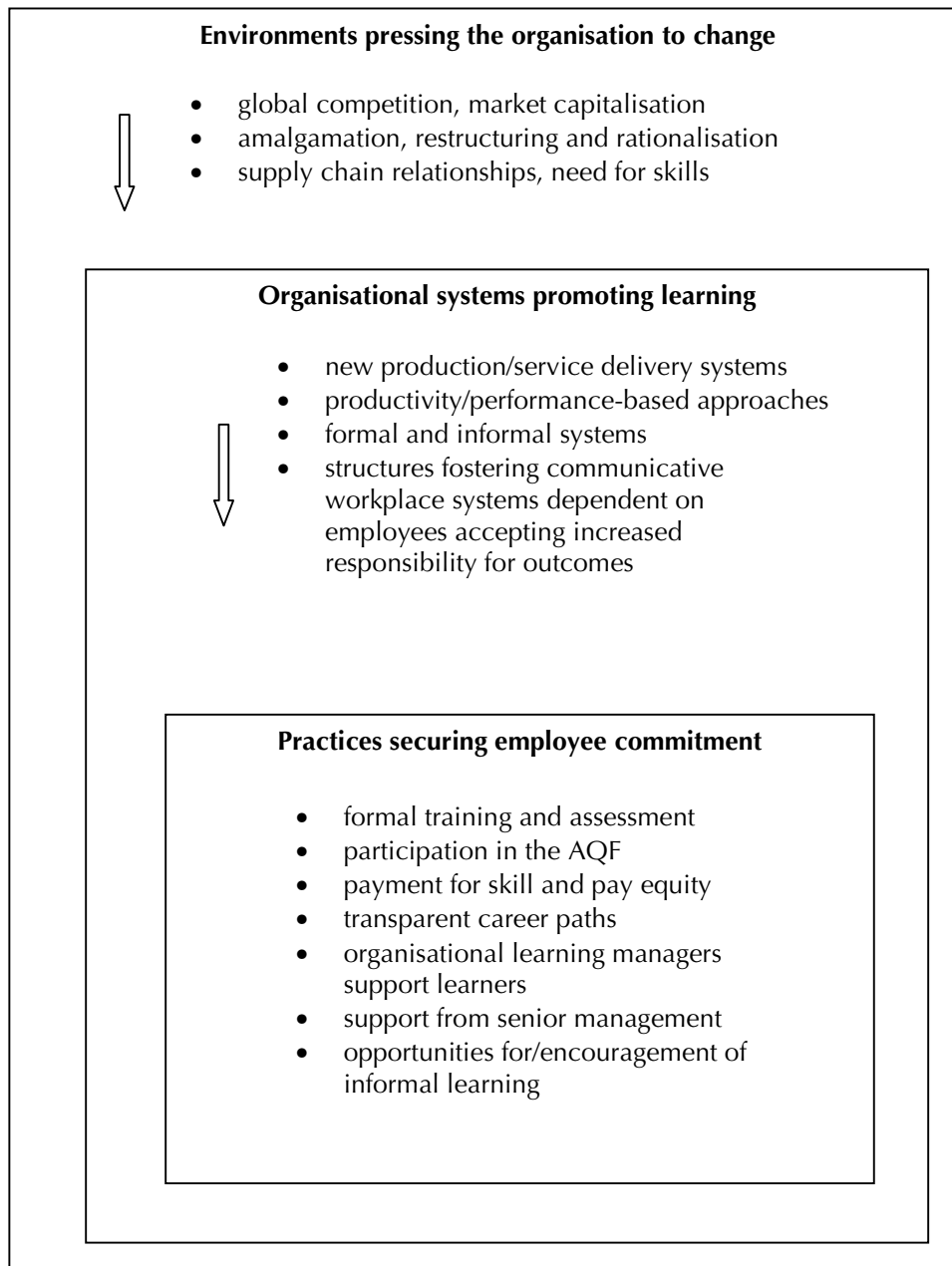| Features	AstraZeneca	RDNS	Banrock	Bartter's	Novell	UCC
Development and embedding of a more sophisticated training and development systems/learning technologies e.g.: Skills training Induction training Management development On-the-job learning Peer learning/self-paced learning Continuous improvement	• Assessment system based on skill matrix • Skills training • Induction training • Management development • On-the-job learning • Peer learning/self-paced learning	• Skills training • Peer learning • Learning from clients via survey action type learning	• On-the-job learning • Peer learning/ self-paced learning • Continuous improvement ethos • Extensive training system exists in parent company	• Skills training linked to AQF/ career paths • Induction training • Management development • On-the-job learning • Peer learning/self-paced learning	• Skills training program leading to certification • Management development • On-the-job learning/ mentoring systems • Peer learning/self-paced learning	• On-the-job learning • Team learning • Peer learning • Traditional training and development opportunities
Skills acquisition linked to reward or career path system	Yes			Yes	Yes	
Organisational structures established which enable team group and individual learning e.g.: Team structures/ team meetings Performance feedback systems Consultative behaviours encouraging open communication	• Teams, meetings for discussion of performance • Learning specialist participating in team meetings • Quality system, gain sharing system	• Team structures for increasing learning • Technologies to provide performance feedback • Links with other organisations, agencies for furthering provision and as source of learning • Senior management commitment			• On-the-job learning • Team meetings collaborative structures • Performance feedback systems • Senior management commitment	• Re-structuring and need to adopt a more business oriented approach provided new learning opportunities • Senior management support
Communication and information-sharing encouraged e.g.: Feedback systems Team meetings Leaders sharing information Employees participate in decision-making	• Quality feedback systems providing more complete information-sharing and basis for team meetings	• Feedback systems from technology • Leaders and clients sharing information	• Team meetings • Leaders sharing information • Employees participate in decision making • Cross-function communication • Employees expected to take initiative/leader-ship • Recognition of expertise	• Some evidence of increased participation at management level	• Increased communica-tion with supply channel partners • Team meetings • Collaborative environment	• Leaders sharing information • Employees participate in decision-making
Building relationships with others e.g.: suppliers, customers, other providers, clients	Supply chain project	Client, working with other agencies	Extensive involvement with community		With channel partners, suppliers of training in industry	
Employees encouraged to take greater initiative for learning and actions	Yes	Yes	Yes	Yes		Employees expected to develop more accountable mindset

Discussion on findings

In order to make sense of the case studies it is helpful to attempt to describe the kinds of processes at work in driving the cultures of learning as they exist in the six organisations. While this process could underestimate the complexity of these processes, it does help to portray some of those common elements contributing to building and maintaining a learning culture in organisations in this study. The resultant model (see figure 1) therefore attempts to show how the learning culture of the organisation is embedded within the systems, the employee interactions and the work practices of the participating organisations.

The model proposes that enterprises are adapting to a changing environment in response to increasingly competitive, often globally driven, market pressures. These pressures become catalysts for the development of new organisational systems, work structures and work processes within enterprises that enable the enterprise to adapt, survive and prosper. These systems, work structures and processes demand new work-related learning by employees. Such learning is not only about the acquisition of new technical skills but also relates to the attainment of new attitudes towards work, the capacity for adaptability and the development of a sense of self-responsibility for learning. In this competitive environment there is also pressure on the enterprise to develop systems and practices that not only promote productivity and increased work performance but also allow for the necessary learning occur at the same time as increased productivity is being achieved. These learning practices are designed not only to improve organisational performance but also potentially to secure greater commitment by employees to the enterprise. At times these systems/practices involve the implementation of more formal training and development systems. On other occasions, or in other enterprises, the required learning is more informed and is achieved with the establishment of a more communicative environment in which individuals play a more active role in making decisions about their work practice and are provided with more feedback on their own performance.

Figure 1 provides at least some explanation of the development of learning cultures in the organisations which participated in this study. External pressures in each case have become catalysts for organisational change. For example, all organisations studied were experiencing either increased competition or new forms of competition which intensified the need for effective production or provision of services. This competition significantly influenced the way work was carried out by employees in and the knowledge required by employees to perform their work role. As Booth and Snower (1996) suggested about contemporary conditions of employment, and as our examples demonstrated, employees required not only new skills but also a capacity for adaptability. Employees in the participating organisations were required to develop new attitudes about what is expected of them in the workplace. For example, employers in both the pharmaceutical manufacturing and poultry manufacturing cases expected employees, who in earlier times may have been designated and operated as unskilled or semi-skilled workers, to engage in upskilling activities. Employees in these enterprises are expected to demonstrate a capability for ongoing learning that will meet the demands of the more competitive environment. Similarly for those working with Novell or their channel partners, there is a need for ongoing upskilling to meet staffing shortages and the rapid pace of change within the IT and T industry. And once again in both the Royal District Nursing Service and Unley City Council, given the changed approach to service provision and various forms of restructuring, new attitudes towards working are required. And finally in the Banrock Station environment, employees needed to adopt a more entrepreneurial approach and a different form of skill sets.

Figure 1: Dimensions of learning culture

> ### Environments pressing the organisation to change
>
> - global competition, market capitalisation
> - amalgamation, restructuring and rationalisation
> - supply chain relationships, need for skills
>
> > ### Organisational systems promoting learning
> >
> > - new production/service delivery systems
> > - productivity/performance-based approaches
> > - formal and informal systems
> > - structures fostering communicative workplace systems dependent on employees accepting increased responsibility for outcomes
> >
> > > ### Practices securing employee commitment
> > >
> > > - formal training and assessment
> > > - participation in the AQF
> > > - payment for skill and pay equity
> > > - transparent career paths
> > > - organisational learning managers support learners
> > > - support from senior management
> > > - opportunities for/encouragement of informal learning

To manage in such a changing environment it has been imperative that organisations develop systems to promote learning that can assist employees to adapt to the changed work demands. Often these systems have been established primarily to increase productivity yet, at the same time they have promoted learning on the part of employees. Moreover, they either have required or afforded employees the opportunity to take more responsibility for a wider range of work outputs and this is seen by the organisations and employees as part of the learning process. This was very apparent in a number of case studies. Decision-making by work teams about work processes based on information generated by enhanced management information systems and an increased emphasis on team responsibility and accountability is a growing practice at AstraZeneca Australia. Similarly at the Royal District Nursing Service and Unley City Council, and to some extent in Novell, notions of team productivity and collaboration between team members for achieving work outcomes are consistent themes. At Banrock there is an expectation that team members adopt an approach whereby issues are resolved creatively and autonomously. This approach requires Banrock employees to be alert to and act quickly on issues that arise from the workplace or the broader production environment which may impact on work performance or work output. Such expectations can

be seen to some extent to validate Casey's (1999, p.26) claim about contemporary workplaces that 'advanced management information systems and attention to the generation of organisational cultures of team productivity and mutual care lead to a high degree of social integration with the organisation'.

These systems can be seen to form a crucible for learning. They provide a space in which formal learning systems can be embedded as well as an enriched environment for informal learning. The systems established by organisations are increasingly establishing a 'space' for communication between peers about work practice which is recognised for its capacity to increase learning as well as productivity. Thus, while it has become commonplace to assert that there is a great deal of informal learning occurring in organisations, these case studies reveal that, at the sites investigated, not only was informal learning occurring, but opportunities for such learning had been intentionally built into the systems and were designed to create enhanced performance by the organisation. Such approaches could be seen as questioning the traditional distinctions between formal and informal learning systems or structures.

A focus on the more communicative organisational environment with increased opportunities for participation in work practice decision-making demonstrated by the case studies also reflects the position advanced in much of the organisational learning literature— the need to promote dialogue and inquiry as part of the process of achieving the status of a learning organisation or at least as building a learning culture (Watkins & Marsick 1996, 1993; Pedler, Burgoyne & Boydell 1991; Senge 1990).

The model highlights further dimensions in the development of a learning culture within organisations. It suggests that organisational systems need to have features that will secure employee commitment to learning through particular work practices. Using Solomon and McIntyre's (2000) term, such systems or practices 'institute' learning for work within the organisational setting. As evidenced by the case studies, changes may include participation in the Australian Qualifications Framework through formal courses and other arrangements which provided accredited certification for employees and development of more formalised career systems and career paths linked to pay for skill incentives. Other practices include providing employees with performance feedback, either through more advanced technological systems or through managerial systems to enable more active self-monitoring of performance by individuals and teams and a systematic encouragement of a climate of open communication and decision-making through the enterprise philosophy or manager-modelled behaviour. Such practices in the development of a learning have also contributed to an organisational reframing of the role of those involved in providing enterprise training and development. There is a change from the notion of these professionals being the providers of training in a narrow sense to a broader role of 'embedding' learning in work practices and organisational systems, a further practice advocated by much of the organisational learning literature cited earlier in this report.

The model demonstrated by the organisations studied therefore represents the development of learning in a certain way. It suggests that a 'learning culture' is something achieved though a deliberative arrangement designed to maximise productive work in a highly competitive environment where the organisations' systems have to be designed to support the development of employees if productivity goals are to be achieved. In short, the model does not idealise 'learning culture' or 'a commitment to learning' as a desirable ethos that evolves through exhortation of managers alone or the goodwill of employees who are persuaded of its worth, but as a result of various managed organisational changes.

Similar to the findings reported in the AIG study (2000), in most cases the culture of learning was at least partly achieved through enterprise-focussed programs rather than through broad generic programs. In some cases the formal programs being established were designed in partnership with like-minded education and training providers. In addition, as suggested in the AIG model which described the behaviour of 'high performance' companies, the provision of financial and other incentives to encourage employees to engage in skills acquisition has contributed to the development of the cultures of learning in these organisations.

Many of the features characterising the movement of the case study organisations towards the development of a learning culture also align with positions advanced in the literature describing a learning organisations. One of the major features associated with becoming a learning organisation is the capacity of the organisation to engage in a more collective form of organisational learning as opposed to individual learning (Coopey 1996; Senge 1990). The most productive form of such learning is often described as generative learning; that is, the learning that occurs from challenging existing ways of doing things. Several of the case study organisations encouraged at least embryonic forms of generative learning. The approaches used by BRL Hardy at the Banrock Station have produced new forms of thinking to promote a particular product line and to differentiate it from the more general market. At the same time there is evidence that in following what was initially a marketing strategy, the learning approach embedded with this project had wider implications for the organisation.

Further evidence exists of organisations encouraging employees to question the traditional ways of working and finding alternative approaches to work-related issues; for example, in the organisations providing their employees with quality-related information about work output and performance such as AstraZeneca's manufacturing teams working with quality assurance data; the Royal District Nursing Service staff and client consultation and feedback initiatives and benchmarking data from their call centre.

Other features evident in these participating organisations which have been linked with characteristics of a learning organisation include:

❖ the adoption of a market and entrepreneurship orientation (for example, the Royal District Nursing Service; Unley City Council; Banrock Station Wine and Wetland Centre project; Novell training collaboration with channel partners)

❖ creation of continuous learning opportunities (for example, AstraZeneca Australia though its learning through teams, Royal District Nursing Service through its call centre and feedback technology)

❖ encouragement of collaboration and team learning (for example, AstraZeneca Australia, Bartter's, Unley City Council, Banrock Wine Station, Royal District Nursing Service, Novell).

In summary, there is substantial evidence of a commitment to learning from those with power to establish formal systems for promoting learning and those who influence the generation of a more open, communicative organisational climate. There is also some evidence from the outcomes reported, of employees contributing to the development of learning culture within these organisations with their growing participation in the formal systems established for upskilling employees, and reports of active participation by employees in activities which foster informal learning.

These findings suggest that the learning culture is spreading within each of these organisations. In some cases the learning is primarily operational—for example, performance errors are corrected against norms built into operating plans—but there is also evidence of strategic learning which enables the modification of existing systems to match changes in the external environment. There is also evidence, in the case of the Banrock Wine and Wetland Centre project, of what Pedler, Boydell and Burgoyne (1991) and Hawkins have described as 'Level 111' learning where the organisation's leaders share the perspectives of others in the wider community tapping into new sources of spiritual energy (Hawkins 1991, p.183).

Another feature of the learning organisations—influencing policy and strategy formulation—proposed by some theorists is not readily apparent in all organisations (Pedler, Burgoyne & Boydell 1991). While some dimensions of strategy formulation on the part of the wide spectrum of employees can be seen in the case studies of the Royal District Nursing Service, Unley City Council and the Banrock Station, this is not a practice involving all levels of employees. Similar to findings reported in an earlier review (for example, Smith et al. 1996; Kane, Abraham & Crawford 1994), learning initiatives in these organisations are a response to strategy and policy rather than a prime driver or shaper of strategy or part of the strategy formation process.

Thus in these organisations a range of systems, practices and behaviours exist that indicate that, within each organisation, there is a commitment to learning by managers and employees and to a developing learning culture. These are perceived to have produced beneficial outcomes for the organisations. The common features or conditions contributing to the developing culture of learning include the organisations' efforts to establish systems or structures to support the ongoing learning of employees, either in terms of formal training development programs or through the establishment of formal organisational structures to facilitate or generate employee learning.

A second common feature is the recognition by the organisation of the often unstructured learning that occurs informally as part of the work process and encouraged by the organisation. A third feature common to the various organisations has been their capacity to establish open communication climates. This has been achieved by embedding consultation and feedback practices, and opportunities for and expectations of employee collaboration as part of normal organisational practice as well as through the display of more open communication styles and management practice. Most of the organisations actively worked with customers, suppliers or other strategic partners and hence were strategic beyond the narrow boundaries of their organisation. In addition, in a number of the organisations there is evidence that learning and skills acquisition is valued and rewarded by remuneration; most have established incentive schemes that encourage employees to pursue further learning. These schemes are an outward symbol of the organisations valuing or being committed to learning.

Implications for policy to foster development of cultures of learning within organisations

This study examines the way selected Australian organisations understand and enact the notion of a learning culture. The diverse approaches which have been used to foster the learning cultures revealed through the case studies certainly confirm that the concept of a culture of learning is not a homogenous one. Similarly, the study reveals that embedding a culture of learning is not uniformly achieved. These are not unexpected findings and could be seen as suggesting that attempts to find a 'one size fits all' model for replicable transfer to a variety of organisational contexts would appear to be futile.

However, a set of consistent conditions emerges which could be perceived as significantly contributing to the embedding and growth of learning cultures within organisations. From those implications for other organisations seeking to foster the development of a culture of learning can be drawn. The commonalities across organisations can also provide potential avenues for further policy development.

From this study it would seem that nationally established accredited vocational education and training systems, while utilised by some organisations as part of their skill formation and performance improvement strategies, are not prime drivers of the emerging learning culture; nor are the widely available training programs offered by recognised providers. Other conditions would seem to be at least as powerful. As the study by Hayton et al. (1996) indicated, competitive pressures either directly or indirectly generated a range of significant structural changes in most participating organisations. In some instances such changes have resulted in the adoption of more formally established team-based models for completing work processes, the use of performance feedback systems and the establishment of newer, more transparent, more accessible career pathways for employees. These changes have therefore contributed to the creation of systems from which learning cultures are emerging. In other instances structural change has been accompanied by a more collaborative operational working environment in which key personnel are modelling communicative behaviours and encouraging a sense of learning about work tasks and from each other, leading to a sense of improved performance.

The study also reveals the recognition in organisations by both managerial or supervisory staff as well as employees, of the richness of learning emanating directly from the work task and from work colleagues—as opposed to learning based in a classroom. While most organisations referred to the opportunities employees had to attend either internally or externally provided training programs, there was also an emphasis on initiatives allowing employees to learn from their work environment and from their work colleagues.

In several of the cases there was a sense that the organisations, in being committed to encouraging learning, were supporting action learning-type activities in that employees were being encouraged to engage with organisational problems, or to search for ways of improving organisational performance through their learning. While this learning was rarely set up in a traditional action learning style, employees were encouraged to diagnose, investigate and collaborate over solutions. These types of activities were nominated as being part of the emerging learning cultures.

Such findings have significant implications for those responsible for encouraging learning in organisations in that they suggest a number of directions for organisations attempting to develop a learning culture. These are:

❖ Organisational pressures can become the impetus for increasing organisational commitment to learning. Such pressures in many of the case studies resulted in structural change that led to increased development of the organisation's learning and development systems and more active participation by employees learning to cope with the new environment. For organisations this would suggest that pressures from the external environment for change within organisations should be interrogated for their learning potential.

❖ Initiatives to encourage learning in organisations need to be more wide-ranging than the provision of formal training classes offered by training institutions or in house. Even in the organisations which had established more formalised training and assessment systems, a number of programs offered included, as part of the learning process, substantial work-based components directly related to employees' participation in the work activities. Such programs were reported to be beneficial to the organisation as well as to the individual. This suggests that there is a need for organisations wishing to foster a learning culture to consider developing programs that embed the work experiences and work tasks of employees.

❖ Creation of a learning culture is aligned closely to the development of a more communicative work environment and the use of working relationships as a source of learning. Several of the organisations in this study had adopted an approach that made development and assessment approaches more transparent and accessible for employees through both documentation and access to key personnel who assisted in the process. Some of the organisations also made information available about performance either through quality data systems or performance review systems and mentoring approaches. Still others reported that the management and supervisory styles of management-level employees contributed to a more collaborative, interactive workplace which was generating learning from work activities. A more open climate of communication in which learners/employees are able to access information and have opportunities sanctioned and supported by the organisation, enabling them to work collaboratively on work-based problems generated a type of learning valued by organisations and employees.

❖ An ethos of employees' accepting greater responsibility for learning permeated a number of the cases and was actively encouraged by participating organisations. This finding suggests that systems that foster a degree of ownership for learning development and workplace action should be encouraged.

The findings from this study imply that many of the major planks associated with skills formation policies may be of questionable impact in determining organisational commitment to learning. It may be that learning in Australian organisations is at least as likely to arise from changes in industrial relations practices or industry policy as from education and training policy. While some of the policies and structures related to skill formation may have stimulated awareness of the need for ongoing learning on the part of society as a whole and in turn in organisations, enterprise commitment to learning and fostering a learning culture has emerged largely from the enterprise's response to change and concomitant pressures.

Policies which encourage more organisations to embrace a learning culture therefore need to be sufficiently broad to encompass activities which individual enterprises and the individuals within them see as being in their own interests. In calling for a broad approach to encouraging learning, it is important to recognise that the learning necessary to organisations, or that is taking place, is not always related to nationally accredited training programs. Such learning is often related to the establishment of systems which provide access to experiences, access to information, career opportunities and collaborative work relationships and a collaborative communication climate. This suggests that, in funding or subsidising skill formation or performance improvement programs, there is value in supporting a range of organisational development behaviours or initiatives that generate what organisations see as learning. Such programs and approaches may look more like programs designed primarily to increase production or to improve market positioning. However, at the same time these programs have the potential to contribute to the building and maintenance of a learning culture within organisations.

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Appendix: Case studies

AstraZeneca Australia Manufacturing Division

Robyn Johnston

About the organisation

AstraZeneca Australia Pty Ltd is a division of AstraZeneca Pty Ltd, a large multinational ethical pharmaceutical manufacturing company formed in 1999 from merger of Astra AB (Sweden) and the Zeneca group (UK). This multinational company employs more than 50 000 employees in Europe, the United Kingdom, the United States and Australia and has attained a leading position in several therapeutic areas of the global pharmaceutical market. Prior to this merger Zeneca Australia traded in Australia as Astra Pharmaceuticals Pty Ltd and as an entity of Astra AB.

The Manufacturing Division of AstraZeneca Australia is responsible for the manufacture, packaging and distribution of a range of therapeutic pharmaceutical products, including respules for asthma treatment, anesthetics in glass and plastic packaging, and a range of tablets. This division is also active in research and development work in packaging and participates regularly in worldwide clinical trials of pharmaceutical products. Involvement in a government incentive program (the Factor (f) program) operating in the 1990s enabled this division to increase its production and export capacity during this period with export trade growing from approximately $9 million in 1990 to over $94 million by 1999.

To assist in achieving increased production capacity, the Australian operation, located in a light industrial corridor on the fringe of the north western suburbs of Sydney, recently opened a new state-of-the-art manufacturing factory in which all Australian production takes lace. This has resulted in the Manufacturing Division becoming the largest sterile manufacturer in the Southern Hemisphere and a leader in blowfill seal technology. Blowfill seal technology allows for the filling of pharmaceutical products into soft plastic rather than glass, thereby increasing safety for end users of these pharmaceutical products.

AstraZeneca Australia employs more than 800 people at this site. Approximately half of these employees work within the Manufacturing Division and are employed as operators (193), laboratory staff, warehouse staff, engineers (quality and technical), validation staff, fitters and electricians. Manufacturing production at AstraZeneca Australia takes place over a 24-hour continuous production cycle which is divided into three shifts. Manufacturing operators are assigned to one of six cross-skilled production team. Each production team is led by a production manager. This team-based structure was introduced in 1995. Production teams are supported by teams from warehousing and laboratory support.

Recent and current challenges for AstraZeneca

To achieve its current position in the global pharmaceutical manufacturing environment, the Manufacturing Division of AstraZeneca Australia has been confronted by a number of challenges. Some of the strategies adopted to meet these challenges are discussed below.

Case studies of organisations with established learning cultures

Introduction of team-based organisational structure and skill-based pay system

Over the last decade, given the exposure of this industry to fierce global competition, all pharmaceutical manufacturers in Australia have been confronted by the need for greater productivity. In response, enterprises from this industry have been actively engaged in creating environments of continuous improvement built on strong relationships with customers, suppliers, unions and their workforces. Many of these manufacturers have also established skill-based pay systems which have allowed individuals to be recognised and rewarded for their skills, and created career path opportunities for manufacturing staff (McDermott 1995).

AstraZeneca has pursued this pathway. Since 1995 it has been in the process of developing and implementing a team-based structure along with a skill-based pay system within the Manufacturing Division in a bid to increase production and hence assist in achieving more competitive positioning for the organisation in Australia. Such structural change has allowed for the elimination of the charge-hand role and provided more production autonomy and upskilling opportunities for members of manufacturing teams. The change was also driven by a perception amongst senior staff that there was a need for employees to get to know 'the bigger picture of the enterprise and to break down a structure in which employees were stuck in their little silos unaware of the larger demands of production and their role in the total process' (Learning Systems manager).

At the start of the process of changing the structure of the Manufacturing Division and the attitudes held by employees, all staff attended a three-day seminar program designed by the training and development team of the Manufacturing Division. The aim of the program was to explain what the changes meant, and to help employees understand where they and their work role fitted into the new structure. This program was underpinned by the perspective 'If you understand yourself and how you are different from others you will work better in the team'. This introduction to the change process was followed up with a series of 12 meetings in which each production team considered issues associated with role boundaries required by the new structure, and what the increase in team self-management and the sharing of co-ordination roles resulting from the removal of charge hands meant for them as teams and for the production process.

This structural change was also accompanied by the introduction of a skill-based pay system. This system established a four-level skills framework for production staff. Remuneration was linked to each skill level. When the system was implemented all production staff members were allocated to one of the four levels according to the skills they had or were using. It was seen that a framework which clearly delineated the skills required at each of the four operator levels would better allow individuals to be recognised and rewarded for their skills. It was also seen as providing a framework for more coherent career progression for production staff based on skills acquisition and a basis for more systematic identification of training needs and the provision of training and performance improvement activities, skills development and multiskilling strategies.

This move to a skill-based pay system was reliant on the establishment of clear delineation of skills required for assignment to one of four specific pay levels. Over the past five years fourteen skills matrices for the six areas of production have been developed and further skill matrices are currently being developed.

The initial implementation of the team-based structure and skill-based pay system presented AstraZeneca Australia with some difficulties. Following the initial meetings an external consultant who had implemented skill-based pay in other organisations was brought in. Work began on developing skill matrices for the various manufacturing production areas for the purposes of assigning employees to various pay levels. In the initial phase of the development of the skills matrices, there was little attention to the development of an assessment system with detailed assessment criteria which could be used to determine skills levels and future skill acquisition needs of employees. This resulted in operational manufacturing staff having little idea about the requirements for progression through the

various skills and pay levels. These difficulties led to perceptions on the part of manufacturing staff of favoritism and inequity in the decisions being made by some production managers about assignment of production staff to various pay levels. With this initial lack of attention to detail there was also some difficulty in establishing the common skill groupings within the various manufacturing areas and linking them to the appropriate pay level.

Another problem occurring when this new structure was first introduced arose from insufficient attention given to certain groups of employees. For example, the organisation failed to think about the 'sterile operators' who were at the core of the organisation's manufacturing business. It also did not fully address the process of reskilling charge hands, whose jobs had been eliminated but who also lacked up-to-date process skills even though they were still being paid at the highest pay level (level 4). This seeming inequity caused considerable tension when the system was first implemented and initially was a challenge to establishing a belief amongst employees that the organisation recognised and valued skill acquisition and ongoing learning in manufacturing. One senior employee stated, 'I'm learning now how a big a driver the issue of pay equity is'.

However, now there is a general perception that many of these issues are being resolved and a detailed assessment of skills systems has been established and is being implemented.

Maintaining productivity and demonstrating a competitive edge and excellence to remain a manufacturing site in the global economy

Pressure for competitive manufacturing in Australia by this division comes from within the multinational company rather than solely from external competitors in Australia. As a multinational company AstraZeneca is working towards a model which establishes specific sites as 'centres of excellence' and which are responsible for manufacturing specified core products. This means that the range of products at some sites may be reduced and production moved to other sites if performance in the manufacture of those products falls or if a site is not seen as the most efficient AstraZeneca site for such production. The Australian division therefore operates in an environment of 'lean production' and strives for maximum efficiency. In recent months manufacture of ointment and jelly products which were previously produced at the Australian site have been moved to other sites managed by this multinational company. The Sydney site however has received increased work in packaging because of its capacity for packaging excellence.

Other drivers of this focus on lean and cost-effective production include:

❖ A major profit-leading product produced by AstraZeneca Australia has recently come off patent, and as a result market position with this product will be challenged when other manufacturers move into the production. Some new products are currently in the pipeline, but as yet not ready to market.

❖ Legislative change to the Pharmaceutical Benefits Scheme has reduced profitability of some lines and benefits once gained from the government-sponsored Factor (f) scheme. This scheme encouraged increased pharmaceutical production for export.

❖ AstraZeneca has been frequently in a position of filling backorders because of supply chain problems. Lack of capacity to readily supply products to consumers puts the organisation at risk of losing contracts.

Staffing

There is an ongoing need to attract and retain staff. Manufacture in this industry is regulated by the Australian *Therapeutic goods act* which requires that all operators are trained and have fairly high level of mastery of written and spoken English language skills. High standards in this area can pose difficulties in retaining employees who have fairly repetitive job positions. Policy supports the use of only permanent staff, but there is an ongoing need for the employment of casual staff (up to 20% casual staff) to fill orders. Casual employees require

training. Manufacturing staff turnover at AstraZeneca Australia is quite high, although there is some evidence that this turnover rate is falling.

Changing technology

The use of new technology for production, documentation and packaging is a challenge to AstraZeneca Australia. Change in these areas is often threatening for the manufacturing operators as it requires them to acquire new skills and potentially can lead to a reduction in manufacturing positions. Since the redevelopment of the current site and the introduction of new technology, AstraZeneca Australia has been in a growth phase and required increased numbers of manufacturing staff. However the organisation is moving into a stage where there is a need for increasing production with no increase in staffing levels.

The need to manage supply chain relationship

As in all manufacturing contexts, the logistics of managing the supply chain becomes a major determinant of effective performance by the Manufacturing Division. Production depends on the availability of raw materials and the capacity to store finished products. It is also influenced by consumer demand. Effective manufacturing depends on the capacity to produce the required amount at the time required. AstraZeneca Australia has recently introduced a program to examine and revise its supply chain relationships to maximise efficiency. This has involved all functions within the organisation as well as suppliers and consumers. Decisions made as a result of this project may ultimately require further changes for the Manufacturing Division.

Each of the above issues has variously impacted or continues to impact on the work in manufacturing at AstraZeneca Australia. In addressing some of these issues the Manufacturing Division has embraced a range of approaches which indicate that the organisation has shown a recognition of the importance of learning by both individuals and to some extent the organisation more generally. Some of the initiatives the organisation has taken are explored below.

Initiatives associated with the development of a learning culture

Roles of learning system facilitators

The Manufacturing Division of AstraZeneca is supported by a training and development (Learning Systems) team of five staff members who work within the Human Resources department. There are also specially designated sales trainers working with sales teams from AstraZeneca Australia with whom the Learning Systems team members have regular contact. Each member of the Learning Systems team working with the Manufacturing Division is assigned to at least one of the manufacturing production teams as an 'account manager'. A member of the Learning Systems team becomes the point of contact for information about training and development activities for both the production team and the individuals within that team. The 'account manager' is also the point of contact for the process of assessment for the attainment of higher skills and therefore pay levels. The trainer attends monthly team meetings and training meetings for the team. The production team manager contacts the Learning Systems 'account manager' when there are new team members requiring development, or when staff not sufficiently skilled to take on specific tasks within the production team are identified. The account managers then work with individuals directly or with the production manager to advise about learning opportunities to upskill those involved. One of the account managers stated 'Anything that comes up in the production team—we are the contact. It doesn't mean the Learning Systems person can always solve the problem but they can help in the generation of a solution'.

Operator development through skills matrices and assessment of competence

AstraZeneca Australia management accepts responsibility for ensuring that staff have appropriate training. The processes used in the manufacture of pharmaceuticals have become increasingly complicated, and management recognises that the lack of appropriate training is both frustrating and demotivating to staff. Given the nature of the industry, mistakes resulting from inappropriate staff training can be dangerous and costly and result in operators' employment being jeopardised. To strengthen learning and performance within AstraZeneca Learning Systems, staff have been involved in the development of the skills matrices for their production areas. These matrices specify the skills required by operators for performance at one of four manufacturing levels and the criteria then used to assess skills acquisition. Learning Systems staff have been involved in the development of training modules (some self-paced) to enable staff to acquire further skills. They also organise both in-house and externally provided training sessions for further up-skilling. This structure and the development of the skills matrices with clearly defined competencies and assessment criteria have been the catalyst for converting what existed as a training system to a competency assessment system. It has also fostered an increased sense of self-responsibility amongst manufacturing staff for their ongoing learning. There are plans for involving operators in the design of redeveloped skill matrices.

Induction programs

AstraZeneca Australia established an extensive induction program which operators undertake before moving into full-time work on the line. This 18-day learning program introduces operators to the manufacturing process in AstraZeneca Australia. The competencies developed in the learning units in this program are generally aligned with Pharmaceutical Manufacturing Competency standards for Level 1 operators although not formally linked to the national qualification framework. Operators in this program learn initially in introductory classroom-based workshops (about 28% of total course), and then through self-paced and self-starter modules for other learning units, followed by supported time on the production line. There is an induction module for every process team and one for general manufacturing process quality. These learning modules were designed by an external agency for AstraZeneca and are now regularly updated in house. Leaning Systems staff believe that the induction modules and learning program have helped new operators realise that they possess some knowledge about production as they move through the induction process. The structured learning experiences contained in the modules require new staff to ask questions of more experienced staff in order to complete the modules. This has given beginning operators the confidence to ask questions of more experienced staff. As soon as the learning modules are completed, the individual's learning is assessed and, when signed off as satisfying the criteria, employees can formally join the production line. This approach has enhanced the confidence and skill of new employees and has taken some of the pressure off the production managers, in that new staff have acquired some skills before they move to the production process.

Management development program for manufacturing employees

AstraZeneca Australia has also recognised the need to equip managerial staff with new skills for operating in this changing work environment. A leadership development program loosely linked with the performance management and appraisal system, has recently been established to develop managers who have often been promoted for their technical skills and moved into managerial positions which require new skill sets.

This leadership program, which was developed following extensive needs analysis with managers and senior managers who have determined the priority areas, is being offered in conjunction with Monash/Mt Eliza Management School. It is based on syndicate and individual work and learners working with the support of mentors from either manufacturing or from human resources areas. It involves on-site workshops, group and

individual assignments and learning projects that support the business needs. The program aims to give managers the leadership skills the company expects of its leaders. As part of the program participants undertake a group project addressing a problem or an issue which has surfaced through a regular organisational climate survey conducted in the organisation. Solutions generated as part of this project will be presented to senior management and either taken on board, or if not acted upon, reasons for inaction are explained. This program is running for the first time and the participants have been specially selected. Once the first program is finished it will be reviewed and further developed.

Gain sharing

A further initiative which the organisation sees as contributing to building both a culture of ongoing learning and improving performance is a plan to implement a gain-sharing system, which has recently been approved by the Board of Directors. The gain-sharing system is seen as a final element in the achievement of a high performing organisation. One senior manager stated:

> We have a flexible enterprise award that allows us to use our resources to the best use, a teams approach which puts the control of the process back to the people who know most about it. The final system then is the reward for excellent performance.

This system will allow teams to receive bonuses on the basis of improvements in performance. Teams will be monitored on their own performance on three sets of measures to determine improvements. The more improvement teams make, the greater their share in gains achieved. As part of implementing the gain-sharing system, more use will be made of data gathered as part of the quality system. Teams will be provided with data on issues such as a delivery on time, quality and cost utilisation for analysis and ultimately as a basis for improving performance and sharing gains from improvements they make.

Quality systems and information sharing

The quality system is also seen as integral to developing learning within AstraZeneca Australia. All information is managed though the system. AstraZeneca sees itself as very good at collecting data and is currently working on strategies for more extensive use of the data collected. With the refinement in team structures has come increased use of data collected by teams. Teams analyse the data provided through the quality process in permanently established team meetings dedicated to overcoming performance problems. At these team meetings managers report anything relevant; for example, backlogs, or 'basically anything that is of value to the team' and production teams discuss ways of resolving problems.

Ethos of self-responsibility for learning

With the implementation of both the team-based structure and the documentation of skill matrices and clearly designed skills assessment criteria, there has been an attempt to establish a view amongst operators of the need for them to take more responsibility for their own learning and skill development. The approach to development enables operators and other staff to nominate specific training programs which will enable them to complete jobs more effectively or attain defined skill levels. This approach also allows employees to seek assessment of skills they have gained informally from working with others on the line or completing tasks that require more advanced skill sets. Team members have had opportunities to determine in their teams which tasks that they need to be given by production managers, areas or tasks about which they should consult with managers, areas which they are entitled to negotiate with managers, and areas or tasks which they are entitled to or expected to manage themselves.

The performance management system for non-operational staff has also matured and increasingly, staff are becoming familiar with the process of determining the areas and objectives they should establish for themselves in their ongoing development.

Other projects impacting on building a culture of learning

One relatively recent project, which has potential for furthering a culture of learning within AstraZeneca Australia generally, as well as in the Manufacturing Division, is the supply chain project. This project involves mid-level managers, 'people that on a day-to-day basis had real input into making decisions for the supply chain' working in cross-functional teams looking at all dimensions of the supply chain process. Use of such cross-functional teams for this type of project was quite innovative for AstraZeneca. While the benefits of cross-functional working are directly supported by senior management, there is a recognition that 'many people are entrenched in the vertical structure and it is going to take time to change'.

Supply chain stakeholders across AstraZeneca Australia are participating in workshops that give an overview of a supply management plan. These workshops are the first step in the roll-out of the planning process that will incorporate all locally processed and imported products. The use of cross-functional teams in the planning and training process has been very effective. Role-playing activities which require participants to take on the position of representing a function other than their own are also seen as contributing to the effectiveness of these initial planning sessions by heightening participants' awareness of challenges being faced by those in different functions within the organisation. The Supply Chain Implementation Manager states, 'This was a real milestone in the learning process. It's just getting these people together and getting them to stand in each other's shoes that has allowed us to learn quite a bit. People are now realising this is part of the way we do business that we can't just focus on the improvement that can be made in one department'.

The Supply Chain Implementation team is currently developing a learning module on supply chain planning that is to be rolled into the learning centre induction program offered by the Manufacturing Division. This program will explain what the supply chain is, the role of the employee within the supply chain and the interdependency of various organisational functions within the supply chain. The project has also involved extensive contact with suppliers and has resulted in the establishment of new service level agreements with suppliers. It has also involved more contact with customers.

Outcomes

As a result of the learning systems that have been established, the Manufacturing Division of AstraZeneca is witnessing a growing culture of learning. Since the development of the competence assessment system and the establishment of Learning Systems staff as account managers working regularly with specific teams, there has been a significant increase in the number of employees moving up skill levels and receiving higher pay. In the past six months there have been 19 skill level movements. The Learning Systems manager reported,

> *Employees will now come and ask to be assessed for higher skills. They talk about assessment. They talk about assessors. They know what their training plan is and who they have to speak to. They have a different attitude to the company. We are really trying to address with employees that it is their responsibility to learn and they are learning everyday, from each other. Most of the training plans do involve another team member. They have a different attitude to the company.*

The achievement of this position has been challenging and time-consuming. Staff of the Manufacturing Division of AstraZeneca Australia realise there is further work to be completed with the skills matrices development. They also recognise that there is a need to ensure that there is equity for all staff in pursuing skill development and assessment. Many operators at AstraZeneca expressed a belief that the organisation valued and recognised ongoing learning on the part of the operators. They saw such learning as being rewarded through the skill-based pay system and as providing them with a feeling of satisfaction in their work. Most operators interviewed felt that they had opportunities to participate in the decision-making, and saw that the team structure gave them opportunities to participate. There was a fairly general view that management 'does listen to us'.

Many operators spoke of the workplace as being a place where you 'never stop learning', a position the Learning Systems staff have been keen to emphasise with the implementation of

the skills assessment system, which allows for the assessment of skills acquired by learners, even if informally and without attendance at formal training classes. Several also commented on the new training and development structure using account managers as providing more opportunities to learn.

Despite what could be seen as a positive response to the learning opportunities and structures, there was some evidence of a perception that some operators gained more opportunities for attendance at training, or undertaking more skilled tasks than others, suggesting issues remained about perceptions of favoritism and inequity. Such perceptions were not widely voiced and seem to be more linked with specific production managers rather than generally spread across the operating staff. While staff felt comfortable to voice such concerns, other staff members just as vociferously argued that if this was the situation it was the responsibility of individual staff members to voice such concerns to their manager or account manager.

Retaining staff remains a problem at AstraZeneca. This is seen as a major concern for the industry generally. Since the implementation of some of the changes, retention rates at AstraZeneca have improved and there is some evidence that employees who, having left the organisation for 'greener pastures', are returning to the organisation and acknowledging the advantages of being employed in manufacturing with AstraZeneca Australia.

Data from a climate survey, organised by an external contractor, have revealed that employees are generally happy and that AstraZeneca Australia compares favourably in terms of organisational climate when benchmarked against other similar organisations also participating in the organisational climate auditing.

The Manufacturing Division manager recognises there are still areas for improvement, given the comparatively short time frame for many of the changes, including the merger and move to a new structure. He indicated that, while there are still performance issues to be addressed, without the new systems being implemented and change in culture, AstraZeneca would not have been able to attain the position it has currently achieved.

Similarly, projects such as the Supply Chain Implementation Project provide indications of a learning culture that expands beyond the Manufacturing Division in that strategies are being introduced to increase employees' awareness of the roles and challenges faced by various functions within the organisation. Greater contact with customers and suppliers has reduced false perceptions about practices that have not been beneficial for the organisation. While the impact of such a program is not evident among floor operators, increased collaboration, team working and decision-making based on data supplied as part of quality processes, are common practice and evidence of a learning orientation.

Conclusion

A commitment to establishing learning opportunities for production staff as well as managerial staff could be seen as a feature of the culture of the Manufacturing Division of AstraZeneca Australia Pty Ltd. Such commitment is seen in the provision of development opportunities, through the introduction of a skills assessment system, a substantial induction program, and the recently implemented management development program. These opportunities while supported by what could be seen as orthodox training programs, are largely reliant on learning through work activities.

There is a major focus on learning and development and performance improvement through access to data and through team dialogue about performance problems. In this environment an ethos of self-responsibility for both production performance and ongoing learning is emerging. It could be argued that, through the structures provided, operators within the Manufacturing Division are being encouraged to build their technical skills and at the same time to challenge their working processes based on the data they are receiving about production. Managers who require new skills sets to work within the new team-based culture are given opportunities to work with various divisions of the organisation to form new managerial skills. While the dominant culture within the Manufacturing Division of

AstraZeneca could be seen as performance-driven and the regulatory environment acts as a trigger for some aspects of skill formation for this enterprise, this division is displaying a commitment to learning as a strategy for achieving desired organisational goals. This can be seen through the structures the division has established and is becoming apparent in the new attitudes of employees within the division.

The Royal District Nursing Service

Abi Thonemann

About RDNS

The Royal District Nursing Service was established in 1893 to provide free nursing care for people in their homes and in the community. Today it is the largest provider of home and community nursing services in Adelaide. In recent years the RDNS has been transformed into a sophisticated corporate enterprise determined to expand and be a leader in the provision and co-ordination of high-quality health care, education and research to the community.

Currently RDNS has 294 full-time employees (82% nursing, 18% management and administration) who work in three regional offices (central, northern and southern), 14 clinics spread around the metropolitan area and a new business centre (headquarters) located at Glenside, just east of the city. Marree Hospital is the only non-metropolitan service located 800km north of Adelaide.

The services provided by RDNS nurses fall into eight programs: home and community care/aged care; post-acute care; wound management; disabilities; palliative care; HIV/AIDS, continence and diabetes. Within each of these programs the RDNS is involved in many joint projects with general practitioners (GPs), community agencies, hospitals and health care providers. The RDNS has a strong tradition of working collaboratively with other partners in the health sector.

RDNS cares for about 4000 people every month. With 1000 new admissions in each month, the median length of stay being about 35 days. Services are provided only to people that need professional nursing care and there is no waiting list. Most clients are elderly (65–70%) and the majority of nursing action is wound care (47%).

RDNS is a charitable non-profit organisation governed by a board of directors. The RDNS Board appointed Bill Taylor in 1996 to bring strategic thinking into RDNS management. A shift toward a more co-operative style of management and leadership has occurred. Valuing staff and seeing staff as customers became an emphasis in annual planning processes and projects, evident in staff participation in strategic directions and consultation regarding the introduction of fees for the service in July 1999.

In 1996 the Royal District Nursing Service Chair in Domiciliary Nursing was established. This is a joint position with the Flinders University of South Australia. The main focus is to develop a research agenda which has the potential to improve the health of the community and at the same time be responsive to the needs of RDNS. The research program is driven by the concerns and areas of interest within the RDNS. One of the key strategies is to involve RDNS staff in the research process of every project. A research plan developed in March 1996 has three domains: evidence-based practice, social health issues and evaluation.

Recent and current changes

Funded by a cost-share agreement between the SA Department of Human Services and the Commonwealth Health and Community Care (HACC program), RDNS is in a category considered 'the poor cousin of acute care'. Demand for its services has increased and has coincided with substantial changes in public sector funding designed to cut costs to government. These factors have contributed to an intensive change process at RDNS in a bid

to maintain its ethos of high-quality care with a personal and individual emphasis. In the words of the CEO, maintaining the quality of care to clients has come down to knife-edge financial management.

Over the past few years many structural changes have occurred, including the introduction of new administrative systems, expansion of commercial activities and the re-organisation of the management of nursing practice in the three regions. New administrative systems have included:

❖ the devolution of budgetary responsibility to regions

❖ the relocation of RDNS headquarters to a new business centre at Glenside

❖ the establishment of a business development unit

❖ the introduction of a client visit management system (CVMS) for managing client data

❖ the development of clinical pathways for the various client categories as a basis for attracting funding

❖ the introduction of new technology such as mobile phones, computers, email and a centralised high technology call centre, Healthcare Access, located in the business centre

❖ the centralisation of recruitment

The expansion of commercial activities has involved supplementing HACC funding by the introduction of client fees and the further development of commercial projects, such as consultancies. The re-organisation of the management of nursing practice in the regions has included direct care functions in specialist areas being delegated to field staff, and a review of the career structure for senior nurses.

There has been some resistance to some of these changes including:

❖ the introduction of fees—many staff and other community health provider organisations believed the burden of fees should not fall on clients, many of whom are elderly people on low incomes

❖ resistance of senior nurses to become more entrepreneurial or to become more involved in regional management

❖ resistance to the Human Resources Manager, a non-nurse, recruiting nurses for regions

Much of this resistance has dissipated largely due to the positive effects stemming from many of the changes. For example, fees for service have been successfully in place for a year and client surveys reveal that the vast majority of clients are happy with fee administration. Further, the Human Resources Manager has the trust of the regions to recruit staff without their presence on interviews.

The Human Resources Manager believes that a shift in the dominant style of communication in the organisation away from an autocratic style to a more open and co-operative style has worked in the organisation's favour. The shift in communication style, as well as the centralisation of recruitment, has helped to give priority to critical processes and engender faith in the organisation through consistent practices. Previously, conditions of employment and approval for leave sometimes depended on rapport between individuals instead of equity.

RDNS has a reputation as a caring employer and an exciting organisation that offers learning opportunities and a supportive environment and values staff input into the direction of the organisation.

This is a place in which people are happy to work and are proud to work and when you ask nurses in the old management regime if they were proud to work at RDNS, yeah they were, but they were proud to work at RDNS because of the nursing they were able to do. Now I think they have a very different model where people say, I'm not only proud to work here but hell it's exciting to work here. This is an organisation that people are knocking on our door to join. That's an incredible benefit.

Communication at the RDNS between clients, nurses and health care providers has been dramatically improved with the development of the call centre, a one-stop-shop for all

information relating to clinical care, nursing visits, fees administration, complaints processes and referrals. Previous to the introduction of the call centre all inquiries to the service went through the three separate regions.

This arrangement was deemed unacceptable as telephone and fax enquiries were not being dealt with adequately. Clients and health care partners, such as doctors and other professionals, were sometimes waiting on the phone for more than 10 minutes to speak to someone who could assist them.

The call centre has centralised RDNS communications, helped to unify operations by providing consistent high-quality telephone service, improved the responsiveness of the organisation to its clients' needs and highlighted technology as a key to organisational efficiency.

Initiatives that have contributed to the development of a learning culture

❖ strategic orientation toward partnerships and alliances for co-ordinated care

❖ comprehensive planning and consultation prior to the introduction of fees—winning support through process

❖ development of a call centre

Strategic orientation toward partnerships and alliances for co-ordinated care

The CEO has a motto 'you can't go wrong if you build on client interaction' and RDNS is committed to the creation of partnerships for co-ordinated care on the basis there is much room for improvement in health care provider cohesion and co-ordination. According to the CEO, the health care sector urgently needs to learn how to co-ordinate its services to provide continuity of care, which is a key factor in dealing with elderly people.

Currently, it is not unusual for a client to complain at the end of two weeks that they have seen a different nurse on every visit. The RDNS is not alone in this and the CEO believes community services are at a threshold. 'For years they have been characterised by their variety of services, their mix of disciplines, their constant complaints of being overwhelmed by demand and their "just do it" mentality.' He has called for more cohesion and co-ordination between health care providers otherwise current trends will guarantee the community is in a significantly worse position in the future.

Stemming from a need for more cohesion and co-ordination between health care providers, the RDNS seeks to create partnerships and alliances with health care providers. This is reflected in a number of RDNS projects and activities. Currently, clinics throughout Adelaide are being expanded from 14 to 18 and are adopting a primary health care focus. Working in close partnership with GPs could 'significantly extend the range of services available to patients, particularly on care planning and case conferencing'.

The high-technology call centre, upgraded to a 24-hour service, is also the basis for a promotional drive to persuade other agencies to share referral and enquiries systems with the RDNS so that they can operate from a single number. There is a capacity in this strategic orientation for the learning ethos to be carried to health provider partners and to create synergies for cross-fertilisation of learning between providers. This is learning in line with the purpose of the organisation—to maintain a customer focus and improve clients' health outcomes. Through this strategic orientation toward partnerships and alliances for co-ordinated care, the RDNS is committed to facilitating relationships from which its clients can only benefit in terms of continuity of care. Although the precise features of these relationships are yet to be realised or defined the RDNS is in a position to identify, capture and develop new capabilities when they arise.

Comprehensive planning and consultation prior to the introduction of fees—winning support through process

The board reluctantly decided to introduce fees for RDNS services in July 1999, following an overwhelming increase in demand for nursing services in recent years (30%). In addition, the board was committed to a fee arrangement that did not disadvantage those who could not afford to pay and a fee waiver process was incorporated. However, the notion of fees for RDNS services, with or without a fee waiver process, went against the grain of the organisation, respected for over a century for providing vital services to the community free of charge.

On the side of the organisation in its bid to introduce fees was the reality that its 'no waiting list' policy was at risk unless fees were introduced. The RDNS and its staff pride themselves on their ability to provide care for anybody who meets the admission criteria and is in need. The threat to the 'no waiting list' policy was a powerful factor in enabling the organisation to justify the financial hardship it may cause clients by charging fees. Nonetheless, many staff remain opposed to the concept of fees for the reason that it can places stress on clients, many of whom are elderly and on low incomes.

Comprehensive planning and consultation around the introduction of fees began between RDNS and the Office of the Ageing in 1997 and eventually involved all stakeholders. A public-consultation phase seeking client, carer, service provider and community views on two fee options started on 14 September 1998 and concluded on 31 October 1998.

A consultation paper was developed in collaboration with nursing staff and mailed out to all existing RDNS clients seeking their views on two fee options. The paper was also provided to new clients admitted to RDNS during the consultation period and to a wide range of service provider partners and other health and community services, including hospitals, divisions of general practice and government.

The paper sought, as simply as possible, to outline the key issues regarding fees. Articles were also included in some service sector newsletters. The aim was to gain views from as broad a base as possible to inform further consideration of the issue. Some media briefings were also undertaken.

Clients were invited to return a page of the paper to RDNS noting which of the fee options they preferred and any other comments they wished to make. Also, clients were able to ring a special fees hot-line number to talk to a staff member about the issue. A question and answer paper was produced that contained more detailed information about fees and was provided to clients and community health service providers upon request. The information in the consultation paper was available in five community languages other than English and interpreter services were also available for clients and their families who had difficulty reading information.

Input from RDNS staff to the consultation process was sought through regional representatives on a steering committee and field staff were fully briefed by the CEO and business unit staff at meetings and through a fortnightly newsletter which accompanies payslips.

Twenty-four agencies, organisations and individuals representing service providers registered their opposition to the introduction of fees on the grounds it would negatively impact on their own services or add to the stress on clients. However, client reaction was supportive of the need to introduce a fee. Ninety per cent of the 1400 clients who responded to the consultation were not opposed to it. The fee amount is similar to a subscription:

❖ $20 every four weeks for clients who have a pensioner concession card or a health care card or equivalent income

❖ $40 every four weeks for all other clients

for the full range of services a client receives in the four week billing period.

In the RDNS client/carer survey conducted in October 1999, 90% of clients indicated that they were either satisfied or very satisfied with the way RDNS was administering the fee system; 90% of clients were satisfied or very satisfied with the fee waiver process. The call centre, operational in May 1999, assisted in the introduction of fees as it was geared to handle all inquiries including the vast number related to the first billing period.

One nurse, an RDNS employee for seven years, said she 'did not enjoy telling people they are going to be charged for a service they really need and can't afford'. However, she understood the introduction of fees to be for the 'greater good of the whole'. Further she felt that the introduction of fees would not have worked two years prior to its introduction in July 1999.

> I'm pleased that it happened [recently] and not years ago. I think two years ago, it could have been much more difficult than it was, because I think the organisation has come a long way as I said in the last two to three years. [Management] actually appreciated that they needed to be informed and their trust gained before they made such a huge impact [with fees introduction].

The process of the introduction of fees is a good example of a learning culture in action: valuing staff, involving staff, and recognising their contribution, working co-operatively. In this way, the introduction of fees helped to bring the learning culture at RDNS to the front of the organisation so that staff actually became conscious of RDNS as a learning organisation. Importantly, the process of fees introduction affirmed a culture of open and honest communication and a commitment to learning which was modelled and supported by the organisation's leaders.

RDNS believes that the fees model could be applied more broadly across the community care sector. Should other community care providers introduce fees, RDNS will work with them to assist the development and implementation process and will discuss fee-sharing arrangements to ensure clients are not disadvantaged.

Development of a call centre

Healthcare Access, the HealthCall Centre, has been a catalyst for learning for the RDNS, its staff and clients, and marks the beginning of a new era for the organisation. The birth of the call centre has heralded a closer connection between the organisation and its environment and planted the seed for future growth of RDNS services in line with community needs. Healthcare Access processes calls for RDNS business and the business of other health-related organisations.

As a fully automated electronic facility, all performance is measurable. Performance benchmarks have been set according to industry standards and call centre operators receive regular feedback on the service they provide over the phone. Although operators were a little apprehensive about working in this environment at first, it has been a benefit because it has provided evidence that the service delivered is of a high quality. Operators obtain satisfaction from knowing their work practices are efficient and customer-focussed. For example, a standard call centre industry performance measurement is that 85% of calls be answered by a call centre operator within 30 seconds and RDNS call centre staff have exceeded that standard.

Call centre staff took part in developing the quality standards for customer service so they own the process that motivates their learning. These standards are taken to a client reference group for customer's input, and this facilitates client learning. All of the call centre staff have undertaken an external communications course and are regularly asked for feedback from the call centre co-ordinator who ensures the quality of service to internal and external customers.

A complaints process through the call centre and the process of 360-degree feedback is a valuable way for clients to give feedback on the nursing service, a process they feel more comfortable with now fees apply to the service. In this sense the introduction of fees has caused spin-off learning for clients, as they become upskilled via the complaints process, and staff as they benefit from knowing the complaints and identify how to prevent them.

The call centre is hailed as a great role model for the organisation. Other departments have been encouraged to look at the process of performance measurement and to identify areas where they can look at their core service and design ways of improving customer focus by setting standards to measure themselves against. Ongoing feedback on call centre staff performance is accepted. This is something that the RDNS is trying to develop throughout the organisation. In the words of the Quality Improvement Manager,

> *The call centre can tell you what sort of level of service to expect, that's something other departments haven't been able to do so it's giving us a whole new picture about what is internal customer satisfaction.*

A nurse was recruited from the field to become the call centre manager and provided with the training, support and encouragement to do the job. This reflects the organisation's commitment to providing a culture of learning where staff are encouraged to learn by experimentation and feel free to learn from their mistakes.

> *I certainly wasn't confident taking on that project but the RDNS is very encouraging. We have achieved so much in the past year from making mistakes and learning and we've been supported through it. The organisation gives lots of positive feedback along the way.*

The call centre is a symbol of ongoing commitment to learning at the RDNS. Through the call centre the organisation has increased its customer focus by making communication with clients quicker, easier and more responsive to client needs. The process has been driven by nursing staff recruited into the centre who have learned how to manage it as it has evolved. These initiatives epitomise a learning culture where the organisation is encouraging its employees to learn to trust that the resources, time and opportunity to make mistakes will be provided in order that outcomes can be achieved. In nurturing trust in the organisation staff self-confidence is boosted and they are inspired to learn outside their current limits and self-direct their learning.

Outcomes

The RDNS learned the value of broad consultation from the introduction of fees and applied it to the strategic planning process. The exercise of comprehensive consultation with clients and staff, seeking staff input to inform the process, and consistent efforts made by the CEO to attend regional meetings and respond to nurses' concerns about the fees engendered trust in the RDNS leadership.

In April 1999 the RDNS Board decided that, in place of its annual strategic planning process, it would commence a longer planning process aimed at setting strategic directions for 2005. Focus groups and interviews with staff and all of the service providers and stakeholders that RDNS has contact with took place in April and May, followed by intensive planning sessions in June. Invited keynote speakers from acute care, aged care, general practice, co-ordinated care and the government contributed to the discussions. The following set of strategic directions provide the framework for board strategic thinking and decision-making up to 2005:

❖ secure core service contracts

❖ create partnerships and alliances for co-ordinated care

❖ provide expert and comprehensive care based on client needs

❖ maximise technology use

❖ be a centre of knowledge for community care

The RDNS Quality Improvement Manager conducted a gap analysis to identify gaps between standards and practice, which fed into strategic planning in April 1999. This analysis identified principles which would assist the organisation to stay on track in terms of its ability to satisfy accreditation with the Australian Council of Health Standards Evaluation Quality Improvement Program.

These principles relate to what should be happening on a daily basis at the RDNS in order for it to achieve its goals and strategic directions. The development of these principles was undertaken to give simple and clear meaning to all RDNS activities and establish good systems. With every strategy there is the approach of achieving quality outcomes by making the principles inherent. The principles are:

❖ comprehensive planning

❖ valuing staff

❖ customer focus

❖ learning organisation

❖ documentation

A copy of the principles went to every staff member in September 1999 and posters were displayed around the organisation to reinforce their value. Articles about the principles appeared in fortnightly newsletter, *Exec files*. The Quality Improvement Manager believed that much of what the principles related to was already happening in the organisation—it was just a matter of 'tying it together'.

A key aspect of the gap analysis was to encourage departments within the RDNS to look at ways of measuring their performance standard against their own expectations of what they could achieve. The call centre is a good role model for the organisation in this sense because, as an automated electronic department, it can measure its performance in terms of client satisfaction and actually become more customer-focussed. Similarly, IT has developed a performance standard in that they can inform other staff of how long it will take to respond to particular inquiries.

The involvement of staff in the formulation of strategic directions is explicitly recognised as a valued activity by the principles, which feeds into the development of staff self-confidence in learning and confirms that the organisation is serious about staff contributing to policy decisions.

As a result of systems development at RDNS in recent years, there is a much greater understanding of IT and its value to the organisation. IT issues are now factored into decision-making much earlier; for example, IT is now included on the working group to set up new clinics which formerly would have included a regional head, finance, operations manager and occupational health and safety staff. The benefit of involving IT early in the process is that the organisation can get a handle on issues that need to be solved when planning projects.

Learning at the RDNS is linked to its purpose as a health care provider; hence an inherent focus on personal care of a high quality, its goal to attract health care provider partners and its goal to attract funding from other sectors, that is, the acute care sector. As a result of the commitment to learning at the RDNS, evidenced by fostering a culture based on valuing staff and encouraging trust in the organisation, staff have developed the self-confidence to learn outside their current limits, self-direct their own learning and acclimatise to fast change. One nurse, with seven years experience at RDNS expressed her approval of the changes.

> I think there's been lots of many good changes that allow you to think for yourself and work things out and develop your own process, it's not as prescriptive and I think sometimes for new staff a prescriptive way of doing things was comfortable, but the system, it's getting bigger, and you can't be that prescriptive when things are moving fast.

Currently at the RDNS, feedback and performance measurement appear to be a burgeoning area of learning, and 360-degree feedback, which is part of the principle of comprehensive planning, emphasises the value of learning from experimentation or mistakes. It is clear from the interviews that feedback on work practices provided in the context of open and respectful communication is closely linked to staff self-confidence and the development of efficient and effective practices.

Conclusion

RDNS exhibits aspects of models of a learning organisation suggested by Watkins and Marsick (1993, p.96) and Pedler, Boydell and Burgoyne (1988, p.89). These models have in common an emphasis on collaboration instead of competition between internal units or divisions, empowering people toward a collective vision, and a focus on valuing staff. RDNS appears to be engaged in both adaptive and generative learning (Argyris 1987; Leonard-Barton 1992). Adaptive learning is demonstrated by its fostering of a supportive culture for staff to learn how to improve efficiency in established systems and frameworks by experimentation. Generative learning is demonstrated in the way it has opened itself up to capabilities outside its current mission of metropolitan home, clinic and community care to pounce on opportunities for growth and expansion. RDNS also engenders a blame-free culture, upheld as a primary characteristic for a learning organisation by Denton (1998, pp.90–1). Penetration at the RDNS of a learning ethos seems substantial and ongoing.

Banrock Wine and Wetland Centre

Peter Willis

The organisation: BRL Hardy

BRL Hardy is a publicly listed company formed from two related mergers. The first was the merging in 1982 of Berri Co-operative Winery and Distillery Limited with Renmano Wines Co-operative Limited to form Consolidated Co-operative Wineries Limited. This was then merged with Thomas Hardy in 1992 to form BRL Hardy.

According to its prospectus and annual report, BRL Hardy has approximately 22% of Australia's total wine market based on litres sold, making it the second largest vintner and vigneron of wine in Australia. The company has eight vineyards and eight wineries in Australia and one vineyard and one winery in France. It has also four bottling and packaging plants located in Australia. It also has a majority shareholding in a United Kingdom wine merchant and importer.

Currently there are approximately 1400 full-time and casual workers in the company. There are organised training programs for employees particularly in occupational health and safety as well as other general and job-specific training. The company has an active equal opportunity program and an active policy to assist women to enter and remain in the workplace by use of flexible working arrangements, although currently few women are employed in the higher levels of the company. The Company divides its production and distribution structure into five sections: grape supply, wineries, packaging and bottling, distribution, and sales. These are directed by a central management group which has oversight of the activities of the company through their managers on the team but has direct input into the company's marketing program. The senior management group consists of a managing director, an international sales manager, production manager, legal and financial managers and operations manager. Each manager heads up a team of staff distributed over the company's administration centres, vineyards, wineries and bottling plants.

As a successful international company concerned with production and sales who had recently invested heavily in environmental protection and education as a major component of its marketing, BRL Hardy was invited to join the learning culture project. This was done through an integrated project of environmental restoration, ecological education and wine marketing based at the Banrock Wine and Wetland Centre on the vineyard property of the same name situated on the Murray River about three hours drive north of Adelaide.

It was obvious that at the executive level of this company there was a learning culture which had created the conditions in which the directors and their shareholders learned a novel approach which although initially expensive, and therefore some risk to a recently capitalised

operation, appeared more certain in each subsequent year, to reap long-term commercial and environmental benefits.

This strategic combination of successful wine production and marketing with environmental protection and development appears to be the fruit of a particular kind of learning culture espoused and promoted by its senior executives and it was on these that the research inquiry was focussed.

Challenges to the company and learning responses

As a publicly listed international company concerned with wine production, marketing and sales, the company faces considerable internal and external challenges. The internal challenge for the company with its history of recent amalgamations and downsizing has been to cultivate what the Managing Director called an 'attitude of adventure' and personal entrepreneurial responsibility in the staff. This was to be achieved by giving staff a sense of their place in the whole company enterprise and by making a space for ideas and suggestions to be tried. Trying and failing was also acceptable provided the failure was swift and swiftly corrected. From this standpoint the culture of learning in the company appeared to be more a culture of acculturation promoted by the visionary eloquence of the Managing Director and his team who invoked the culture of adventure at every opportunity. Learning of this kind was, understandably largely about encouraging staff to fit into the culture of a competitive organisation, contribute to its productivity and share its benefits.

The external challenges were to compete in quality internationally with products of equivalent cost; to maintain and extend marketing reach and penetration into overseas markets and to provide efficient distribution of products once they were ordered. These functions were pursued within three characteristics of the contemporary marketplace. Firstly, that as a global company it needed to function on the grand scale was required at that level with large outlays on global marketing followed by global delivery and retailing. Secondly, that as a publicly listed company it is challenged by its shareholders to meet objectives and return dividends as planned. Thirdly, that through the power of the media and the environmental lobby, all international companies with a primary production element in their portfolio need to protect their public image as a environmentally responsible corporate citizen by having active environmental protection policies and strategies.

In his interview, the Managing Director said that he and his team had adopted three strategies which generated a huge jump in the company's sales in the last few years. Firstly he had insisted that as many as possible of the different wine styles and brands be submitted to peer assessment at national and international wine shows. He pointed out that success at wine shows validated the company's market claims for the high quality of their products. The second strategy was to develop an effective worldwide marketing program which would extend the reach and penetration of the company's marketing messages. Globalised marketing favoured the establishment and promotion of identified brands with a specific name and badge which could capture the imagination of consumers. At the same time as promoting sales of the badged product it would also highlight the company's name. Specially badged brand items needed to be available in large quantities with good quality control and provided the leverage to justify large amounts spent on their promotion. He pointed out that the company had an excellent production and distribution system already in place and was moving rapidly to the stage where the huge orders coming from retailers in Britain and America could be handled efficiently. Large international orders were always the aim and these had been increasingly coming in.

The Managing Director saw marketing as central to the ongoing success of the company. As he saw it, the marketing team was the most challenging learning environment since what had to be learned was always something new. Marketing was essentially risky and innovative and demanded those concerned to learn to be different, to link things that had not been linked and see things that had not been seen before. At the same time marketing needed to be responsive to the real issues and interests of potential corporate and individual consumers.

The following case study of the ecology and marketing innovation pursued in the development of the Banrock Wine and Wetland Centre points to a particular kind of learning culture—one that is not about learning by being taught or even by being shown how to do things directly or indirectly, but rather what was referred to in the introduction, as enterprise action learning. This is a form of learning pursued in a group, concerned with learning projects to do with some work-related or civic enterprise. It involves collaborative engagement with the real-life challenges and with the ideas and interpretations of these by other team members.

Following the considerable success of the wetland venture measured in sales returns and the public raising of the good name of the company as a pioneer in environmental protection and restoration, the company now sponsors similar wetland operations in Finland, The Netherlands and Canada in conjunction with local environmental groups involved in wetland preservation. The company's involvement in Finland's Liminganlahti Bay was recently acknowledged by the World Wildlife Fund as a good example of new solutions that arising from the view that meeting people's needs and conserving nature are compatible, rather than conflicting, aims. This involved significant innovation and represents an interesting example of action enterprise learning. The following explores some of the processes through which it came to fruition.

Initatives associated with the development of a culture of learning

BRL Hardy in its planning to market 'Banrock Station Wine', decided to expand and build on the environmental restoration work it was doing at the Banrock Station. When it was purchased and developed as a major vineyard, the property had been significantly eroded through uncontrolled sheep farming particularly along the river frontage. In addition, the lakes and billabongs on the property linked to the Murray were infested with European carp which destroyed native fish and water plants.

The company had already been working with Wetland Care Australia particularly on the section of the Murray river which ran through Banrock and the wetland surrounding it. Wetland Care Australia has spent many years in agricultural areas working to raise ecological awareness and to protect and revegetate eroded regions. It has a particular interest in the parlous state of Australia's greatest river and seeks to establish ecological partnerships with landholders.

BRL Hardy was persuaded by its Managing Director in association with the international marketing manager to integrate the existing partnership into the marketing plan they were developing for the new Banrock brand wines. The extensive global publicity planned would sell the wine and raise ecological awareness. A designated portion of the return from these wine sales would go to WetlandCare Australia.

To implement this strategy, the company decided to do two things: firstly, it would build an interpretation and marketing centre on an elevated bluff overlooking the Murray River and adjacent wetland and secondly, it would recruit an environmental scientist and community educator to head up the environment and wine marketing program based at the centre.

The Banrock Wine and Wetland Centre

On 6 February 1998, BRL Hardy opened the Banrock Station Wine and Wetland Centre. Approximately a year later, on the 26 of May 1999, the Governor of South Australia, Sir Eric Neale opened a six-kilometre environment trail which starts and ends at the interpretation centre. A year later again, in the middle of 2000, Banrock Station Wines—the subsidiary group within the company responsible for the interpretation center—was awarded the Prime Minister's Australian business award for environmental leadership. Within the next few months an environmental boardwalk with bird-watching hides is to be constructed to extend the environmental trails over the wetland. This will be jointly sponsored by the SA Government and BRL Hardy.

In expanding the ecological action of revegetation and carp eradication being carried out in conjunction with Wetland Care Australia, over a million dollars was spent to set up the large purpose-built interpretation centre. It was built as a first-class facility and an innovative framework for the Banrock brand.

The interpretation centre was designed and built to integrate ecological sensitivity with striking design. It was powered by solar panels and oriented to maximise natural ventilation in the fierce Mallee heat. Posters mounted on the walls name the animals and birds and trees of the mallee eco-system. Visitors are encouraged to walk the environmental trail and enjoy spectacular views over the Murray wetland. They can sit and enjoy a light meal, with a glass of the Banrock Station wine on display which they can purchase at the bar or cellar door.

Handouts explain the strategies put in place at the station (which has more than 200 hectares of vines) to revegetate the Murray banks, improve the wetland and ensure maximum ecological care in the husbandry of the growing vines and disposal of waste water.

Through the programs publicised by the interpretation centre, ample evidence is shown that the company is actively addressing environmental issues, such as erosion along the Murray banks, the infestation of the river and wetland pools by carp and waste water disposal from the vineyards.

Radiating out from the interpretation centre is concrete evidence of revegetation of the Mallee scrub and care for the pools and billabongs around the river. At the same time, radiating out from Australia on its globalised marketing agenda are cinema advertisements shown in England, America and Europe. These highlighted the 'twinning' function of Banrock marketing. The catch phrase 'good earth, fine wine' accompanies striking images of the vineyards and the beauty of the surrounding eco-system shown to be in great shape under the careful eye of the environmentally careful wine producers.

The Banrock Wine and Wetland Centre with its catchword 'good earth, fine wine' showcases environmental care and sustainability while celebrating and selling Banrock wines, a relatively recent brand marketed nationally and internationally which, according to the 1999 annual report, sold nearly two million cases.

Recruiting and integrating the environmentalist educator into the team

To run the multiple programs planned for the centre, BRL Hardy created a relatively senior position of Director of the Wine and Wetland centre and recruited an experienced and qualified environmentalist educator with some experience in marketing and sales to head up the enterprise.

It was understood that the director would bring expertise to the whole enterprise, integrating environmental regeneration, ecological education and wine marketing and thus promote the image of the company as an environmentally aware corporate citizen and a producer of good wine.

An environmental scientist with post-graduate qualifications from Monash University in Victoria was appointed to the position. He had been president of the local regional Wetland Care Australia group and was a partner in an active business retailing bush food products.

The director was thus recruited as a retailer, educationalist, environmental revegetator, adviser and planner. Besides heading up a small team of educator–retailers to run the day-to-day functions of the center, he participated in the interactive action learning processes of the senior marketing team.

His advice could protect the firm from making expensive environmentally related mistakes; for example, when he persuaded the directors not to go ahead with a marketing idea in which a small envelope of malaleuca seeds was to be attached to the neck of some of the Banrock wines. He was able to show that there was already an infestation of malaleucas in the Everglades of Florida brought about by earlier import of seeds from some Australian traveler.

His intervention protected the company from an environmental error and at the same time protected its reputation as an environmentally aware primary producer.

The company not only took his advice but has been increasingly involved in using his expertise to sponsor wetland eco-regeneration systems. BRL Hardy has become a major sponsor of wetland redevelopment projects worldwide. These environmental programs have become an integral part of the company's activities and take it into a broader arena where its brand has become rapidly well-known and respected.

The learning culture: Participation learning—direct action

The company's interest in promoting a culture of adventure seems to be linked to a policy of direct action through which staff are encouraged to focus on the goals of the company and to think of ways to achieve these most directly without seeking too much direction or endorsement from superiors. The company depends on its person on the ground in offices in England, America, or Europe to read the local environment and respond directly where delay is impossible.

This means that mistakes can happen which the management expects from time to time. It values in its managers the capacity to respond quickly to a changing local context, to take appropriate action, to read the signs quickly as to whether an action was the right one, and to modify practice quickly to maximise benefit and minimise losses.

Giving out-posted members responsibility and support also increased their identification with the company so that they became vigilant on its behalf. Problems and challenges from the environment, whether ecological, governmental or marketing, were moved quickly from the person identifying the issue to the whole team. This is a clear example of the suggested feature of a learning organisation where 'all boundary workers become environment scanners' (Pedler, Boydell & Burgoyne 1988, p.89).

The enterprise action learning team approach mentioned by the Managing Director in relation to the sales and marketing staff of the company is given a different interpretation in the day-to-day activities of the staff of the Banrock Wine and Wetland Centre. The staff, recruited for their enthusiasm and ecological concerns as well as wine knowledge, are involved in all functions of the centre. Besides greeting and serving meals and beverages, the staff brief visitors on the range of interest points which cover ecology, wine, nature, wildlife and flora. In addition, their ecological awareness and enthusiasm penetrates other parts of the organisation through a conscious policy of cross-fertilisation between work groups; for example, moving from overhead spraying to dripper watering in the vineyards which conserves water, prevents run-off, and grows a smaller richer grape. This strategy which is good for business is also publicised in the handbook provided for walkers on the Banrock environment trail.

Outcomes of initiatives

Under the Managing Director appointed after the recent merger, the working team in which he was located developed a form of interactive action learning which emphasises team action and dispersed leadership and responsibility and open communication and accountability. To a large extent any member of the team is expected to take the leadership when the project calls for that member's specific expertise—another feature of 'enterprise learning'.

The question arises as to how the company, which was recently amalgamated and listed on the stock exchange, with huge demands of productivity from its shareholders, could have generated the learning evident in this project and communicated it throughout the organisation.

According to the Managing Director and the International Marketing Director the impetus came from extending the nature, importance and strategies of marketing. The company as it went global, needed to highlight marketing and its place in the growth of the company. Marketing is used here in a broad sense since it was BRL Hardy's policy to ensure that the

image was backed up by reality. In the case of wine sales the company had been concerned to lift and maintain the quality of the wines so that purchasers who were influenced by the images in advertising would actually be impressed when they tasted them. This had been implemented by the company's wines being placed in competition with others of equivalent price at various wine shows nationally and internationally to promote their brands in competition. The same had applied to the ecological themes in its marketing which also required validation in identifiable ecological programs and visible improvements to the environment.

Among other fortuitous spin-offs were European carp reduction and revegetation of the Murray banks and wetland which led to an increase in quantity and variety of wildlife and vegetation. The natural beauty of the place was greatly enhanced. Images of these places attached to BRL Hardy's marketing campaigns brought together pleasure, conviviality and a sense of doing the right thing by the natural world.

There thus appeared to have been considerable learning generated by the introduction of ecological concerns into the company's traditional cycle of marketing, sales, product validation and further sales. The learning generated in the subsequent process was a classic act of enterprise action learning. Members of the marketing team listening to the voice of their team members and welcoming the new environmentalist voice, were able to come up with an ingenious strategy. While re-vegetating and improving the land under its care, the company improved the quality of the soil and surrounds at Banrock. By publicising the environmental and scenic benefits of its ecological action as a unique selling point, it converted what began as basic environmental housekeeping to a successful worldwide marketing for its wine.

Conclusion: The degree of learning penetration

A significant question emerging in this research is the kind of learning that the corporation was able to identify when they saw themselves as encouraging a learning culture.

Among the many meanings of learning, one which appeared in evidence here is not about gaining new information nor about taking on a new skill; for example, in learning how to use a new machine or a new computer program. In this case, the learning is more about becoming open to innovation even from improbable quarters: new ways of seeing things, new ways of doing things, linking the unexpected, and following the faint track of an emerging possibility to its full potential. This has been named a kind of enterprise action learning which was described in the overall introduction to the case studies in the first part of this report.

Two key elements of a culture favouring enterprise action learning are demonstrated in this case: firstly, the company favours strong open interactive working teams which are a major feature of its management structure. Secondly, the team integrates forms of enterprise action learning into the everyday processes of running the company. When the Managing Director crystallised the style of the company with its four major components: agriculture, wine-making, marketing and sales as 'essentially marketing' he including learning as one of its integral parts.

The degree of penetration of the learning culture emerging in the marketing arena was integral to the version of marketing being pursued by the company. The 'culture of adventure' which characterised the company's approach to enterprise action learning was pursued within the tough realities of globalised commercial enterprise in a strictly regulated production environment in Australia and the open competition of international marketing.

The learning in the senior management action learning 'set' that seems to be in place without being so named, has many features of enterprise learning and appears to be strongly influenced by this 'enterprise culture'. What made this learning culture stand out was its reciprocal adventurous nature so that in this climate, to be enterprising involved being environmentally aware. What was good for the wetland was good for business.

Bartter Enterprises

Paul Comyn

This case study examines practices associated with the creation of a learning culture within a number of divisions of Bartter Enterprises. The case has been generated through interviews with the managers of the Processing, Egg, Broiler and Human Resources Divisions. Within the Broiler Division, interviews were also conducted with a broiler farm manager and several farm hands. Several discussions were also held with the Training Manager within the Human Resources Division. Focus groups were also held with staff from the egg packing and pulp rooms and with the workplace assessors within the processing plant.

About the organisation

Strategically located at Hanwood near Griffith NSW, Bartter Enterprises has grown from a small school project of Peter Bartter in 1959 to become a major stakeholder in the local food industry, and arguably Australia's largest producer of fresh and frozen chicken products, table eggs and pasteurised liquid egg. Peter Bartter and his brother David concentrated on building egg production facilities and developing marketing expertise. From the mid-1980s they diversified into the production and marketing of fresh chicken meat. A 700-sow piggery was constructed in the early 1980s. While the facility produced superior-quality low-fat pork, it was decommissioned in the early 1990s when the domestic pork market suffered a downturn.

One of the most significant features of the Hanwood operation is the complete integration of its functions. This self-sufficiency encapsulates initial facility design, steel fabrication, concrete batching, building erection, equipment installation and commissioning through to breeding, hatching, feeding, growing, processing, further processing, marketing and distribution to customers. Company-owned distribution facilities are strategically located in Sydney, Melbourne, Canberra, Wagga Wagga, Albury and Griffith.

More recently, Bartter's has taken over the operations of Steggles, which then was the second largest producer of chicken meat in the country after Inghams. This move is a major shift for the company, which has now inherited a number of additional processing plants and contracts with non-staff growers that cover a substantial additional number of birds per annum.

This case however, will focus on the Hanwood site and the experiences of a number of its Divisions.

Recent and current challenges faced by the organisation/industry

The poultry industry in Australia has a brief history compared with other livestock sectors of the agriculture industry. Significant growth in the consumption of chicken occurred during the 1970s with the development of a larger network of fast food outlets. Coupled with further improvements in available genetic material, refinement of the nutrition and husbandry of broiler chickens, improvements in processing technologies and increasing consumer demand from the growing appeal of white meats, the industry has continued to grow steadily over the last fifteen years. The expanded range of raw, semi-processed and cooked products has also greatly expanded, continuing to be one of the key challenges facing the industry. The increasing importation of chicken products is also a major issue likely to influence the long-term future of the industry by challenging the economic viability and overall structure of the Australian industry. Beyond the economic implications, the risk from introduced exotic disease agents continues to loom, as recently highlighted by disease outbreaks in the Eastern States that resulted in the culling of significant bird populations. The challenge of agricultural production in peri-urban areas also affects Bartter's. Changing patterns of land use have

heightened the issue of neighbour relations, and brought into focus the lack of land available for housing in Griffith.

Other issues facing the industry include the increasing sensitivity towards environmental controls and the increasing scrutiny of animal welfare.

Initiatives associated with the development of a learning culture within the organisation

Staff within Bartter's Human Resources Department perceive themselves as change agents within the organisation, providing internal consultancy services to line managers as well as working towards the development of a culture where learning is more central to the way work is done. While the company can't yet be described as a 'learning organisation', it does have a number of characteristics that clearly indicate the development of a learning culture.

One of those is the way in which the company participates in the national vocational education and training system as a registered training organisation (RTO). As an RTO, it has demonstrated to the NSW state training agency, the Department of Education and Training (DET), that it has the appropriate quality systems and procedures in place to ensure the delivery and assessment of quality VET. As an RTO, it has accessed public monies through DET to fund short-course training for its staff, and has received other project funds to develop and pilot a workplace training program for staff within the Egg Division. Bartter's has also developed sound links with other RTOs who have relevant related expertise, including Murrumbidgee College of Agriculture (Yanco), the Goulburn Ovens Institute of TAFE and the Riverina Institute of TAFE.

Bartter's also participates in the Commonwealth Government's new apprenticeship system and as an employer of trainees. In 1999, Bartter's was awarded the Industry Category Award for Food Processing in the Australian National Training Authority (ANTA) national training awards. These national awards are highly regarded amongst stakeholders, and have led to Bartter's' accomplishments being highlighted and recognised throughout the industry and the VET system more generally.

Bartter's mission statement is 'to service our customers beyond their expectations'. As a family-owned and run business, the company has not generally relied on policy and planning documents. The recent takeover of a large competitor has, however, led to changes in this regard as senior managers are now having greater input into decision-making. While there is little input from other staff into policy formulation, there is a growing awareness amongst staff of the need to work collaboratively in all aspects of production. At its most basic level, this co-operation has been demonstrated through the development of standardised work instructions.

Over the last three years, the company has embarked on a conscious process to develop written work instructions for all employees in the organisation. Initially developed for the Processing Division, the instructions have been finalised for the farms, and are under development for other areas including the egg packing and pulp room and the transport and feedmill areas. These work instructions have been developed in a collaborative way, with staff from all levels having input and in the process, debating the way work is done, and in some cases, how it should be done. The development of these work instructions has been a necessary first step in identifying the benchmarks for acceptable workplace performance, and have been aided to some extent, by the existence of national industry competency standards.

The Processing Division was the area where effort was initially directed. The processing plant had difficulties with high staff turnover and workplace safety, and was viewed by management as being an area where the greatest returns might be achieved from an investment in training. Linked to the development of an enterprise bargaining agreement (EBA) covering workers within the processing plant, national industry competency standards in food processing were used to develop a professional development framework for staff that identified career paths and linked remuneration to different levels of achievement. The introduction of this EBA was supported by structured on and off-the-job training, delivered

by key staff trained as workplace trainers and assessors. Existing staff were involved in a process to move them to new classifications, and they are now able to progress through the new framework if they wish as new skills are developed. All new permanent employees are now engaged as trainees through the VET system who are awarded the AQF Certificates in Food Processing embedded in the framework.

It appears that this approach has led to improvements of turnover, accident reduction and morale within the plant, notwithstanding the challenges associated with reconciling the competing demands of production and training, and developing the varying skills of supervisors to manage and develop staff.

A strong training culture has developed slowly over time in the Processing Division. Some resistance however, has been generated by employees who were engaged prior to the introduction of the EBA, who perceive the traineeship system as providing a 'fast track' to reward. While there are issues of perception in play, this scenario has been addressed to some extent through a focus on recognition through RPL processes and encouragement.

It is hoped that the achievements in the processing plant can be repeated within the other divisions of the organisation. The development of the manuals and work instructions is seen to be the first step in that process. Despite the challenges of developing standardised practices within an emerging work team environment, the benefits are tangible, particularly in those cases where supervisors assumed ownership of the process. Job standardisation is seen as the first step in the articulation of career paths and promotion and selection based on the criteria within this framework. Human Resources staff at Bartter's aim to introduce such systems incrementally to other parts of the organisation. While the skilling of workplace trainers and assessors is underway, the engagement of new staff as trainees in other divisions will not take place until training and learning is more firmly entrenched as part of the way things are done.

Efforts to introduce change into the broiler farms through an EBA similar in structure to that in place for the processing plant, experienced a setback when the EBA was rejected by the workers. Management feel that its rejection was linked to staff perceptions that the training provisions within the framework were an additional burden, rather than an opportunity for mutual benefit.

Human Resources staff recognised that the training arrangements in the proposed EBA were not sold as effectively as they could have been, and that alternate strategies would be required to introduce change into the farms which had in effect a different culture to the processing plant. Accordingly, a number of initiatives were introduced to deal with the challenge.

A pilot was established to award forty production staff with the Certificate I in Agriculture from the Agriculture Training Package. It was initially positioned as a training and development exercise rather than an RPL process, and some difficulties were experienced with the more experienced staff during the off the job training component. Twelve months into the project, at the time of this report, most of the volunteer participants have received the credentials. Human Resources staff believe that, while the pilot has demonstrated a need to shift to more flexible self-paced learning arrangements utilising learning resources, most staff need to be taken to a basic level, and that subsequent progression should be linked to incentives and remuneration.

While it was recognised that the qualification level was too low for the majority of participants, a number of staff experienced difficulties in generating evidence of competence. This was exacerbated by shortcomings in the resources available through the non-endorsed components of the Agriculture Training Package, as many of the learning guides required some adaptation to satisfy the particular production needs at Bartter's. This created resourcing issues for Human Resources staff who had to blend and match the competency standards with work instructions and the learning materials. Within the pilot group, booklets to support on the job assessment were also developed in consultation with leading hands and farm managers who provided input on the types of evidence required across a range of contexts.

Problems with staff turnover within the broiler farms have been frustrating for workplace trainers and assessors, who are trying to develop an attitude amongst employees that they have a career path and a future within the organisation and the industry itself. This challenge is not limited to Bartter's, particularly given the labour market conditions within the region, where demand is high for entry-level employees in a number of industries.

In concert with these developments, the company has also introduced more formalised induction training for all new staff that includes short courses in occupational health and safety and the use of hazardous substances.

Another learning initiative within the company has been aimed at production staff within the pulp and packaging rooms of the Egg Division. With funds from the NSW Department of Education and Training, a structured workplace learning program with supporting resources was developed for on-the-job delivery. The program was developed and implemented in order to increase integration across the two work areas, address some staff management issues and reinvigorate interest in the benefits of training after the successful EBA process. In doing so, it sought to address a number of challenges including the distinctive workplace cultures in place in the two sites and narrow skill sets amongst staff. The project was initiated by Human Resources staff in consultation with management of the Egg Division who identified the Certificate II in Food Processing as the qualification outcome that would be achieved by all staff through job rotation and on-the-job training delivered by staff trained especially for the task.

While at the time of writing not all of the training had been completed, results to date suggest that there has been improved working relations amongst staff, increased skill levels, a stronger training culture and improved relations between staff and management. The pilot also highlighted a number of challenges associated with multi skilling through on-the-job training including access to production equipment, the need to tie training with broader organisational goals and the demands of training staff as trainers and assessors.

Another learning initiative within the company has taken place in the Broiler Division. Three farm managers are involved in an informal learning process on a weekly basis where the settings and practices in different sheds are reviewed and analysed for their relative effectiveness. While in its infancy, its apparent success is likely to contribute to the development of a more explicit benchmarking program across the farms once information management systems are introduced to provide the required data. This pilot has proved very successful, and has highlighted the need for some form of leadership training, as Human Resources staff recognise the need to shift the focus from the husbandry practices of employees to the management and business skills of supervisors and managers.

The company also participated in a national RPL project managed by the Rural Training Council of Australia (RTCA). The project sought to award 70 rural industry staff and managers with qualifications from one of the rural training packages. Three farm managers from Bartter's participated in the trial, all receiving Certificate III in Poultry Production. While the project generated local media coverage and raised the profile of skills recognition within the company, it highlighted the difficulties of matching national frameworks to local conditions, where corporate structures don't necessarily match broader industry career pathways.

Apart from initiatives in skill formation, the learning culture within Bartter's is supported to varying degrees by the systems and procedures within the organisation. The reward systems vary across the organisation, with the EBA within the processing plant being most explicitly linked to a skills and learning framework. While systems for supervisors and managers are less well developed, there is scope for individuals to be supported by the organisation in their own professional development. Course fees and study leave may be approved, and relations with other RTOs underpin encouragement to pursue further study. The original focus on staff at AQF II–III is now shifting to supervisors and managers where the Human Resources section is facilitating performance reviews of staff, highlighting areas of personal skill development and reinforcing a career development focus. Farm managers within the Broiler Division are paid on an incentive basis, with a range of bonuses linked to different levels of

productivity. Employee amenities include a work-based 60-place day care centre for pre-school children and modern amenity buildings. Bartter's is an active stakeholder in the local community, participating in a range of initiatives that seek to promote the region and the industries within it.

The extent to which the organisational culture facilitates individual learning and a questioning frame of mind varies according to the position and the division of the company. There were some indications however, that while the culture needed to be improved, the greater efforts in support of supervisors may enable change in this regard. Generally speaking, while management has operated with an ethos of self-responsibility, staff, including supervisors and production operatives, experience varying degrees of autonomy. It was indicated by some staff that the development of this capacity was a long-term objective, but that 'getting the right people' was part of the challenge.

As the organisation is vertically integrated to a large extent, there are significant differences of culture between the different parts of the organisation. Staff exchange information, identify expectations and provide feedback on an ad hoc basis. While the divisions generally work collaboratively, it was recognised that more effective communication between different functional groups should be introduced.

Internal structures within the organisation have been created and revised in an organic fashion as it has grown from a small family-run project to a multi-million dollar business. The recent takeover of a major competitor has introduced a different cultural dynamic as management attempt to incorporate additional resources and capacity without compromising the existing culture. Anecdotal comments suggest that the recent takeover will strengthen the role of senior management and increase their capacity for decision-making.

There has been no concerted effort to extend a 'learning ethos' to suppliers, mainly because of the extent of vertical integration within the company. The recent merger however, may provide some opportunities in this regard, as many birds will now be produced under contract by private growers across the country.

While the availability of budgetry information has been limited within the organisation and not available historically, management is taking steps to ensure that it is more readily available to assist decision-making at the supervisor level. In the late 1980s the organisation adopted a total quality management (TQM) approach which has been more recently embraced within an approach of continuous improvement, one that incorporates the particular quality regimes demanded by the various regulatory authorities associated with the production, processing and distribution of Bartter's products.

Outcomes of such commitment for the organisation and employees

Clearly, Bartter's have attempted and achieved much over the past five years. As a result of this substantial change process, Human Resources staff have come to recognise the pitfalls of trying to introduce too much change at once. Comments from processing staff suggest that some implementation difficulties arose from the limited capacity of staff to deal with the simultaneous introduction of an EBA, standardised work practices and on-the-job training as too many facets of organisational change at once. This awareness has affected the change management processes within the company, and influenced the way that Human Resources staff and management are approaching the challenge of developing a learning culture more generally. Experiences of the last five years have made staff focus on the development of a training culture as a necessary first step, one that brings enough challenges without tackling the demands of a learning culture. As one staff member suggested, 'Bartter's used to be just a big farm', dominated by a farming ethos of self-sufficiency and management by decree.

As the company continues to grow and develop, the strengthening focus on production and management issues will further ensure that staff have the ability and capacity to make better decisions. There has been a shift within the company from an emphasis on 'this is what we do' to an emphasis on 'this is what we do and why we do it'. The range of initiatives

discussed in this report has changed the forms of learning recognised within the organisation, and changed the concept of a desirable employee to include participation in training. It appears that training is now being recognised as something that is part of the job, not something extra. Such a commitment to learning however, is not yet fully shared by all staff within Bartter's.

While a strong company culture exists, the ongoing development of a training and learning culture within Bartter's is likely to be accelerated by the recent merger with Steggles. Expertise from within that organisation may contribute to the systems and procedures used within Bartter's as staff blend the functions and approaches of the two organisations.

Conclusion

The agriculture/food processing industry is not generally considered to have the same strong training culture as some other industries as a result of traditional apprenticeship frameworks. This in itself is a barrier to the development of a learning culture, particularly where there are stark cultural differences between various aspects of production and distribution. Given that the efforts at Bartter's have also included a strong emphasis on workplace and on-the-job training, their achievements over the last five years are more significant as a result.

Bartter's might be currently described as an organisation well advanced in developing a training culture, and one which is still grappling with the basic components of a learning culture.

In terms of the three levels of control learning identified by Argyris and Schon (1981), Bartter's are predominantly engaged in operational learning (level 1) which is focussed on procedures, performance, materials and services, etc. This should not ignore the reality that individuals within Bartter's have engaged with strategic learning (level II) and learning related to purpose (level III) over the past thirty years of its operation. The skill formation projects undertaken within Bartter's have been mainly focussed on procedures, performance, materials and services. Such a focus has clearly been a necessary step in addressing the priority operational needs of the enterprise. They have, however, led to outcomes that are generating a commitment to ongoing learning.

Developments at Bartter's reflect the three major themes identified in the literature review. It has undergone considerable change internally and as part of broader industry dynamics, it has become integrated within the developing national VET system and has staff who have been exposed to thinking about learning organisations and organisational learning.

Novell

Paul Comyn

About the organisation

The Australian division of Novell is of one of the world's largest companies specialising in information technology software and services. Novell is the leading provider of directory-enabled networking software and the world's largest independent software company focussed exclusively on networking.

One of Novell's current organisational goals is to support the development of the internet by assisting organisations to manage their digital relationships amongst the vast number of people, organisations, services, and devices on the net. Novell's software is focussed on the development of directory services and other intelligent networking software for creating, managing, and securing these digital identities as directory services emerge as the central nervous system of the internet.

Novell products and services aim to give businesses total control of their private networks and the worldwide web, simplifying the management of user access and identity. Its

worldwide channel, consulting, developer, education and technical support programs are some of the most extensive in the network computing industry. Novell is a true multi-national corporation. Its headquarters are located in the USA. On a global basis, Novell has over 4500 staff and generates revenue in excess of $1.1billion. The head office for the Australasian region is located in Sydney. In the Asia-Pacific Region, the company employs over 300 staff within a relatively flat organisational structure. It has sales offices located in Sydney, Brisbane, Melbourne and Perth. Generally speaking, the organisation's structure reflects the differentiation of accounts on the basis of size being either strategic, large, medium or small. The management of these accounts involves targeted and product-specific support to customers who have, in some cases, the country's largest computer networks. Clients include Telstra, Qantas, Centrelink, St George Bank and the NSW Department of Education and Training.

The sales area of the business includes the responsibility of managing the organisation's relations with its channel partners and re-sellers, that is, those companies that sell Novell products and provide follow-up product specific technical support to their customers.

Recent and current challenges faced by the organisation/industry

Information technology and telecommunications are enabling technologies for almost all industries. They are technologies that underpin much of business in 'first world' countries. In Australia, the largest employers of IT and T skilled people are the service industries such as banking, insurance, the media, advertising and government. To a lesser extent the IT and T industries support manufacturing and primary industries.

There are two aspects to the IT and T industry, the enabling component, or services sector, and the research and development, or product sector. In addition, to function successfully in Australian society, every person in Australia now requires some basic understanding of IT and T. The IT industry is central to the information explosion which is occurring on a global basis, and is crucial to the capacity of nations attempting to develop 'knowledge economies'.

The information technology industry is currently experiencing a global skills shortage. The supply of graduates from the local tertiary and VET sectors will only sustain an annual growth rate of 2.7% in the demand for professional skills.[1] This is not satisfying, and will not satisfy the demand for skilled professionals in the information industries and in IT support functions in business and government. In the last five years, the Asia–Pacific region, excluding Japan, has been the fastest growing information communications technologies (ICT) market in the world, moving at a compound rate of over 14.5% per annum. Estimates recently prepared suggest Australia could be short of 200 000 skilled people over the next two years.

In Australia, there has been considerable interest shown by industry and government in ways that the current skills shortages can be addressed. These initiatives however, have occurred less rapidly than steps already taken by some nations in the Asia–Pacific region, an issue that is of some concern to the industry locally. Several initiatives have been launched in a number of States and Territories where partnerships between industry, government and educators are considering ways of addressing the situation. Nationally, the convening of the IT and T Skills Task Force is leading to the creation of a national IT and T Skills Exchange which will provide a range of service to industry and other stakeholders aimed at addressing the education and training challenges facing the industry. Novell has been an active member of the Skills Task Force and is seeking greater involvement in the Skills Exchange.

A reflection of this growing co-operation between the IT and T industry and the VET sector is the recent appointment of Novell's Managing Director to the Board of the National IT and T Industry Training Advisory Body (ITAB). The development of industry training packages and the integration of vendor training within them, represent a shift in thinking within the industry where VET providers are now seen as major stakeholders in the supply of skilled IT

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[1] New South Wales Department of Information Technology and Management 1998, *Education for the third millennium, NSW Department of Information Technology and Management, discussion paper*, Sydney.

and T staff along with tertiary providers who have until recently been considered the sole source of graduates.

These developments have had a direct effect on Novell which has sought to develop a number of targetted responses to these challenges.

Initiatives associated with the development of a learning culture within the organisation

Staff within Novell's Human Resources Section perceive themselves as change agents within the organisation, providing internal consultancy services to line managers as well as working towards the development of a culture where learning is more central to the way work is done. While the company can't yet be described as a 'learning organisation', it does have a number of characteristics that clearly indicate the development of a learning culture.

One of those initiatives is the Novell Education Academic Program (NEAP). NEAP aims to provide educators with the capacity to compete more effectively in the education market while addressing the skills gap by delivering training that leads to certification as Novell Network Administrators. Vendor certification is the process through which major software and hardware vendors ensure that IT professionals have the skills required to support their products in the marketplace. Certification was pioneered globally by Novell in the 1980s and has since been embraced by all the major IT companies including Oracle, Lotus, Cisco, 3Com and Microsoft. Through the NEAP program, Novell is again leading the industry in establishing certification programs as a part of standard curriculum activities within schools, universities and the VET sector.

The NEAP program enables students to undergo certification training as part of a school, degree or diploma course. It provides a level of specific vocational training within a generalised course, is generally speaking a less costly method of obtaining certification and improves the employment prospects of graduates. Standard programs and resources have been customised for students without a background in IT, so that every opportunity is available to support students to the level of certification. In the first instance, certification is available for Network Administration, but institutions are able to offer other options depending on their approach and the amount of time and resources allocated within the curriculum. For educational institutions it provides a means of attracting students through the provision of more complete curricula and internationally recognised certification.

NEAP providers are encouraged to form strategic alliances with local businesses who may be Novell channel partners so that students are able to maximise the benefits of their training with the local business community. The NEAP program has been in place locally for six years. Partnerships exist with a number of schools, universities and TAFE institutes, and despite a slow start, it appears likely that partners will soon be in place in every State and Territory. The NEAP program is considered as part of an international strategy which values education as an integral component of the relations between Novell and its customers.

Novell conducts regular round-table forums with its channel partners to discuss issues and ensure sound working relations. The company has been faced with increasing demands from re-sellers for people skilled in Novell software. Traditionally, Novell's internal recruitment needs were often met by engaging staff from their channel partners, but in response to the feedback given in the context of the growing skills shortage, Novell decided to introduce a program through which it would increase the pool of skilled labour, address the skill shortages within the supply chain, and increase the quantum of Novell-specific training that takes place.

The transitions program is the result of a strategic alliance with a training organisation that is recognised within the national VET system. Terasys is a registered training organisation (RTO) that delivers a wide range of programs and services that target the IT and T industry, including career transition and workforce development programs. The company delivers across a number of sites locally and abroad. Novells hope that transitions will grow to the point where it will provide a steady stream of available staff appropriately skilled for their

own recruitment needs in each of their local offices, and the recruitment needs of some of their customers.

With direction from Novell's Managing Director, the National Sales Manager was given the responsibility for developing and implementing the program. An approach was made to a training organisation which had links to the parent company in the USA and had some familiarity with Novell products. Staff from Terasys Australia Pty. Ltd. and Novell jointly conducted interviews with a number of key staff within Novell to identify and develop the range of competencies required. A program to run over twelve months was developed as a result. This process provided for some ownership of the program within Novell and sought to ensure that the needs of the various business units within the organisation would be met where possible through the program.

The transitions program commits participants to be engaged by Novell for a 12-month period. It initially involves an off-the-job training program with Terasys, followed by a series of placements within different business units across Novell. Participants are rotated through different sections of Novell in an attempt to develop a holistic understanding of the parent company and the range of work involved. Through a basic mentoring approach, participants are exposed to a wide range of experiences through the daily work routines of the business unit they are attached to. They are supported through weekly meetings with the Program Manager where feedback is provided not only to themselves in terms of progress, but to the company in relation to the conduct and management of the program.

The program goes beyond having a limited technical focus, and includes generic skills developed through presentations, problem-solving exercises and active participation in team meetings. Participants undergo a structured selection process jointly conducted by Terasys and Novell, and are required to have between 3–5 years business experience before being admitted onto the program. Participants are also expected to complete the Novell Certified Systems' Engineers program through study in their own time using the company's reference materials. While the course was developed as a generic program, Terasys and Novell experienced some difficulty in satisfying the channel partners given the niche markets that they tend to specialise in.

The initial course utilises contemporary delivery and assessment practices involving weekly testing and presentations that also provide opportunities for feedback. At the time of writing, one group had completed the program with another due to commence. Novell has developed a website to market the program, and is involved with Terasys in making presentations to a number of re-sellers who are being encouraged to commit their enterprises to employing participants in the program. Novell is currently looking to expand the number of channel partners involved in the program and is soon to commence operations in Melbourne.

Novell management believes that once the program is more established locally, there is potential for it to be promoted internationally as a model of good practice within the organisation and possibly the industry, given the interest shown locally by a number of larger IT companies through the IT Skills Task Force and related forums.

It has been suggested that the program is inducing informal re-engineering within some of the channel partners through the review of skill needs within their organisations and the examination of staffing levels across both technical and non-technical roles. In this way it is assisting Novell's channel partners to reconceptualise their skill needs thus potentially enabling them to free-up more specialised staff from routine tasks.

The program is also changing traditional attitudes towards recruitment within Novell as a more organic approach that aims to recognise and capture the skills of an individual through job re-engineering if required, as opposed to starting and sticking with a job description as the basis for recruitment and selection.

Apart from initiatives in skill formation, the learning culture in Novell is supported to varying degrees by the systems and procedures within the organisation.

Their attempts to manage the supply chain through the development and implementation of the transitions program reflects a general approach within the organisation that seeks to foreground education within relationship management. Return business from a number of channel partners suggests that a learning ethos may be developing through the program.

Generally speaking, the organisation has a strong training and learning culture that is evident across all business units with a range of features in place that might be characteristic of a learning organisation.

There is evidence that departments and units work collaboratively rather than competitively, with systems and procedures in place to provide for the exchange of information and input into cross-functional and individual planning processes. A number of committees within Novell meet on a quarterly basis. These committees undertake cyclical planning and reviewing activities linked to particular business efforts within the organisation.

The business objectives identified within these planning cycles are also reflected within the performance monitoring arrangements and reward systems that operate for individuals within the company. Objectives are identified and weighted through regular performance reviews with rewards for performance available in the form of bonuses, travel, promotion and additional training. Generally speaking, staff within the organisation are enabled and empowered to take the necessary action at the 'coalface'. There is a strong ethos of self-responsibility with staff experiencing varying degrees of autonomy of action. The organisational culture encourages individual learning and a questioning frame of mind.

This approach is reflected in the professional development opportunities available to staff and the role that learning plays within the organisation.

The professional development of staff occurs within an international corporate framework that aims to provide for the needs of the individual and the organisation across multiple sites. Staff members have access to videoconferencing, webcasting and teleconferencing facilities that link many of the sites that form Novell's global network. Self-paced learning materials and video-based tutorials are also available to individuals through the company's global intranet. Corporate trainers are often involved in regional lecture/training tours and the feeling within the organisation seems to be that there are no shortages of opportunities to learn new skills if they have the time to attend and if a business case can be made for their involvement.

Outcomes of such commitment for the organisation and employees

As noted, learning and education is foregrounded within most systems and procedures in place at Novell. The two initiatives considered in some detail, NEAP and transitions, are both evidence of the company's attempt to meet their own local skill needs while addressing the shortages facing the industry more generally. Novell prides itself on having probably the lowest staff turnover rate in an industry which struggles to retain staff due to the competitiveness of the marketplace and the shortage of skilled staff.

Conclusion

Novell demonstrates many of the features of a learning organisation. There is definitely a learning culture within the organisation that is being extended to its channel partners through the two initiatives, NEAP and transitions. Developments at Novell reflect the three major themes identified in the literature review. It is a lean organisation with a flat structure representing a modern corporation within an industry experiencing substantial rates of change. It has become integrated within the developing national VET system through its partnership with RTOs and involvement in industry advisory arrangements, and has staff who have been exposed to thinking about learning organisations and organisational learning within a global corporate culture.

Unley City Council: A learning organisation

Ken Bridge

About the organisation

Unley City Council is a relatively small inner suburban local government organisation in Adelaide, with 150 staff catering to a population of 35 000. Being one of the oldest councils in SA, it has a strong sense of its own history and is also conscious of its benchmarking role in SA local government:

> *It's seen as one of the leading councils in South Australia … It's often a council that is sought after for comment on local government policy or procedures; it's often used in pilots for projects; it's seen to be a good council to get a job at by employees in the industry … It's doing some innovative work in a number of areas: traffic, in planning (and with) our outdoor staff.* (Assistant City Manager)

Local government generally has somewhat of a reputation for its bureaucratic approach to management and customer relations, and the 'officious enforcement of local laws and regulations' (Tucker 1997, p.71). However South Australia was quick to take up issues of local government reform in the 1970s and has addressed this problem (Tucker 1997, p.81). Unley City Council meanwhile, has developed its own reputation for best practice management, its infrastructure department providing the case study for a recent textbook on the subject (Hunter & Tually 1998).

Recent/current challenges

Recent changes in the local government environment have placed increased pressure on Unley City Council's systems and resources. A 1995 report on local government reform in SA outlines major pressures for change in that state: funding cutbacks; the impact of national competition policy and a general pressure for public sector reform as discussed in a recent SA report (MAGLGR 1995, p.ii). These pressures have been felt strongly by Unley City Council.

Firstly, cuts to public sector funding at all levels have resulted in increased pressure on Unley City Council services. This has had a direct impact on some services, as one brochure published by the SA Local Government Association (undated) puts it:

> *State government funding for public libraries has fallen on average to less than 25% of library costs. Proposed cuts will see a shortfall of more than a million dollars in 2001/02 and more pressure on Council rates.*

The impact of cuts in other areas such as health, aged care and education has been more indirect, with the responsibility for gaps in service provision falling—by default—on local government. As one team leader put it:

> *What I'm trying to say is that we're now picking up on services for people with mental illness, for example, whereas in the past perhaps that was a state government responsibility … and we don't have the ability to fall back on a bigger tax base.*

Secondly, in the wake of the 1995 MAGLGR report, a number of smaller councils were persuaded to amalgamate, resulting in some very large and powerful local government organisations (for example, Charles Sturt Council). In the case of Unley City Council there was strong pressure to amalgamate with one or more of the adjacent councils of Mitcham and Marion, a pressure which was successfully resisted.

Thirdly, there has been a good deal of pressure on Australian local governments to conform to a business model of administration (Tucker 1997), most importantly in terms of the principle of contestability in the provision of council services. Although the SA *Local government act* of 1999 did not implement the recommendations of the MAGLGR report (which recommended the Victorian model of setting targets for compulsory competitive

tendering), SA councils are obliged under the act to 'prepare and adopt policies on contracts and tenders' involving 'competitive tendering and the use of other measures to ensure that services are delivered cost-effectively' (South Australia 1999, #49, chap 4, part 4). In the context of this contestability principle in the costing of its services, Unley City Council is vulnerable to economic competition from other providers—and even from other local councils.

Finally, recent changes in SA legislation have given extra responsibility to local government, such as the licensing of hostel accommodation. These pressures have been compounded by demographic changes which have led to increased demand for council services:

> *We've got an ageing population and again [there's been] cuts to aged care accommodation. We've got more and more rest homes being privately operated within the council area and that responsibility for licensing and monitoring those facilities again has been passed back to local government.* (Team leader)

Initiatives associated with developing a learning culture

In the context of these changes, Unley City Council has undertaken substantial changes in its internal structure and functioning, many of which incorporate a commitment to the development of a learning culture within the organisation. The following section outlines some key examples of this.

Amalgamation

In response to the threat of amalgamation with two other local councils, Unley City Council mounted a comprehensive (and successful) campaign, combining thorough research into relative cost/benefits with astute political negotiations. While the leadership of the campaign rested with senior management, Unley City Council staff assisted with information collation and were kept closely informed of developments at all stages through monthly newsletters and periodic general staff meetings. As a result, staff became highly involved in Unley City Council's defence campaign:

> *We talked to our staff about data in order for us to put in the reports … And you know when we'd go to the [Local Government Reform] Board and give evidence we'd come back and everybody would be hanging around the back door saying 'What happened? What happened?' and it was a real group thing.* (Assistant City Manager)

Thus the threat of amalgamation triggered significant innovations in internal communication involving an elementary form of a 'learning culture'; that is, keeping staff informed about important matters affecting Unley City Council as a whole. As outlined below other challenges to the organisation resulted in the development of more comprehensive and sophisticated forms of learning.

Restructure

In anticipation of the contestability requirement under the 1999 *Local government act* and the resultant need for a client–provider split in its operations, Unley City Council restructured its administrative system—with a reduction from three to two divisions. This restructuring involved voluntary redundancies for 10–12 staff, extra workload for some staff and a re-configuration of roles for others. This process was not always easy for staff to accept, but was to a large extent managed by the teams themselves; for example, when two geographically separate units in the Community and Cultural Development team were amalgamated. As one Team leader stated:

> *[It's] been difficult. I'm not sure how we could have done it differently because I still think it's the best mix … I think it's more about personalities but we've basically listened and tried to take on board and all the rest of it; but it's still difficult.*

Relocation and refurbishment

A subsequent re-arrangement of physical office space and the resultant temporary relocation of staff created some administrative and personnel problems.

You try moving people out of their space and their desk and their chair and where their cupboards are and where things are stored that have been stored there for 20 years; it absolutely gets them going.   (Assistant City Manager)

Overall, however, the relocation and refurbishment was handled in a way which involved staff in thinking about their workspace and helping to make decisions:

I think the way it's been managed, it's been brilliant, with people having incredible input into what their workspace would look like. Communication has been terrific, knowing ahead when they're going to move and when they're coming back.   (Team leader)

The shift to a business model of local government administration

With a State government committed to principles of accountability and efficiency (and a program of outsourcing services) there was pressure on local government to operate on the same basis. At Unley City Council the pressure to adopt a business model of administration led to three innovations: the development of business plans by individual business units (teams); the costing of services by those teams; and the preparation of tender briefs and contracts for the outsourcing of services. In the implementation of these innovations, Unley City Council has closely involved staff in the process, further enhancing the development of a 'learning culture'.

In 1997 the Assistant City Manager divided staff into business units (teams) and got them to develop annual business plans. Describing the process he stated:

Every single person and each business unit, we pulled the whole business unit out for a whole day and we sent them off together somewhere where they sat down and examined what was the core business of their business unit, what were the issues in achieving that, what were their key result areas, what were their action plans for the next twelve months, what were their performance measures and who was going to do what how, when and where; and they've all produced a business plan.

As well as learning specific business planning skills, team learning at a deeper level has also taken place, with the group setting team goals and strategies:

… just to get people as a team to think about 'OK, where are we going as a team and how are we going to get there?' and 'How are we going to measure our success?' and this has been incredibly useful.   (Team Leader)

Even before it became a requirement under the 1999 act, Unley City Council management established the principle of contestability in the provision of council services, seeing it as a substantial but necessary change in the culture of the organisation:

What we did a couple [of years] ago, we brought in contestability and we said 'The world has changed and you can't just assume that you'll do this work however slowly or however you know, at whatever cost you deem. You have to show that you're competitive and if you're not competitive, we'll have to think about how to make it competitive and if we can't make it competitive, we'll have to think about letting some others do it'.   (Assistant City Manager)

With the looming possibility of competitive tendering (prior to the act) it was not difficult to motivate staff to accept this new way of thinking about their service provision:

We needed to be ready if we were to be placed in the position of being subject to competitive tendering for our services; we would have a resource plan and we would be able to fairly quickly write our tender specifications.   (Team leader)

Some council services were in fact outsourced, and in the preparation of tenders and contracts Unley City Council staff learned a great deal:

We've had to not only learn what that is, to contract something out. But what are we actually contracting, and having to describe that so that we end up with is what we want—that's been quite difficult but we've learnt lots. (Team leader)

Outcomes for individuals and the organisation

It can be seen from the above that, in the process of responding to recent challenges Unley City Council senior management has taken initiatives which involved various forms of formal and informal learning which have contributed to the development of a strong learning culture in the organisation.

Formal training and education

At an organisational level, Unley City Council set up a comprehensive system of formal training which addresses training needs at the level of the business unit (team) and the individual as well as the corporate structure.

At a corporate level, Unley City Council analyses learning needs and develops overall training strategies to meet those needs. Much of this formal training occurs at the level of business units, or teams—and content is often decided by the teams themselves. Team training sessions are organised on topics such as conflict management, stress management or the development of business plans. Staff seen as having potential for team leadership are offered training in the Public Sector Management course.

At an individual level, staff members are encouraged to undertake training programs, with annual performance reviews used to assess each individual's training needs and each staff member being offered a HECS subsidy of $1000 per annum.

We have our regular annual performance development review process. The primary focus of that is to look at your job description and say 'Are you actually managing that well? If you're not, what is the training that you need?' So it's not about blaming you or criticizing you for not actually carrying out your job well, it's saying 'Well, we need to support you as an organisation to better do your job and that is through training'. (Team leader)

In addition, staff are encouraged to undertake formal study programs of their own choice at TAFE or university. A limited number of scholarships are available, with staff encouraged to undertake study tours in their specific area of responsibility.

Informal learning

As well as formal training programs, much workplace learning at Unley City Council takes place informally and is evidence of the development of a learning culture within the organisation.

Some informal learning takes place in the form of mentoring of individual employees by more senior staff. The Assistant City Manager is a key provider of such support at Unley City Council:

She's always really open to me—just bowling up and going through things; she's got a great mind for that stuff. (Team member)

There is also encouragement of staff at a broader level—the development of their career paths:

… opportunities for staff to put their hand up if they wanted a change of career path or they wanted to try something different. (Team leader)

The Assistant City Manager's supportive stance has become an example for supervisory staff at other levels in the organisation:

Yes, I guess it's a bit of a modelled behaviour—sort of up and down. (Team leader)

As a result, the qualities of team leaders themselves are also valued highly by other staff:

I think a lot of that has to do with [the Team leader] and how she's really managed that group of people. She's met with them, she's included them—a lot of it has to do with her skills as a leader.

(Section head)

Learning from each other/learning by doing

The mutual support staff give each other within the team environment also contributes significantly to their learning:

It's interesting because what I'm finding from the team is how they support each other. And they include me in that, so I'm actually getting support—the 'How are you doing as a person?' stuff, from those team members. (Team leader)

Thus staff may learn from their peers: setting up informal meetings with each other or simply by working together within a team context:

We usually come up with an idea about how it should be done; but then if we hit a wall, we'll always either bring it up in team meetings or have coffee with someone; and that's how we get through those blockages really. So it's absolutely brainstorming and bouncing ideas off each other.

(Team member)

This 'learning by doing' approach is an important part of the learning culture at Unley City Council and is mostly successful. However ad hoc character of the approach can lead to difficulties: 'groping in a cave without a torch', as one team described the development of their first business plan.

Networking

In the context of the re-constructed organisation, staff have had to develop quite a new set of generic skills in organising and networking. Thus all staff are now expected to co-operate with other individuals and teams within the council in carrying out their work. In addition, staff in some sections have to spend a good part of their time liaising with elected members. Furthermore, some staff have had to develop liaising skills with individuals in the community and agencies outside council (for example, RDNS, Domiciliary Care etc. as well as all three levels of government). Thus one staff member who volunteered to take responsibility for the management of an important local event (the Tour Down Under in January 2000) had to deal with a variety of local groups and local business.

Cultural change

Perhaps the biggest change has been cultural—where the organisation and its staff have had to relinquish traditional assumptions about the operation of local government and take on new ones:

I guess the challenges are around—quite rightly—the community wanting improved customer service, improved standards of accountability and reporting, demanding more consultation—which again is absolutely reasonable—and council being much more responsive to those sorts of requests. And it's trying to shift people from, you know, 'I work for government' … through to 'Yes we really are here to help and we are accountable to our community'. (Team leader)

A 'learning culture' at Unley City Council

As can be seen from the above, Unley City Council to a significant extent has become a learning organisation, that is, one where 'people are continually learning how to learn together' (Senge 1990, p.3). As well benefits for the organisation in terms of administrative efficiency and institutional survival, an important outcome has been an increase in staff skills and self-confidence:

I don't think we were thinking about costings though; we were thinking more about developing our skills enough and confidence to be able to do that sort of thing. (Team member)

Factors which have helped Unley City Council become a learning organisation include the ready availability of training and effective organisational communication. However, the most important factor in the development of a learning culture has been the support of individuals and teams by senior managers:

If there is any learning that I need—again you've got those open communication channels that are non-threatening and non-judgmental that you can go back to and say 'Look I need to know this or what do you think, do you think I need to know this?' and you can discuss it. (Project officer)

Support from team leaders was also highly valued:

Her strengths are she's a fantastic listener and has a really good way of breaking things down into small enough segments for us to handle. Because I think a lot of us are very big on creativity and ideas and we're so big on it that we sometimes get overwhelmed and go 'My god how are we actually going to execute this?' and she's really good in that sense. (Team member)

Overall then, Unley City Council has responded successfully to recent challenges by operating as a learning organisation at a corporate level while also supporting individuals in their own professional development; that is, creating a learning culture. As one team leader put it:

I think the organisation has coped extremely well with the change, all the changes that have happened. I personally have grown and learnt and developed career pathwise enormously from the experience … Some people just grabbed it and ran. It's an opportunity to do new things, to learn new skills—and some people, I believe, were feeling quite bored and stuck so it's been quite refreshing.

Gaps in the learning culture?

Nevertheless, the process of Unley City Council becoming a learning organisation has not been entirely successful. Firstly, although there has been general management support for staff during the process of organisational change, this has not always translated into extra resources for dealing with that change:

At any time of change you need more resources to get you over that change … you need to bring in someone on a temporary basis who can do identifiable tasks to make sure that the work still gets done and that the people are supported. The problem I see with this organisation is that we have a budget, we have a tight budget. (Team leader)

Secondly, although individual staff are encouraged to take responsibility for the development and management of projects in their area, support from senior management is not always forthcoming when problems occur; for example, when one employee's inexperience in preparing contracts led to problems:

What comes back is anger from up top rather than 'Gee, I really shouldn't have signed off on that, I should have actually got someone more senior to help [them] through it'. (Team member)

Thirdly, while most Unley City Council staff accepted the recent changes in the organisation's structure and functioning, there has been resistance from some individuals—often seen as merely obstructive:

Others have resisted and resisted and resisted to the point where you know, you've got to start to question 'What are they doing here?' And you know that's in spite of lots of consultation, lots of retraining, lots of TLC. (Team leader)

In other cases individual resistance has occurred at a more complex level. Thus there has been resistance to organisational change from a few of the professionally qualified staff at Unley City Council who feel that the new arrangements constitute a threat to their professional autonomy:

I think maybe … feeling threatened about having to look beyond the box … Maybe they got their degree 20 years ago in a certain area and the world's moved on. And some of them found that fairly difficult and at times have hidden behind the 'I'm the professional and I know what's best and I'll tell the customer what they need thank you very much' sort of stuff. (Team leader)

Perhaps the strongest source of resistance to some of the changes at Unley City Council has been at a structural level from white-collar employees (and their union) who saw the new business approach as a threat to their jobs and working conditions. Thus there was some early concern amongst staff about their involvement in business planning:

There were some comments like 'Why are we doing these business plans?' and 'This is the step towards writing a tender specification; are we going to be put in a position to have to tender for our jobs, for our services?' (Team leader)

These concerns became the subject of subsequent enterprise agreement negotiations at Unley City Council as part of the normal industrial relations process. During these negotiations, senior management saw the contestability issue as central to organisational change and was convinced that the 'old' tradition of local government had to be changed:

I mean I was talking to them about, like, 'Excuse me everybody, the world has changed, you're not just the fat local government organisation that has to spend money like you used to' … And what we were trying to do was shift them along to the fact that this little cosy local government world had to change and it was about to change even more. (Assistant City Manager)

For their part, however, white-collar ('inside') employees at Unley City Council and their union were conscious of the Victorian local government experience of competitive tendering where there had been significant job losses:

Well our first enterprise agreement was a pretty tortuous process and that was around the time that compulsory competitive tendering was becoming fashionable in South Australia. That's the same concept that Victoria took on by the truck load and we've seen the … damaging effect of that. So to have that start to inch its way in here, it looked like it was a tide that couldn't be stopped and council staff felt quite powerless in that. And that coincided with our first enterprise bargaining agreement which is unsettling as well. (Team member)

The resultant negativity in the enterprise bargaining negotiations was exacerbated by a lack of organisational resources to ensure adequate communication amongst staff:

Staff were saying to the reps on the single bargaining unit, you know, well 'How come you've supported that because I didn't know about that?' and 'That wasn't what I wanted to be taken back to the table'. So there was actually some conflict between staff. And again it comes back to this thing—the enterprise bargaining process was a change document and yet there were no additional resources provided to enable communication to happen properly. (Team leader)

It should be noted, however, that an enterprise agreement with ('outside') staff had meanwhile been negotiated with strong support from blue-collar employees and their union, continuing a collaborative tradition already established amongst this section of the organisation (cf Hunter & Tually 1998).

In the context of a number of pressures on local government, Unley City Council has undergone substantial organisational change. In the process it has endeavoured to become a learning organisation, one which is responsive to change and in which its staff feel empowered to think deal creatively about challenges. The development of a learning culture is an important part of this process.

The threat of amalgamation triggered the early development of a learning culture, with significant innovations in downward communication. In a subsequent internal re-organisation this learning culture was extended, with staff involved in re-thinking their workspace needs, and work teams learning to determine their own goals and strategies.

The development of a learning culture at Unley City Council has been facilitated by the ready availability of training, effective systems of internal communication and support from management at all levels.

Factors which have hindered the development of a learning culture at Unley City Council include a lack of resources for specific change programs and occasional lack of senior management support for staff decisions. In addition, there has been some staff resistance—from individual employees (especially professional staff) and also from white-collar staff and their union in the enterprise bargaining process.

Conclusion

As argued earlier in this report, the development of a 'learning culture' in the workplace is of increasing importance as work itself becomes more knowledge-based and demanding. Moreover, the existence of a learning culture within an organisation can be crucial to its survival in an increasingly competitive environment. This case study demonstrates the validity of these claims for a local government organisation in the process of undergoing substantial change. Unley City Council has responded to the challenges of amalgamation, budget pressures and an increasingly competitive external environment by developing structures and systems which encourage staff and work teams to develop their own goals and strategies as well as a new orientation—a commitment to client service.

The principal driver of change at Unley City Council has been the Assistant City Manager, appointed in 1995 from a background in a State government sector which had itself undergone significant change in similar directions.

Increased employee commitment to Unley City Council and involvement in its operation were initially triggered by a successful campaign against a proposed amalgamation. However this level of commitment and involvement has endured as staff take more responsibility for the determination of their own goals and strategies within the team structure.

The key elements in Unley City Council's success in developing a learning culture are three-fold: the encouragement of formal training and education programs; support of employees by management at all levels; and a climate of mutual support and learning within the team environment. It is arguable from this case study that the development of a successful learning culture is associated with relatively small organisational size, its local focus and a commitment from key senior management.

Nevertheless, there appear to be some gaps in Unley City Council's operation as a successful learning organisation during the change process. With regard to its employees, there has been resistance from some—largely due to the anxieties of professional and white-collar staff. As for senior management, there has been an occasional lack of support for individual staff and an occasional lack of additional resources to facilitate the change process. Perhaps the most striking gap was a breakdown in trust and communication between white-collar staff and management during the enterprise bargaining negotiations. Although in one sense this is an inevitable by-product of the combative tradition of industrial relations in Australia, in terms of the development of an effective learning organisation it also constitutes a missed opportunity for a genuinely participatory process.