

E-learning in Queensland Visitor Information Centres:

Barriers, Facilitators and Communities of Practice

**Roy Ballantyne
Karen Hughes**

November 2004

© 2004 Australian National Training Authority

This work has been produced with the assistance of funding provided by the Australian Government through the Australian National Training Authority. Copyright for this document vests in ANTA. ANTA will allow free use of the material so long as ANTA's interest is acknowledged and the use is not for profit.

ISBN 1 921045 11 6 web edition

Part of the Australian Flexible Learning Framework

Managed by the Flexible Learning Advisory Group on behalf of the Australian Government, all States and Territories in conjunction with ANTA



Contents

List of tables and figures	iv
Executive Summary	1
Introduction	4
Purpose of the research.....	5
Research Questions	7
Methodology	8
Literature review	10
Benefits of e-learning	12
Barriers preventing the uptake of e-learning	13
Lack of time	14
Technical issues.....	14
Lack of management support.....	15
Lack of computer skills.....	15
Preference for face to face learning	16
Results and Discussion.....	188
Phase One	188
Phase Two	255
Implications for the Tourism Industry	300
Implications for the wider VET System	366
Recommendations	400
Limitations of the research.....	422
References.....	433
Appendix A: Stage One questionnaire for all QICA members.....	466
Appendix B: Stage Two interview questions for manager	500

List of tables and figures

Figure 1: Age distribution of paid and volunteer staff	188
Figure 2: Computer experience of paid and volunteer staff	19
Figure 3: Access to workplace computers by paid and volunteer staff.....	20
Table 1: Computer skills of paid and volunteer staff	211
Table 2: Benefits of e-learning to individual learners	233
Table 3: Benefits of e-learning to Visitor Information Centres	244

Executive Summary

Visitor Information Centres are located in urban, rural and remote areas throughout Queensland. Staff working in these centres are primarily responsible for providing visitors with travel advice; interpreting the local region; collecting visitor data; and making accommodation, tour and transport bookings. The highly competitive nature of the tourism industry and the increasing sophistication of the travelling public have placed considerable pressure on Visitor Information Centres to provide quality, relevant and up-to-date tourist information. This is not an easy task in an industry that is highly fragmented – many staff work on a casual or part-time basis; some are retired or have little, if any, work experience; skills and tourism knowledge varies widely; there is a high turn-over rate; and few staff have professional qualifications. In addition, many centres are located in regional areas where access to training and opportunities to view examples of 'best practice' are limited.

The professional isolation experienced by Visitor Information Centre staff is exacerbated by the fact that there is considerable variation in terms of each centre's functions, operational procedures and role within the community. While there is some online communication amongst managers located in the same tourism region, state-wide dissemination of tourism information and exchange of ideas between Visitor Information Centres remains limited. Rather, many centres operate in isolation, and as a result, there is considerable variation in the design, operational procedures and standards of customer service offered. Accordingly, this research was conducted to examine the potential of e-learning to enhance the professional development of Visitor Information Centre staff and ensure a high standard of customer service is delivered by all Queensland centres.

In particular, this project was designed to

- examine how Visitor Information Centres currently access tourist information;
- explore the challenges faced by centre staff;
- identify staff training needs;
- document the type of information that would facilitate the delivery of visitor information;

- identify factors that would facilitate the uptake of e-learning within the industry; and
- explore the potential of e-learning and the development of Community of Practice to enhance the delivery and sharing of information and ideas.

The project design involved collecting qualitative and quantitative data as follows:

- a literature review informed the design of an e-learning questionnaire that was distributed to managers and staff of Visitor Information Centres throughout Queensland.
- questionnaire responses were used to guide interviews with managers of nine Visitor Information Centres in North and Outback Queensland.

The research revealed substantial differences between centres in terms of funding, training opportunities, staffing resources and computer facilities. It also identified considerable variation within centres between paid and volunteer staff in relation to skills, work tasks, qualifications and access to workplace computers. The main barriers preventing staff accessing e-learning were lack of time; insufficient computer resources; and lack of computing skills. For volunteer staff, lack of computer skills was generally rated as the top barrier whereas for paid staff, lack of time was regarded as the main impediment.

Both volunteer and paid staff strongly supported the introduction of e-learning, provided it was delivered in a blended format that enabled them to access materials outside work hours and/or at home. There was also overwhelming support for the development of an online Community of Practice, as staff felt this would enable them to keep abreast of events, attractions and tourism developments in their own and adjoining regions.

Recommendations

- visitors expect a high level of service regardless of whether staff are voluntary or paid, therefore *all* staff should be given comprehensive training, not only on local tourism products, but also in areas such as customer service, itinerary planning, computer skills and online tourist information retrieval.
- it is important that the visitor information industry builds a culture which values and acknowledges the role of self-directed learning. The provision of computer facilities, access to computers and the internet, and opportunities to engage in e-learning is an essential component of this process.
- a high proportion of Visitor Information Centre staff is volunteers and/or older adults. Accordingly, computer training may be required prior to the introduction of e-learning.
- in some Visitor Information Centres the introduction of online training may require a review of policies and procedures for allowing volunteers to access workplace computers and professional development materials and courses.
- training materials and approaches need to be designed to overcome resistance to training common in volunteer workforces. The introduction of incentive schemes; flexible learning materials (eg. CD-ROM, videos); short modules; educational methods that cater for a wide range of learning preferences and abilities; and a reduced fee structure for volunteers are recommended.
- online training materials need to be simple enough to ensure that constant technical support is not required. This is particularly important for centres located in remote and rural areas where access to technical and learning support is limited.
- due to the diverse nature of the industry in terms of staffing, tourism products, operational procedures and funding, materials need to be presented in a format that can be customised to suit the training needs of individual centres.
- Community of Practice 'champions' need to be identified early and asked to take on the responsibility of promoting the benefits of belonging to the network. These 'champions' will be responsible for encouraging member participation, ensuring topics of communication are appropriate and relevant, and building a culture of online communication within and between Visitor Information Centres.

Introduction

This project was funded under the Australian Flexible Learning Framework (Framework). This Framework is a five-year, national collaborative program between Australian States and Territories, the Australian National Training Authority (ANTA) and the Australian Government. It is managed by the Flexible Learning Advisory Group (FLAG), which comprises representatives from each State and Territory, ANTA, Adult and Community Education (ACE) and the Australian Government Department of Education, Science and Training.

The Framework is designed to create and share knowledge about flexible learning and to support its adoption in the vocational education and training (VET) system. It is committed to the development of innovative online products and services; professional development; and the design of infrastructure that will encourage the wide-spread adoption of flexible learning approaches by Australian businesses, educational institutions and the broader community.

Visitor Information Centres play a vital role in boosting the economic, social and recreational well-being of the surrounding communities by encouraging visitors to extend their stay, to experience a wide range of local attractions, and as a result, to contribute to the local economy. In recent years there has been increased recognition of the role Visitor Information Centres play in providing visitors with travel advice (where to go, what to do, where to stay, safety issues, road conditions etc); interpreting the local region (what is special about the local flora, fauna, geography, customs, history etc); collecting visitor data; and making accommodation and travel bookings. In particular, there has been considerable emphasis on the need for centres to provide high quality, relevant and up-to-date information (Tourism Queensland, 2004).

This project examines the potential of e-learning to enhance customer service, operational procedures and acquisition of knowledge in Queensland Visitor Information Centres. Most centres in Queensland are members of the Queensland Information Centre Association (QICA), a voluntary non-profit organisation that is committed to promoting and developing professionalism within the industry. The primary goal of QICA is to provide cohesive leadership and representation, and thereby achieve maximum sustainable economic benefits for its members. QICA currently has a membership of 50 visitor information centres, some of which have two or more 'shopfronts'. Member centres are located in metropolitan areas such as Brisbane,

Townsville, Gold Coast; remote areas such as Mt Isa and Quilpie; and coastal regions such as the Whitsundays and the Fraser Coast.

Purpose of the research

Visitor Information Centres are often an important community facility and can act as a social hub in remote areas. However, the visitor information industry is also very fragmented – many staff work on a casual or part-time basis; some are retired or have little, if any, work experience; skills and tourism knowledge varies widely; there is a high turn-over rate; and few staff have professional qualifications or access to training. Although State tourism agencies throughout Australia are currently developing accreditation programs or policies for the provision of visitor information, access to formal training remains limited. Likewise, there are few opportunities for staff to visit other centres to view and discuss examples of 'best practice'. This professional isolation is exacerbated in rural and remote centres, where distances and costs associated with accessing traditional institution-based training are prohibitive. Even staff located within travelling distance of formal training providers experience difficulties attending courses due to long working hours and heavy workloads (S. Honnery, Personal Communication, 2004).

As a result of limited access to professional development and training, the design and operation of many Visitor Information Centres tends to be ad hoc and rarely informed by research. Some centres do conduct regular staff training and have access to flexible learning resources that enable staff to improve their knowledge and skills; however, most have limited access to either formal or informal training. This is problematic in an industry whose *raison d'être* is to provide extensive, up-to-date information to visitors. Accordingly, this project was designed to examine the potential of e-learning to promote inter-centre communication, enhance staff tourism product knowledge, and provide a means of accessing current and accurate tourism information. The outcomes will benefit QICA members, Regional Tourism Organisations and the tourism industry in general by

- informing the development of strategies and policies relating to the design of tourism training web sites and other flexible learning resources;
- encouraging staff working in remote and rural areas to upgrade their skills and knowledge by accessing flexible learning resources;
- assisting QICA to create a dynamic and productive Community of Practice that will enable members to discuss common problems, share innovative ideas and solutions, and build a cohesive, supportive network despite being geographically isolated; and
- encouraging other providers of visitor information (eg. hostels, tourism attractions, museums, garages, cafes) to access flexible learning resources, thereby improving the quality of visitor services throughout Queensland.

ANTA and the VET system will benefit by having access to qualitative and quantitative data relating to factors that either enhance or prevent industries in rural and remote areas using e-learning solutions to meet their learning needs. In particular, this research will present recommendations for improving access and use of e-learning as an alternative to traditional institution-based training. Thus, the research will enable VET institutions who currently offer tourism courses to design training packages that are relevant for staff working in geographically dispersed industries.

Research questions

The aim of this research is to identify factors that either prevent or encourage staff in Visitor Information Centres to participate in e-learning. In particular, this research will answer the following questions:

- What are the specific challenges facing different staff groups working in Visitor Information Centres (eg. older workers, part-time workers, indigenous workers, volunteers)?
- How do staff of Visitor Information Centres currently access information?
 - Are they aware of and regular users of e-learning?
 - Do they have the skills to access and use flexible learning resources?
 - Are they willing to upgrade their skills and knowledge through e-learning?
- What are the training needs of staff working in Visitor Information Centres throughout Queensland, and what specific information would enable staff to improve the way in which they organise, present and deliver visitor information and services?
- What conditions/features would facilitate the uptake of flexible learning solutions, particularly for staff in rural and remote areas?
- What factors either facilitate or hinder the development of a virtual Community of Practice network that would allow QICA members to access e-learning resources and share ideas?

Responses to these questions will enable researchers to develop strategies and policy recommendations to foster the introduction of e-learning and a Community of Practice within QICA. Essentially, the present study will lay the groundwork for the development of an interactive, informative and practical QICA website that will enable members to upgrade their skills and knowledge. It will focus on issues such as the strategies that need to be put into place to create such a website; the priorities of the organisation; types of information required by different levels of staff (management, paid staff, volunteers); methods of developing standardised forms and procedures; and steps for setting up and maintaining a vibrant Community of Practice.

Methodology

In order to address the project aims, the proposed research was conducted in three stages as follows.

Stage One: Develop, distribute and analyse QICA questionnaire

The aim of Stage One was to identify and document factors that either hinder or facilitate the uptake of e-learning in Queensland Visitor Information centres. A literature review of the benefits and barriers to the adoption of e-learning was conducted to inform the design of the questionnaire. This questionnaire was designed to identify specific training needs within QICA's member centres and to explore the potential for e-learning to meet these needs. Thus, questions examined staff's current use and knowledge of e-learning options; barriers that prevent them accessing training; degree of proficiency in using flexible learning resources; training needs; and attitudes towards developing and using a virtual Community of Practice. Questions relating to computer experience and confidence were taken from Cassidy and Eachus's (2002) Computer User Self Efficacy Scale and Joo, Bong and Choi's (2000) Internet Self-Efficacy Scale.

The draft questionnaire was sent for review and comment to the Project Advisory Board, which consists of Sherilee Honnery (President, QICA); Polly Hutchence (secretary, QICA); Carmen Smith (Tourism Queensland); and Greg Winslet and Shane Dawson (IT Department, QUT). After slight revision, the questionnaire was distributed electronically to all current member centres of QICA (see Appendix 1). The questionnaire was accompanied by an explanation of the project and instructions for managers to print and distribute copies to all full-time, part-time and voluntary staff members of their centres (see Appendix 2).

146 questionnaires from 29 of the 50 Visitor Information Centres were completed and returned. Questionnaire responses were analysed to identify common barriers and facilitators, and to inform the development of the Stage Two follow-up focus group interview questions.

Stage Two: Conduct interviews with managers of nine Visitor Information Centres

Interview questions were designed to probe issues raised in the questionnaire (particularly in relation to barriers and solutions for overcoming these) and explore which modes of e-learning would best meet the needs of centre staff. As part of this qualitative data collection, issues relating to the development of a QICA Community of Practice were also discussed. The questions that guided interviews are presented in Appendix 3.

Interviews were conducted with managers of nine Visitor Information Centres: Cooktown, Cairns, Mission Beach, Townsville, Charters Towers, Hughenden, Richmond, Cloncurry and Mount Isa. These centres represent a broad cross-section of QICA members, and are located in rural, remote, coastal and metropolitan areas. Interviews lasted from forty-five minutes to one hour.

Stage Three: Produce a set of guidelines to encourage the uptake of e-learning in Queensland Visitor Information Centres.

Data collected in Stages One and Two informed the development of recommendations to encourage the uptake of e-learning in Queensland Visitor Information Centres. These include specific guidelines for engaging older people and volunteers in e-learning. Strategies for developing an online Community of Practice within QICA were also devised. These were designed to support Tourism Queensland's recent introduction of an accreditation system for Visitor Information Centres and to compliment the recently released Tourism White Paper.

Literature review

The development and implementation of flexible learning options in a range of industries is gaining momentum as a means of catering for geographically dispersed clients. Research in 1995 by Leonard-Barton found that isolated communities often become single-minded in the way that they approach workplace tasks and challenges. Without external stimuli such as online communities, their working practices stagnate and new ideas and approaches rarely transfer from one community to the next. This isolation is very evident in Visitor Information Centres, where for most staff the opportunity to meet and exchange ideas and practices is limited to an annual conference. At these events, the transfer of ideas and best practices flourishes, however, it is argued that if online communication networks were established this transfer of ideas could occur continuously.

Online collaboration and the building of virtual communities are becoming a key focus of knowledge management initiatives in many industries. These forms of communication have the potential to create bonds and a sense of community within organisations, even if members of the community are spread over wide geographical areas and do not have regular contact (McDermott, 2001). An online community operating within an organisation is commonly referred to as a Community of Practice. Such a community is held together by members who share common interests and ways of operating within their given occupations. A Community of Practice supports its members by building upon their ability to solve common problems; to develop creative solutions; to broadcast developments both within and outside an organisation; and to connect with and share experiences and knowledge. Thus, members of a Community of Practice share common learning goals and have a wealth of knowledge, information and experience upon which to draw (Terra, 2003).

According to Wenger and Snyder (2000), Communities of Practice have the potential to benefit the organization by solving problems quickly; transferring best practice throughout the organization; developing the skills of members; and recruiting and retaining staff. Communities facilitate learning because they create dynamic networks amongst people who are experiencing and solving similar work challenges and tasks. Accordingly, members learn from others mistakes and successes, become engaged in group problem solving, and pass on their knowledge to others. This exchange

generates a shared understanding of common tasks and challenges, and provides members with the necessary skills and knowledge to deal with difficult events the next time they arise (Sharp, 1997). Terra (2003) adds that Communities of Practice also enhance the social fabric of organizations. For example, discussing real problems and engaging in shared learning creates a sense of connection amongst community members (McDermott, 2001). Furthermore, research indicates that the establishment of online communities decreases staff attrition because it provides opportunities for socialisation and guided or incidental contact with peers (Rovai 2002).

To be successful however, Communities of Practices must be supported by management. This is not to suggest that management is responsible for supplying and transferring of knowledge; rather, management needs to demonstrate that they value the development and maintenance of Communities. This 'nurturing' is best demonstrated by encouraging employees to participate in Communities of Practice, as well as setting aside time for them to do so (McDermott, 2001; Wenger, 1998). There also needs to be several dedicated 'champions' of the Community of Practice, either in management or amongst members, to train members and promote the value of membership. These members need to lead by example by keeping other members informed of developments and creating opportunities for members to get involved (McDermott, 2001; Terra, 2003; Wenger and Synder, 2000). However, champions should not coerce members into belonging, as one of the key features of successful online communities is voluntary participation – members should be inspired not forced to participate (Terra, 2003).

While Communities of Practice provide 'informal' learning, more formal methods, commonly referred to as e-learning, can also provide huge benefits for geographical dispersed industries such as the Visitor Information Centre industry. E-learning refers to the use of technology (particularly computer networks and web-based technology) to deliver and mediate learning. Some definitions of e-learning also include the use of CD-ROMs, interactive television, and video and audio conferencing. Advances in computer technology, wide-spread use of the internet, and society's promotion of life-long learning are some of the key factors driving the expansion of e-learning in modern society (Mungania, 2003). In business too, knowledge is increasingly being regarded as the key to success, however, tried and tested methods of distributing such knowledge through geographically dispersed staff have yet to be established (Kimble, Li and Barlow, 2000).

Benefits of e-learning

One of the key benefits of e-learning reported in the literature is that it provides learners with the flexibility to learn at their own pace and in their own time. For example, Bennink (2004) interviewed staff from 20 private and government Australian organisations and found that the benefits of e-learning to individual staff members include the opportunity to learn at their own pace; flexibility in where and when they can learn; and less stressful learning. Brennan et al. (2003) interviewed 46 e-learners from four Australian institutions and found that many would participate in e-learning again due to the flexibility and convenience this mode offers. Likewise, Daniell's (2004) study revealed that learners in regional and rural Australia found the flexibility of e-learning enabled them to fit it in around other tasks and responsibilities. This particularly applied when study was done at home rather than during specific times at telecentres or TAFE learning centres. Flexibility also related to the pace at which learning was conducted. Again, Daniell's (2004) respondents appreciate the opportunity to study at their own pace and being able to review and revise particular areas.

Another commonly cited benefit of e-learning is that it can save time and money. Many researchers have highlighted the costs that can be saved in staff training by adopting e-learning (Bennink, 2004; Waller, 2002). Daniell (2004) found that many regional online learners appreciated the fact that they could upgrade their skills and knowledge without having to travel huge distances. Likewise, Sidoti (2001, as cited by Brennan et al., 2003) states that web-based training has the potential to extend learning into rural and remote communities and thereby overcome the geographical isolation and difficulties accessing training. Indeed, from a training aspect, e-learning is able to provide high quality training that is consistent regardless of the location of the trainees (Bennink, 2004). This is particularly important for industries whose members are separated by large distances, such as those staffing Visitor Information Centres.

E-learning also enables geographically remote individuals and organisations to exchange ideas through computer networks and discussion forums. While members may not meet face to face, they nevertheless interact and form ties with other members of the community. These online communities have been touted as an ideal method of providing learners with a sense of social cohesion and belongingness despite learners' geographic isolation (Williams, 2003).

E-learning can also provide greater equality and access to computer technology. For example, Mallett, Howard and Thompson (2003) found that one of the perceived benefits of e-learning for pharmacy staff was that it enabled staff across all levels to access high quality computer-based resources. In addition, respondents felt that staff's computer skills would benefit from involvement in e-learning, and that it would provide greater opportunities for promotion.

Barriers preventing the uptake of e-learning

Despite the obvious benefits to both individuals and organisations, simply providing learning software is not sufficient to ensure the wide-spread adoption of e-learning within an organization. E-learning is different to traditional learning methods, and as such, provides challenges for both trainers and trainees. For example, trainers have to master new technical systems, delivery modes and adapt to changes in their working relationships with trainees; while trainees need to adapt to learning in contexts that are often not as social and collaborative as traditional classroom instruction (Ellet and Naiman, 2003). Because large scale adoption of e-learning often requires significant changes within an organization, the introduction of e-learning may meet with resistance from staff and management alike (Renninger and Schumar, 2002; Simons, 2003; Waller, 2002).

A series of case studies by Kimble, Li and Barlow (2000) found that “introducing virtual teams encompasses complex social, economic, managerial and psychological issues as well as organisational and technical processes” (page 9). Managers are often uncomfortable with e-learning and virtual teams due to their novelty; while staff may express reservations about having to change the way they operate and interact with others (Kimble et al., 2000). Negative attitudes towards new technologies and practices are often entrenched, either due to observing failures in other organizations or due to lack of knowledge and understanding about e-learning (Bennink, 2004). It is therefore critical that staff at all levels are encouraged to overcome the perceived barriers to change, and given time and support to experiment with and adapt to new technologies. To do this effectively, an organisation must develop an understanding of the factors that impact on the incorporation of new technologies into their work place. So what are the common objections to using e-learning, and how can these barriers be overcome?

Lack of time

Insufficient time is perhaps the most commonly cited reason for not accessing e-learning. This barrier includes time management problems, particularly in relation to self-directing one's learning (Brennan et al., 2003); over commitment to multiple roles and/or responsibilities (Mungania, 2003); as well as simply being inundated with work tasks. While research indicates that learners prefer to undertake work-related training during working hours, in many cases this simply is not possible. Open design offices, ringing phones, work emergencies and general conversations often intrude upon learning activities, making effective e-learning in work places difficult for even the most dedicated learners (Ellet and Naiman, 2003; Sloman, 2002). Furthermore, Mallett et al. (2003) found that if e-learning is being conducted using a 'general use' computer, constant interruptions are likely when other staff need to access the computer for work-related tasks. Thus, many researchers have emphasised the need for management to prioritise e-learning by providing staff with set times and well-defined private spaces if e-learning is to be done during office hours (Mungania, 2003; Sloman, 2002; Waller, 2002; Wenger, 1998).

Technical issues

Technology has a significant impact upon the nature and growth of e-learning within an organisation (Brock, 2003). While e-learning has been widely promoted as a method of gaining a competitive advantage, there are still many small businesses that find the costs associated with purchasing computers and upgrading software prohibitive. Organisations with insufficient computer resources, unreliable connection to the internet, and outdated software face obvious hurdles to the adoption of e-learning. The resultant long download times and inaccessibility to learning resources can place significant stress on learners, particularly if they are geographical and/or socially isolated (Brennan, Horton, McNickle, Osborne and Scholten, 2003; Simmons, 2003). Indeed, Daniell's (2004) study of regional e-learners in Australia suggests that the more remote the user, the greater the incidence of technology and infrastructure difficulties. In addition, many remote users pay STD rates for their dial-up service which further exacerbates the problem.

Lack of management support

Bennink (2004) interviewed a range of private enterprises and government departments to identify the barriers and facilitators for the uptake of e-learning. Lack of support from staff and stakeholders was a key barrier to the uptake of e-learning. Similarly, research undertaken by the ASTD and the MASIE Centre found that e-learners in 16 US companies were more likely to participate in e-learning if they received support from management and co-workers (Sloman, 2002). Brock (2003) states that for e-learning to be successfully adopted, management must value and promote e-learning as a legitimate work activity. Likewise, Labonte (2003) claims that managers must be involved in the e-learning process, and willing to show learners how to apply their new skills and knowledge to solve work-based challenges. This includes justification of why the e-learning is beneficial to both the workplace and the individual learner. In other words, changes will only occur if there is a widespread perception amongst *all* levels of staff that such changes are important and beneficial.

Lack of computer skills

Developing the skills required to effectively engage in e-learning can be a daunting task for those with limited computing experience (Floyd, 2003). According to Guglielmino and Guglielmino (2003), beginner e-learners often feel anxious about their lack of computing skills and require considerable support and nurturing to ensure their early experiences are positive and successful. Mallett et al.'s (2003) study of pharmacy trainees revealed that a significant proportion were not comfortable with computers, had poor typing skills, and regarded traditional training approaches that rely on 'paper and pen' as more convenient and portable than computer-based methods.

Negative attitudes towards new technology are particularly evident amongst older staff, many of whom do not see the point of learning new skills towards the end of their working life (Ring & Watson, 1994). The nature of the working environment has meant that many older adults have, however, been forced to learn how to use computers during their working years (Baldi, 1997). It is a commonly held belief that older adults are both incapable of and unwilling to undergo computer training. However, studies have shown that in many cases it is older adults' lack of exposure to computers and limited knowledge about their potential that causes them to avoid new technology (Baldi, 1997). Indeed, in many cases, brief computer training has been found to create

positive attitudes towards computers (Kelley, Morrell, Park and Mayhorn, 1999). Other studies indicate that computer training may have to be customised to suit an older audience. This particularly applies to the time allocated to training and practice, as e-learning research suggests that older adults require more time, more practice and more support than younger adults (Echt, Morrell and Park, 1998). Furthermore, although it is commonly believed that a negative relationship exists between age and computer performance (i.e. older adults are less able to complete computer tasks), studies suggest that it is experience and length of time allocated to tasks that determines the ability to use computers. In sum, it seems that while performance is comparable with younger adults, older adults take longer to complete computer tasks (Baldi, 1997).

Regardless of age and skills, some degree of training and support is likely to be necessary when introducing e-learning into an organisation. Mungania (2003) questioned 875 people who had participated in e-learning and found that, not surprisingly, computer training and competency was a significant predictor of e-learning success. She states that the importance of computer skills was clearly evident, and that introduction of e-learning into an organisation must be accompanied by training where skills were lacking. This includes early and regular exposure to the technology to build up staff members' self confidence in using e-learning technology. The need to provide regular computer training for learners as well as opportunities to practice was also recommended by Brennan et al. (2003).

Preference for face-to-face learning

Simmons (2003) studied 144 companies in the USA and found that 87% of learners preferred instructed training to learning via computers alone. In fact, much of the literature indicates that learners tend to prefer some social contact during the learning experience. Researchers point to the fact that modern society's view and expectations of learning experiences are still entrenched in traditional classroom models, where the teacher possesses expert knowledge that he or she passes on to the learners. In other words, most of the current workforce learnt in a system where learning was directed by experts, not the learners. As a result, our society still has reservations about a system that relies on self-directed and life long learning models (Guglielmino and Guglielmino, 2003; Phillips, 2003).

Preference for face-to-face training is particularly evident amongst learners in rural and remote areas, where feelings of isolation are prevalent (Daniell, 2004). However, in many rural areas such training is simply not available unless individuals travel large distances (Mallett, Howard and Thompson, 2003). Difficulties accessing formal training are compounded in organisations with limited funds to cover the costs of travel and replacement staff. One solution that is gaining popularity is to adopt a 'blended learning' approach. This involves using e-learning to complement rather than totally replace face-to-face training. Thus, techniques such as web-based instruction, teleconferencing, video conferencing are used to augment traditional instruction (Eklund, Kay and Lynch, 2003). In many cases, online learning is used to prepare staff for face to face workshops and courses – staff use the online environment to learn about the theoretical underpinnings of the topic at their own pace before meeting as a group to build upon this knowledge (Bennink, 2004).

One of the key benefits of blended learning is that it reduces costs associated with face-to-face training without reducing the content taught (Hall, 2003). Another benefit is that the face-to-face aspect allows members to get to know each other well enough to sustain effective electronic communication for the e-learning sections of the training (Kimble et al., 2000). A blended approach to learning also has a considerable degree of flexibility as it allows for a range of teaching and learning styles and can be tailored to meet individual training needs (Eklund et al., 2003; Hall, 2003). Indeed, a two year study by Barbian (2002) found that blended models of learning were more successful than single-delivery options. Other champions of this mode state that its success lies in its ability to combine the best elements of traditional and technology-mediated training (Eklund et al., 2003; Hall, 2003). Although blended learning is suitable for a wide range of training situations, Sloman (2002) cautions against randomly adopting a range of delivery modes just for the sake of it. Rather, he stipulates that the medium chosen must be suitable for the topic being taught. For example, topics such as 'customer service' are best taught through face-to-face instruction and role plays; whereas information-rich topics such as 'local tourism products' are more suited to computer-based instruction.

Results and discussion

Phase one

A total of 146 questionnaires were returned from 29 of the 50 Visitor Information Centres belonging to the Queensland Information Centre Association. Participating centres were located in rural, regional and urban areas.

The majority (69%) of respondents were volunteers, which is not surprising given that the Visitor Information Centre industry relies heavily on a volunteer workforce. Most of these volunteers (80%) work eight hours or fewer per week. Volunteers also tend to be older, with 77% being over the age of 50. Paid staff, on the other hand, are generally younger, with 62% being under the age of 40 (see Figure 1 below).

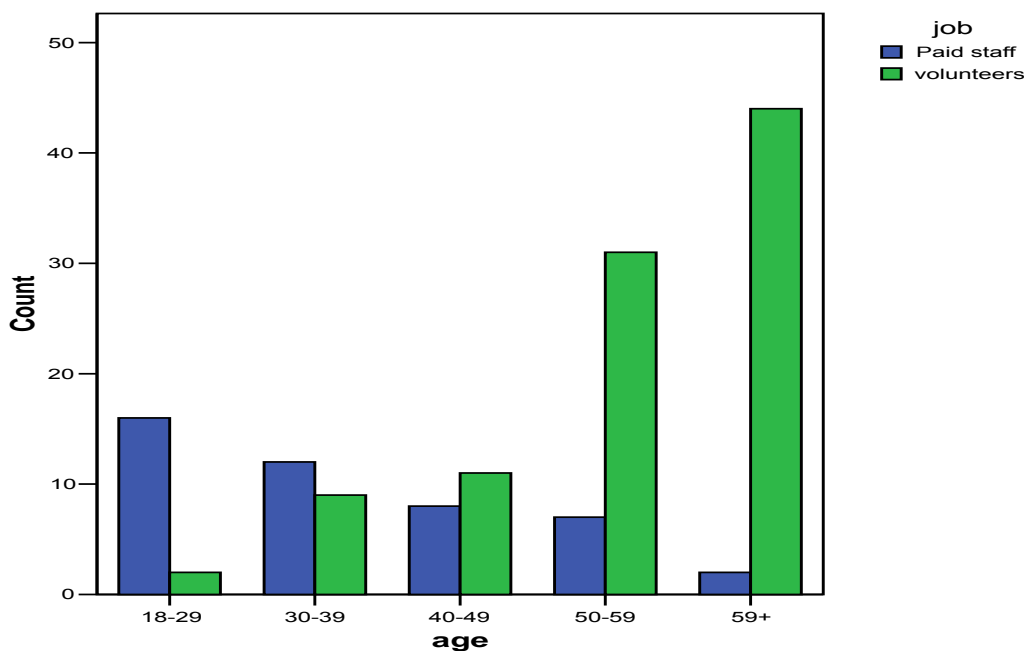


Figure 1: Age distribution of paid and volunteer staff

Given the high number of older volunteers, levels of computer experience were expected to be low. While 33% of volunteers reported that they had none or very little experience, a surprising number had 'quite a lot' or extensive experience (21% and 10% respectively). Indeed, in some categories, volunteers claimed to have more experience than paid staff (see Figure 2).

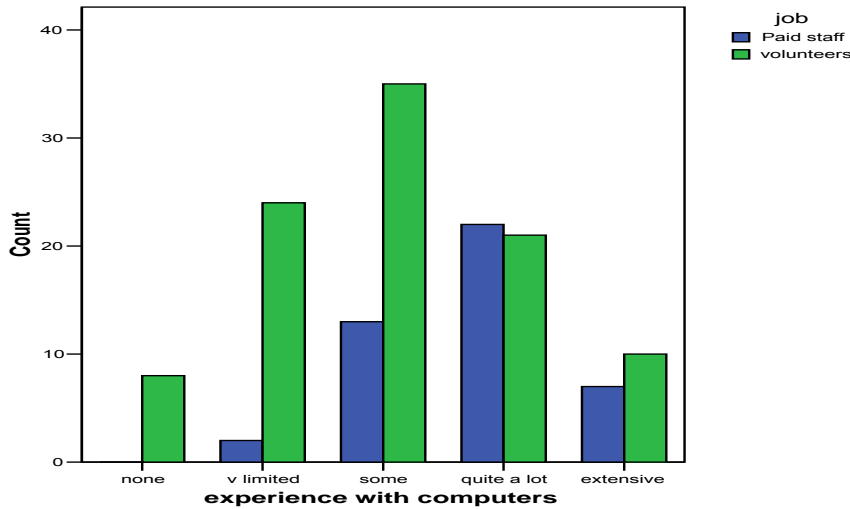


Figure 2: Computer experience of paid and volunteer staff

The reasonably high level of volunteer computer experience was surprising, as anecdotal evidence gathered through informal meetings with managers suggests that volunteers in Visitor Information Centres generally have little, if any, computer experience or skills. Managers' perception of computer competency amongst their volunteers may account for the patterns of computer use in the centres, as data reveals a significant difference between paid and volunteer staff in terms of access to the work computers ($U(140) = 549.5; p < .000$). On a scale from 1 ('several times a day') to 6 ('very rarely'), the median response for paid staff was 1 whereas for volunteers it was 6. This indicates a substantial difference between paid and unpaid staff in terms of computer access. The difference in workplace computer access by volunteer and paid staff is represented in Figure 3 below.

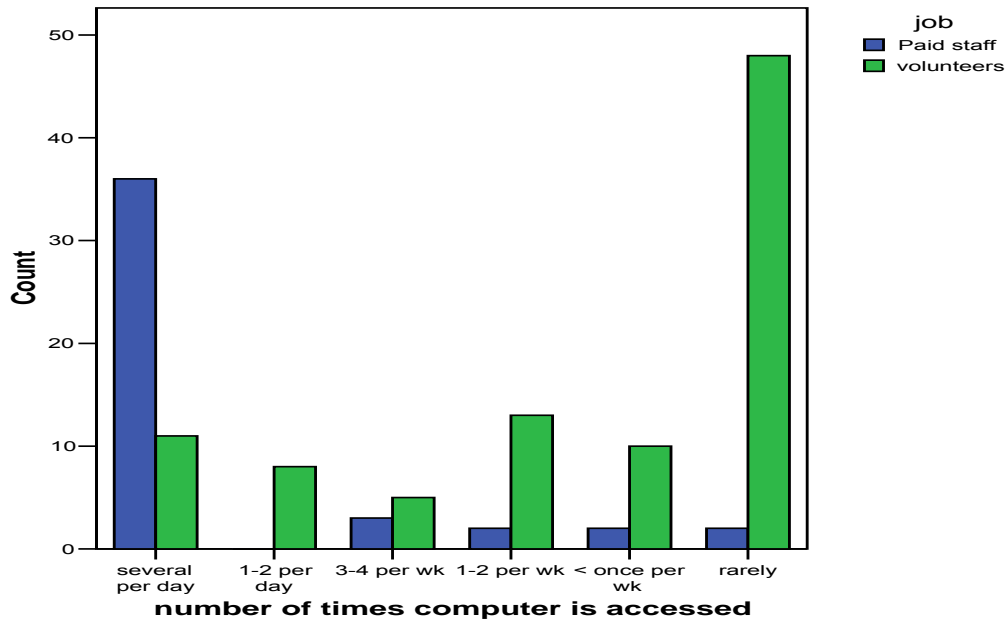


Figure 3: Access to workplace computers by paid and volunteer staff

While the discrepancy may in part reflect the number of hours worked, it does suggest if future training were to be online, a review of volunteer staff’s access to computer resources may be necessary. The data indicates that currently, although volunteers are reasonably computer literate, they rarely use workplace computers. It seems that managers may have underestimated the computer skills and experience of their voluntary workforce, and that these skills may not be being used to their full potential. Indeed, one of the key benefits of e-learning mentioned by respondents is that the Visitor Information Centres would be able to give volunteers more responsibilities (mentioned by 12 respondents, all volunteers).

There is a significant difference in computer competency between paid and volunteer staff in a variety of areas. Respondents were asked to rate their skills from 1-5, with 1 being ‘Strongly disagree’ and 5 being ‘Strongly agree’. Areas where they differed are presented in Table 1.

Statement	p	U	Paid staff			volunteers		
			Mean	sd	Med	Mean	sd	Med
I can send and receive emails	< .0001	1103.000	4.75	.576	5	3.81	1.332	4
I feel confident using computers	< .0001	1286.000	4.14	.795	4	3.29	1.324	3
I can follow links on websites	<.005	1505.000	4.27	.758	4	3.71	1.234	4
I can deal with most difficulties I encounter while using computers	<.05	1491.000	3.70	.954	4	3.11	1.283	3
I know how to search the Internet	<.05	1518.500	4.32	.708	4	3.75	1.307	4
I waste a lot of time struggling with computers	<.05	1536.500	2.41	1.064	2	2.95	1.252	3

Table 1: Computer skills of paid and volunteer staff

It can be seen that in terms of sending and receiving emails, dealing with computer difficulties and general computer confidence, paid staff had a median score that was higher than volunteers. In other words, paid staff were more likely to state they had skills in these areas than volunteers. The claim that paid staff are have higher computer literacy than volunteers is further supported by the fact that paid staff also had a lower median score for wasting time struggling with computers. That is, paid staff are less likely to waste time struggling with computers than volunteers.

Initial discussions with managers and comments written on managers' questionnaires revealed that many thought volunteers were not interested in upgrading their computer skills:

"There is also quite a degree of resistance to learn computer skills with many of our older volunteers."

"I have 12 volunteers over 65 who really aren't interested in computers"

"Most [of my volunteers] are fairly elderly and uncomfortable with modern technology"

There was some evidence for this claim, with volunteer comments such as

"The manager has offered to teach us but I think we are too old"

"Not interested.... what is wrong with simple phone calls, face-to-face conversation and negotiation and fax?"

"Taking 40 years off my age would make it easier to access e-learning"

However, on the whole, responses given by volunteers indicate a positive attitude towards e-learning. For example, 79% of volunteers would like to learn how to use the computer more efficiently; 67% thought computers made learning more fun; and 66% would like to be able to access training materials via the internet. There was no significant correlation between age and willingness to learn or between job type (paid verses voluntary) and willingness to learn, suggesting that irrespective of employment status or age, respondents wanted to learn how to use computers more effectively.

Overall, there was a very positive attitude towards learning how to use a computer, with 80% of the total sample (volunteers and paid staff) stating that they would like to learn how to use the computer more effectively.

The expressed need for further computer training may account for the finding that 55% of respondents felt the computer training provided by their Visitor Information Centre was insufficient. When respondents were asked what specific job training they felt was needed, many listed computer software packages such as Access (requested by 38 staff) and Excel (requested by 13 staff), though more generic job skills training such as local tourism products were also requested (mentioned by 10 staff).

While attitudes towards computers and e-learning are generally positive, there were many respondents who had never accessed e-learning.

"I am totally and completely computer illiterate but would like to learn."

"Internet and CD ROM is of little use to those who have little confidence of their ability with computers."

"Can't comment on e-learning because I don't know what it involves."

The literature suggests that lack of time and lack of computer skills are likely to be major barriers preventing the adoption of e-learning in the workplace. This was indeed the case. When respondents were asked to rank factors that prevented them accessing e-learning in their workplace, by far the most common response was lack of time, rated as the most important barrier by 49 respondents (34% of the sample). A further 26 respondents (18%) rated lack of time as the second most important barrier. This reflects the fact that in general, Visitor Information Centres are understaffed and that their services are in high demand throughout the day:

"We do not have enough volunteers to spare one for [training]"

"28 hours in the day would be the only way [I could access e-learning]"

"There is not enough time [to do training] because we are serving customers"

"[E-learning] options are impractical when working with the likelihood of interruptions"

Insufficient computers was also a key impediment to e-learning (rated as the top barrier by 27 respondents), as was lack of computing skills (rated as the top barrier by 36 respondents).

Non-parametric Mann-Whitney U tests reveal some significant differences in perceived barriers to adopting e-learning between paid and unpaid workers. For volunteer staff, lack of computer skills was most commonly rated as the top barrier to accessing e-learning; whereas paid staff tended to rate lack of computer skills as fourth (U (81) =

328.5; $p < .000$). Lines available for internet use was also rated differently ($U(61) = 288$; $p < .05$), with volunteer staff most commonly rating this as fourth most important, and paid staff generally seeing this as least important. Both groups rated lack of time as a key barrier, with paid staff tending to regard it as most important, and volunteer staff tending to rate it as second most important.

There was also significant correlation between the barrier 'lack of computer skills' and age (Chi square = 24.079, $df=4$; $p < .000$). That is, as age increased, lack of computer skills was more likely to be a barrier to accessing e-learning. However, it is possible that these significant differences are a result of computer experience, as there is a significant correlation between age and experience (Chi square=31.551, $df=4$; $p < .000$), with computer experience decreasing as age increases. As reported in previous studies, there is also a significant correlation between age and the need for technical support while engaging in e-learning ($p < .05$). On a scale of 1 to 6 (1 being the most important barrier), 'lack of technical support' had a median rating of 3 for younger adults (19-39 yr olds); 4 for middle-aged adults (40-59); and 2 for older adults (60 and over). This indicates that older adults regard lack of technical support as a substantial barrier to them accessing e-learning, and confirms other studies that highlight the importance of providing older adults with support and guidance if e-learning is to be successful (Baldi, 1997; Etch et al., 1998).

Despite the barriers preventing access to e-learning, many respondents reported a willingness to learn how to use computers and were positive about the benefits that e-learning could provide, both to them personally and to the Visitor Information Centre. Some commonly mentioned benefits to the individual learner and to the Visitor Information Centre are presented Tables 2 and 3 respectively:

Benefit to individual	N of respondents	% of those who listed benefits
Enhances computer skills and proficiency	47	45
Improves general tourism knowledge	27	26
Ensures knowledge is up-to-date	12	12
Makes it easier to conduct work tasks	12	12

Table 2: Benefits of e-learning to individual learners

Benefit to the Visitor Information Centre	N of respondents	% of those who listed benefits
Increases efficiency, particularly in terms of finding out information for visitors	36	38
Enhances staff's skills	31	32
Provides volunteers with the skills and knowledge to take on more responsibilities	12	13
Helps staff to regularly update their tourism knowledge	10	10
Ensures information given to visitors is accurate and up-to-date	10	10

Table 3: Benefits of e-learning to Visitor Information Centres

These perceived benefits are similar to those obtained by researchers in other industries. For example, Bennink (2004) reports that e-learning provides high quality training that is consistent despite trainees location; Sheldon (1997) claims that online information enables staff in Visitor Information Centres to obtain up to date information about their own and adjacent regions; and Neilsen (2001) states that online information collection and distribution is the way of the future for tourism personnel.

In response to suggestions for making it easier to access e-learning, two conditions were required: more computers in the Visitor Information Centre (mentioned by 23 respondents or 28% of those who gave suggestions) and time set aside to train staff how to use them (mentioned by 22 respondents or 27% of those who gave suggestions). Providing someone to conduct the initial training and being able to access training after hours were also seen as conditions which would enhance the uptake of e-learning (mentioned by 13 and

12 respondents respectively). Again, this mirrors previous research that emphasises the importance of having designated times and places for e-learning to occur (eg. Mungania, 2003; Sloman, 2002; Waller, 2002 and Wenger, 1998).

By far the most preferred method of e-learning amongst this group of respondents was CD-ROM, rated as most or second most preferred by 48% of the group. Accessing learning materials via the internet was also highly rated (rated as most or second most preferred by 40%). Reasons given for these choices largely focused on their flexibility in terms of allowing staff to work at their own pace or in quiet times (mentioned by 32 respondents) and being able to do it at home or in one's own time (mentioned by 36 respondents). Again, this reflects previous e-learning research (eg. Bennink, 2004; Daniell, 2004) which highlights the importance of providing training that is both flexible and portable.

In addition to examining e-learning, this research aimed to ascertain whether the establishment of an interactive QICA website would be useful for its members. Respondents were asked to indicate how often they contacted other Visitor Information Centres. Presently, there is a relatively low level of interaction between centres, with 62% of respondents stating that they contact staff in other centres less than once a week. Almost all communication that does occur between centres is conducted via telephone. It is argued that if QICA developed a website that enabled members to communicate via discussion forums and email, this contact may increase.

The need to include website features that meet users' requirements is consistently highlighted in the literature. Thus, respondents were asked to indicate what type of information they would find most useful and how the current website could be improved. Interestingly, ten respondents said they couldn't comment on improvements because they had no idea what was on the current QICA site. Those who did comment recommended information on local tourism products (suggested by 19 people); contact details of other Visitor Information centres (suggested by 14 people); information on other areas (also suggested by 14 people); and training manuals (suggested by 10 people). Sections with up-dated road conditions, weather conditions and maps were also regarded as desirable.

Phase two

Interviews with managers at nine Visitor Information Centres aimed to explore issues relating to training and e-learning in more depth. Of particular interest were barriers and facilitators relating to the establishment of online training modules and a Discussion Forum. The centres selected differed widely in terms of their scope, funding arrangements, staffing and operational procedures. Some were directly funded by Shire councils (eg. Richmond, Townsville), some were funded by industry (eg. Cairns), while others were run as a business (eg. Cooktown). Despite these differences, comments regarding training and access to e-learning were similar and are presented according to themes.

Current training activities

The scope of training provided to full-time and volunteer staff generally reflects the size and funding capacity of the Visitor Information Centre. Larger centres such as Cairns pay for their staff to attend regular training sessions on topics such as customer service and computer training. At the beginning of each year, management selects a suite of Tropical Tourism North Queensland (TTNQ) courses to meet the needs of the staff, estimated to cost AUD\$10,000's.

While large centres can afford to send staff on externally run courses, this is not a common practice within the Visitor Information Centre industry. Instead, many Visitor Information Centres design and deliver their own in-house courses. For example, Townsville Visitor Information Centre management runs monthly workshops on product updates and customer service. These include familiarisation trips to gain first hand experience of the tourism product, a common practice amongst the centres visited. Smaller centres such as Mission Beach and Cooktown also run regular information sessions to update staff product knowledge and refine their customer service skills. Managers of both centres stressed that being part of a small community means that obtaining information and updates is not as problematic as it is in larger communities. Mission Beach management ensures staff remain well-informed by distributing a regular newsletter. In the smaller centres access to formal or in-house training is virtually non-existent. This is largely due to funding and staffing issues, as centres are either unable to afford to pay replacement staff or unable to find anyone qualified to take over in their absence. For these centres, the benefits of flexible delivery and not having to travel make e-learning an attractive training option.

Most Visitor Information Centres run courses to induct their volunteers. Many also provide on-going courses in customer service and local tourism products to maintain staff skills and knowledge. Eight of the managers interviewed noted that because volunteers tend to be older and unpaid, training is kept as informal as possible. For instance, Visitor Information Centres in Charters Towers and Mission Beach refer to their monthly meetings as 'morning teas' rather than training sessions to encourage participation. Others noted that sessions are kept as brief as possible to overcome volunteers' reluctance to attend training. Training for paid staff tends to have a different focus to that offered to volunteers. For them, emphasis is on leadership, management, customer service and advanced computer skills. In some centres this training also covers issues relating to dealing with a voluntary workforce.

E-learning facilities and accessibility

Larger Visitor Information Centres such as Outback at Isa and Cairns have reliable internet access and staff regularly use the internet to obtain tourism-related information. Accessing e-learning through the QICA website is unlikely to pose difficulties for these centres and, according to management, could easily be accommodated during working hours.

More remote and smaller centres, on the other hand, have a myriad of problems relating to accessing on-line training. Cooktown, for example, has very slow connection and the Internet link regularly 'drops out' for no apparent reason. The manager of the Visitor Information Centre feels her staff would be constantly frustrated by the poor access and that any form of training via this method would pose significant challenges. She was more in favour of placing training materials on a CD-ROM as this would facilitate access and enable staff to serve customers when required. However, if QICA did choose a web-based format, the Cooktown centre has a computer that could be dedicated to e-learning. This is unusual, as many of the smaller centres did not have computers that could be set aside for training. For example, Richmond only has one staff computer, and as the internet line is required for phone enquiries and EFT-POS access, accessing e-learning during work hours was perceived as impractical. Likewise, Mission Beach Visitor Information Centre uses the same phone line for phone enquiries and EFT-POS sales, as well as general administrative functions. There are no computers that could be dedicated to e-learning, therefore the manager felt it would be very difficult for staff to access e-learning during work hours.

Larger centres such as Cairns have several computers, each connected to the internet, which could be dedicated to e-learning. Not all large centres are so well-equipped, however, as neither Visitor Information Centre in Townsville has a computer. Any training delivered on-line would automatically preclude the involvement of their staff.

Other access issues focused on the staff themselves, with many managers commenting that their volunteers tended to be older and therefore not interested in using computers to further their knowledge and skills. This supports a range of studies that have found there is a common misperception that older adults are both incapable and unwilling to participate in computer training (Baldi, 1997; Kelly et al., 1999). The general feeling amongst managers in this study is that a blended approach to e-

learning would ensure training materials are both attractive accessible to their staff. Many do not encourage computer use by their volunteers, and in some cases, volunteers are prevented from accessing Shire-funded computers by council regulations. For staff working in these centres CD-ROMs that could be used at home or modules that could be downloaded into printed formats may be the only option.

Suggestions for website contents

All managers interviewed expressed an interest in being able to access the QICA operations manuals online. In particular, they requested training modules be presented in a format that allows each centre to customise the information and, if necessary, print out materials. Most managers interviewed requested training on management topics, particularly in relation to dealing with volunteers. This included 'best practice' procedures for selecting tasks to maximise volunteers' creative and intellectual input; recruiting and supporting volunteers; overcoming volunteers' apathy towards training; developing customer service ethics amongst volunteers; and implementing innovative ways of harnessing volunteer's knowledge and skills. Interviewees felt this section should be protected by a management-only password as it is likely to cover topics (such as overcoming staff resistance to training) that may offend some volunteers.

Managers also felt a section specifically geared towards volunteers would encourage these staff to regularly access the site. Some commonly suggested training topics for this area included customer service; how to upgrade knowledge; and a newsletter which highlights volunteers' achievements and activities. Other training topics that interviewees felt would be particularly useful for both paid and volunteer staff included general computer skills; creating and maintaining local tourism product databases; selling souvenirs and tours/accommodation; and techniques for critically evaluating local tourism products while participating in familiarisations. The latter includes the development of a QICA approved evaluation form.

Some features that were suggested for the 'front page' of the proposed website included a 'Innovative Ideas' section; a 'tricky questions' box; calendar of events; awards and 'staff news' section; and links to commonly used sites such as the Outback Queensland Tourism Association, Main Roads, RACQ and other Visitor Information Centres.

There was overwhelming support for the development of a QICA members-only Discussion Forum. All those interviewed thought this would be an excellent method of discussing common problems and distributing 'best practice' solutions. Recently, a fledgling Community of Practice has begun operating within QICA. This has come about as a result of the secretary occasionally distributing questions asked of the executive via email to all members for comment. The benefits of this shared communication were mentioned by all managers with whom we spoke. Indeed, Visitor Information Centres seemed very interested in how other centres were responding to particular issues. Responses from questionnaires and interviews suggest that a Discussion Forum would flourish within QICA and would help develop and enhance communication amongst its members.

Implications for the Tourism Industry

Tourism has the potential to enhance the social, recreational and economic fabric of both urban and regional communities throughout Australia. Visitor Information Centres play a vital role in this process by providing visitors with travel advice; interpretive experiences; and accommodation, travel and tour bookings. However, due to the geographically dispersed nature of the industry and the wide range of skills, knowledge and qualifications amongst staff, the standards of customer service and operational procedures followed by centres vary considerably. In addition, this research revealed a substantial difference within centres between paid and volunteer staff in relation to skills, work tasks, training and access to workplace computers.

These differences have the potential to affect the overall efficiency of the tourism information industry. Visitors are becoming increasingly well-travelled and, as a result, demand high standards of customer service. Regardless of their location, people expect Visitor Information Centres to be staffed by people who are well-informed and capable of answering a range of travel-related questions. Whether these staff are employed in a paid or voluntary capacity is incidental to visitors – if they are working in Visitor Information Centres, the expectation is that they will be sufficiently trained to offer relevant, accurate, and comprehensive travel advice. It is therefore critical that *all* staff interacting with visitors receive a high level of training, not only on local tourism products, but also in areas such as customer service, itinerary planning, computer skills and online tourist information retrieval.

Currently, there is a two-tiered system of training and task allocation operating in most centres, particularly in relation to computer-based tasks. Generally, paid staff regularly use computers for administrative tasks and obtaining booking information, whereas volunteers rarely have access to workplace computers or opportunities to participate in online learning. There are also differences in the training needs, areas of interest and responsibilities of paid and voluntary staff. For volunteers, the key areas of training required are customer service; upgrading local tourism product knowledge; and basic computer skills. For managerial staff, the key issues are recruiting, training and supporting volunteers; developing customer service ethics amongst staff; and developing innovative ways of harnessing their staff's knowledge and skills. It has been noted that some topics (for example, how to manage volunteers) may be

contentious and that access may need to be protected through a managers-only password system. While most of the paid staff are highly computer literate, advanced computer training in the areas of web site design, graphic design, and data base construction and maintenance have been requested.

Within the industry computer skills are yet to be regarded as essential for Visitor Information Centre staff, however, there is a general recognition that online learning has the potential to improve the efficiency and quality of information services. Many centres still rely on traditional forms of information distribution, viz., printed brochures and verbal communication between staff and prospective visitors to promote local visitor facilities and attractions. Unfortunately, these sources of information can be variable. Brochures have a tendency to date very quickly, while the knowledge and expertise of staff can vary widely. Many visitors travelling through Queensland are on multi-destination trips; consequently, they require information not only about the local area but also adjacent regions. Research suggests that the availability of online information and links with adjacent regions would help staff to service these requirements, particularly if regions are significantly different from each other in terms of facilities and attractions (Sheldon, 1997). Again, it is argued that information technology, particularly access to and use of internet and computer-based sources of information, has the potential to improve the accuracy, quality and scope of information that can be disseminated to visitors. For example, the Internet can be used to gather and disseminate information to prospective travellers, while the intranet can be used to provide updated information to other visitor information centres (Sheldon, 1997). The latter is particularly important, as tourism products are constantly changing and staff at information centres must keep abreast of changes in their own and adjoining regions to effectively meet visitors' needs. In the words of two volunteers:

"Tourism changes quickly and constantly. E-learning would provide timely updates."

"Access to e-learning would enable us to complete tasks more efficiently and make better use of the resources available."

Although e-learning has the potential to improve the services provided by Visitor Information Centres, this research revealed that generally, managers think their volunteers lack the skills or interest to access e-learning. Many viewed this problem as a generational factor, one that would eventually be resolved through natural attrition. However, responses from volunteers suggest that attitudes towards computer use and e-learning are more positive than managers realise:

"[It would be great] because all volunteers could become computer literate."

“Being able to access e-learning would make me feel better within myself that I can do something modern and technical.”

“E-learning would give us all the same skills and ensure consistent service standards.”

Despite the large proportion of older volunteers working in the industry, computer competency was surprisingly high. Even those with limited skills were keen to access e-learning and improve their computer skills. This suggests that if training were to be online, a review of policies and procedures for allowing volunteers to access workplace computers would be needed. It is interesting to note that a high proportion of volunteers complained that the training provided by the centre was insufficient, particularly in relation to computer training. Again, unless managers can be convinced that volunteers are interested in improving their computer skills, this practice is unlikely to change.

It seems that while policy-makers and stakeholders generally believe access to training will increase the profitability of the tourism industry, there are still sections of the Visitor Information Centre industry not firmly committed to maintaining or upgrading workers' skill levels. Managers need to view their volunteers as a valuable resource, not just people who stack brochure shelves for free. There is considerable potential for volunteer staff to relieve the staffing problems common in the industry, and to assist with the daily operations of the centre. However, this would require a wholehearted commitment to training and, in some cases, financial investment in additional learning resources. Many managers reported that volunteers are not working enough hours to justify the costs associated with providing training; however, it is argued that if this training were delivered online and accessed through current computer networks, the financial outlay would be minimal. Volunteers are keen to improve their computer skills; management needs to be convinced that this would be beneficial, not only to their centre but also to the on-going success of local tourism attractions and the Queensland tourism industry.

It is imperative that the visitor information industry builds a learning culture in which managers and colleagues provide support for all staff members to access e-learning. The provision of computer facilities, access to the internet and opportunities and encouragement to engage in e-learning is essential to ensure the adoption and growth of online learning within the industry. Each centre also needs e-learning 'champions' - respected and influential staff members who have the skills and expertise to train, support and encourage the uptake of e-learning within their centre. In sum, management needs to clearly demonstrate that training of all staff is valuable, and

provide opportunities and workplace support for those who chose to participate in e-learning.

The issue of motivation and self-management should also be addressed. Managers mentioned that resistance to formal training is common.

"I have to call my training sessions morning tea otherwise they wouldn't come"

"I put on a social function with great cakes, then act surprised when my speaker 'pops by' and offers to give a short talk. If I publicised the fact that it was a training session, I'd be sitting there on my own!"

For many staff, particularly those who are volunteers, there is little advantage in engaging in learning to improve career pathways. It is argued that the only way to encourage volunteer staff to engage in online learning is to build a culture that values and rewards learning. Emphasis needs to be placed on the fact that regardless of their voluntary status, Visitor Information Centre staff are important ambassadors for their town and region. In essence, their ability to 'sell' local tourism products and services directly impacts upon the economic, social and recreational well-being of the whole region. Perhaps an incentive scheme especially designed for volunteers (such as a Volunteer of the Month) could be introduced by QICA. This could include public recognition on the QICA website or in QICA newsletters. Alternatively, each centre could have its own awards for exemplary volunteers. This could include vouchers for local products/attractions, increased access to computers, and/or greater responsibilities in the workplace. For paid staff, participation in e-learning could be rewarded financially or with increased leave loading. The challenge is to develop a range of incentives that encourages *all* staff to participate in e-learning, one that clearly demonstrates the value management and QICA place on workplace training.

This research also revealed a wide disparity in the funding, scale and resources of Visitor Information Centres throughout Queensland - some are totally or partially funded by shire councils; some are funded by industry; while others are self-supporting. Likewise, the opportunity to access training (either in-house or externally) varies depending on location, funding and staffing resources. Tourism is a highly competitive industry with a wide range of attractions, events and services in each region. If tourism staff are to benefit from e-learning, an effort must be made to ensure there is equal access to learning resources, regardless of whether Visitor Information Centres are located in Brisbane, Bowen or Boulia. In other words, the industry needs to prioritise e-learning and explore ways of encouraging staff to access learning resources and opportunities.

The importance of equal access and standardisation of procedures is evident when one considers that a negative experience in one centre has the potential to not only ruin visitors' entire holiday, but to also discourage them from stopping at other Visitor Information Centres 'down the line'. Information centres are inextricably linked; therefore, a standardised approach to procedures, training and information retrieval seems logical. It is argued that the development of online operations manuals and standardised training procedures would be a significant step towards raising the level of service in all Queensland Visitor Information Centres. This will also ensure that all centres give the same travel advice, and that the service received is the same high quality regardless of the centre's location or staff member involved. In particular, it will enable QICA to deliver relevant, 'hand-on' training materials that clearly articulate to workplace experiences.

In addition to standardising operational procedures amongst QICA members, the development of QICA training materials will promote the message that QICA values, supports and encourages e-learning amongst its members. Online training will also give QICA's members a marketing edge in that they will be able to access training resources not available to non-member centres. It is recommended that these resources cover issues requested by staff, namely, information on local tourism products; contact details of other Visitor Information Centres; information on other areas; and links to sites that update road conditions, weather conditions and maps. The development of a website that includes member-requested information can also be used by QICA to encourage non-member centres to join the association. Increased membership means increased networking opportunities; wider access to training; and ultimately, better customer service for Queensland's visitors.

The development of an online Community of Practice is also recommended as a key method of encouraging and enhancing communication between centres. The fact that there is already a small network of QICA managers swapping ideas via email suggests that this form of online support has considerable potential to improve network links between tourism regions. Indeed, there was overwhelming support from managers, paid staff and volunteers alike for upgrading the QICA website and developing an online Discussion Forum. Members are keen to discuss common issues and problems, and regard the introduction of a virtual Community of Practice as an innovative and attractive method of disseminating information throughout the organisation. Many Centres feel isolated, and commented that their QICA membership and professional links to other Visitor Information Centres were essential to ensure they delivered 'best practice' customer service. They felt that the establishment of a

Discussion Forum would encourage state-wide communication and interaction, and would elicit a wider range of responses and solutions to common problems. Indeed, enhancing the social fabric and intellectual capacity of organisations is one of the key benefits of Communities of Practice (McDermott, 2001; Terra, 2003). However, to be truly effective, this system of communication would need to be made available to *all* staff, not just managers as is currently the practice.

The fact that managers are keen for their staff to be involved in the e-learning process and, where possible, willing to set aside time for them to do so suggests that the introduction of e-learning and virtual Community of Practice within the industry will be successful (Brock, 2003; Labonte, 2003; McDermott, 2001; Wenger, 1998). To facilitate this process, it is recommended that Community of Practice champions are identified early and asked to take on the responsibility of promoting the content, relevance and benefits of the network to staff members. They will be responsible for encouraging member participation, ensuring topics of communication are appropriate and relevant, and building a culture of online communication in all QICA centres. This will enable members to exchange ideas; promote examples of 'best practice'; develop professional links with staff in other regions; solve problems as a group; and keep abreast of events, products and changes within the industry. A vibrant Community of Practice will also enable QICA members to publicise their events and products in all QICA centres, thereby enhancing the potential of centres to attract visitors to their region.

Implications for the wider VET Sector

Incorporating equity into Australia's VET system is a key component of the National Strategy for Vocational Education and Training 2004-2010. Thus, the development of learning materials needs to be based on accurate analyses of clients' needs and delivered in a format that is accessible to learners with a wide range of educational qualifications, literacy skills and socio-economic backgrounds. In addition, training providers delivering courses to industries that rely heavily on volunteers need to ensure their materials are suitable for audiences with diverse ages, interests and experiences.

The perception that older adults are incapable of using computers is widespread amongst industries and needs to be altered if e-learning is to become a method of learning for the future. Indeed, contrary to managers' beliefs, many older adults in this study had basic computer skills and felt that with some training and on-going support they would be capable of performing simple online information retrieval. Many were very interested in enhancing their computer skills and expanding their general tourism knowledge. Training providers need to take advantage of this interest and design courses which encourage both young and older adults to further their education through e-learning. Courses designed for older adults should be structured to provide extra practice sessions and plenty of time for learners to assimilate new information, as computer literacy research indicates that older adults generally require more time and practice sessions than younger learners. Indeed, if a high proportion of learners are older adults it may be necessary to provide computer training prior to the introduction of the online materials. Comments received from management support this:

"Very few of the volunteers have computer skills – basic computer skills would be a pre-requisite to e-learning."

"Staff training of volunteers is needed before we would consider access to the Internet for the volunteers."

"Computer training would need to be step by step, point by point."

Any provision of e-learning within the visitor information industry will need to take into account the common barriers listed by respondents. Lack of time is a key issue, particularly in busy centres where interruptions by visitors are frequent. Not only are Visitor Information Centres busy, many also tend to be understaffed.

"We're too busy to train because we are short staffed most of the time"

"[Training needs to be designed so] learning can be completed as time permits and without interruptions from clients."

Interviews indicate that in most centres opportunities to devote more than a few minutes during business hours to e-learning are limited. For larger centres, managers felt this problem could be overcome by putting aside dedicated computers and spaces for e-learning. For smaller centres this is not possible for two reasons: insufficient staff to respond to visitor enquiries, and phone lines being needed for other purposes such as telephone enquiries and processing EFT-POS. For these centres, the provision of training materials in a format that could be accessed outside business hours is essential.

The issue of flexibility and the ability to access materials outside the workplace was a common theme throughout questionnaire and interview responses. Whether part-time, voluntary or full-time, workers in the visitor information industry expressed the need for flexible approaches to training and further education:

"Individual learning would be easiest because we are volunteers and lead a busy lifestyle."

"I am most comfortable working through learning at my own pace..."

"[I would prefer] discs that could be borrowed and viewed at leisure at home"

These comments suggest that the provision of e-learning in short, simple and easy-to-manage 'chunks' would be particularly suitable for this industry. Traditional training approaches that require cohorts of learners meeting in one location are unlikely to be successful for this industry, as most centres are either too geographically isolated or too short staffed to spare learners for blocks of training. There was a range of preferences in terms of learning formats, suggesting that a blended approach may be best when dealing with such a diverse range of clients. Responses do suggest that if possible, training materials should be delivered in a format which could be used by learners in their own time (eg. CD-ROM, videos, internet). In particular, e-learning should be no more time-consuming to undertake than traditional forms of training.

The issue of 'lack of time' is also closely related to the seasonal nature of the visitor information industry. There are peak times during the year (particularly school holidays) in which it would be virtually impossible for industry personnel to participate in training. Consequently, course delivery and assessment need to be programmed around these peak visitor periods. This timetable will need to be conducted on a regional basis, as different regions have different busy periods (for example, peak

season in south east Queensland is Christmas/January, whereas in western Queensland it is mid-year).

The provision of online learning is often seen as a key solution to requests for flexible learning approaches. While almost all regional and remote Visitor Information centres are connected to the internet, some still have difficulties with slow connections and lines inexplicably 'dropping out'. For these centres, a blended approach that combines on-line instruction with materials in a printed, CD-ROM and/or video format would be more suitable than relying on web-based instruction on its own. Some of the key benefits of a blended approach are that it combines the best elements of traditional and technology-mediated learning; it can be tailored to suit a wide range of learning styles; and it is suitable for a wide range of training situations (Eklund et al, 2003; Hall, 2003; Sloman, 2002).

While trainers will need to provide some technical and learning support, it is important that online training products are simple enough to ensure that constant technical support is not required. This particularly applies to courses delivered in remote and rural areas where access to technical and learning support is likely to be limited. For learners in these situations, technical difficulties, inadequate induction and time delays associated with asynchronous communication are likely to be major sources of frustration. In the words of a young staff member located in Outback Queensland:

"I have used e-learning before and didn't find it very good – no support, hard to learn outside classroom environment."

Likewise, an older volunteer states:

"Because I am lacking knowledge of the computer it frustrates me quite quickly unless I have someone I can call on immediately a problem arises that I can't fathom."

It is argued that the ability of training providers to design courses and instructions that reduce technical and communication barriers will be crucial to their success.

The issue of cost of training also needs to be taken into account. Many older adults and volunteers do not have regular incomes and therefore may not be able to afford enrolment fees. The development of modules that could be purchased in isolation, as well as reduced fees for older adults/pensioners should be seriously considered. It should also be noted that many volunteers and older adults may not own computers; therefore, arrangements to facilitate computer access may be required. These could include organising after-hours computer access in the workplace; facilitating access to public library resources; and providing hard copies of training materials and learning texts.

This research revealed a highly diverse industry - some centres are industry and/or council funded, while others are completely self-funded; some centres have less than five staff members, others have 50; some centres pay for their staff to attend VET training, others rely on in-house training; some centres are predominantly staffed by volunteers, others only have paid staff. The implications for training providers are obvious - any courses developed for this sector would need to be generic to ensure the content can be applied to a diverse range of sites, situations and operational procedures but at the same time specific enough to be considered relevant and engaging to those working in the industry. If possible, the development of online learning materials should allow for customisation of materials to suit the training needs of individual centres. That is, management needs to be able to add or modify sections to suit their particular centre. Above all, there would need to be concerted effort to raise industry awareness of online training materials and to develop partnership arrangements between businesses and organisations (eg. public libraries, TAFEs, internet cafes, Shire councils) that facilitate the sharing of community resources, knowledge and skills. This is particularly important in rural and remote areas, where access to resources tends to be limited.

The provision of training materials and the development of a vibrant Community of Practice within the Queensland Information Centre Association is regarded as a timely and essential service for an industry which relies on keeping its staff motivated, well-informed and up-to-date. A large proportion of the workforce is volunteers; therefore, the development of materials that assist managerial staff to harness the knowledge, skills and potential of this group is essential. Likewise, it is important to design separate training materials that specifically target the needs, interests and skills of volunteers if the future success of Visitor Information Centres is to be assured. E-learning is a viable and innovative way of serving an industry that is geographically dispersed, information dependent and undergoing constant product changes. This research indicates that managers, paid staff and volunteers all feel that e-learning has enormous potential to service, support and enhance the provision of visitor information throughout Queensland.

Recommendations

This research gives rise to the following recommendations:

It is recommended that the Australian Flexible Learning Framework

- draws the attention of the tourism industry and tourism training providers to the potential of e-learning to service the needs of geographically dispersed industries.
- continues to champion the benefits associated with online training methods.
- promotes examples of 'best practice' online training materials.
- conducts further research into methods of reducing resistance to online learning in rural and remote areas.
- conducts research into 'best practice' methods of introducing online training to older adults and volunteers.

2. It is recommended that the VET system

- designs training materials and approaches that will be suitable for both paid and volunteer staff. In particular, these must be designed to overcome the resistance to training commonly found in volunteer workforces.
- devises training materials that suit workplaces where interruptions by clients are frequent and unpredictable.
- introduces incentive schemes; flexible learning materials (eg. CD-ROM, videos); short modules and educational methods that cater for a wide range of learning preferences and abilities.
- designs online training materials that do not require a high level of technical support. This is particularly important for centres located in remote and rural areas where access to technical and learning support is limited.
- presents materials in a format that allows for customisation by individual Visitor Information Centres.
- develops a fee structure that encourages participation by volunteers.

3. It is recommended that QICA

- encourages centres to provide comprehensive training to *all* staff, not only on local tourism products, but also in areas such as customer

service, itinerary planning, computer skills and online tourist information retrieval.

- builds a culture which values and acknowledges the role of self-directed learning. The provision of computers, access to the internet, and opportunities to engage in e-learning is an essential component of this process.
- conducts an awareness campaign to highlight the value of belonging to the QICA network. This should include benefits such as access to standardised online training materials and operational manuals; online communication with a wide range of 'expert' practitioners; and access to regular updates on tourism products, events and statistics.
- identifies Community of Practice 'champions' and asks them to take on the responsibility of promoting the benefits of belonging to the QICA network. These 'champions' will be responsible for encouraging member participation, ensuring topics of communication are appropriate and relevant, and building a culture of online communication within and between Visitor Information Centres.

4. It is recommended that Visitor Information Centres

- provide computer training for both paid and volunteer staff prior to the introduction of e-learning.
- review policies and procedures for allowing volunteers to access workplace computers and professional development materials and courses.
- develop workplace practices that encourage and reward staff for participating in online professional development courses.

Limitations of the research

The most obvious limitation of this research is that completion of the Phase One questionnaire was voluntary; therefore, managers who did not value e-learning may not have distributed questionnaires to their staff. Alternatively, they may have only given it to staff who they thought would want to be involved. Even if questionnaires were distributed to all staff, those who were not interested in e-learning may have opted not to participate. Thus, it is unclear whether the positive attitudes towards e-learning identified in this research are truly representative of the entire visitor centre workforce or whether they reflect the views of those who already have some level of interest in computer-based learning.

Another limitation of this research is that questionnaires were only distributed to centres with current QICA membership. It is possible that attitudes towards e-learning may be different in non-member centres, however, given the wide range of centres and staff involved in this research, it is unlikely that widening the survey would have produced different results.

A common problem associated with research examining behavioural intentions is that it examines intentions not actual behaviour. Although respondents in this study indicated a strong preference and willingness to engage in online learning, this does not guarantee they would participate in e-learning if it were introduced at their information centre. Further research to develop training materials for the visitor information industry and follow-up research to determine the extent to which these are being accessed by staff in the industry is therefore required. This will enable researchers to gauge the ability of online learning to meet the training needs of the visitor information industry.

References

- Baldi, R.A. (1997). Training older adults to use the computer: Issues relating to the workplace, attitudes and training. *Educational Gerontology*, 23(5), 467-474.
- Barbian, J. (2002). Blended works: Here's proof! *Online learning*, 6(6), 26-31.
- Bennink, R. (2004) Implementing e-learning from the corporate perspective.
Retrieved on 13th September, 2004 from
<http://www.flexiblelearning.net.au/knowledgetree/edition05/html/editorial.html>
- Brennan, R., Horton, C., McNickle, C., Osborne, J. and Scholten, K. (2003) *Online learning on location: Perspectives from regional Australia*. Retrieved on 2nd August, 2004 from <http://www.ncver.edu.au/research/proj/nr1F04.pdf>
- Brock, R. (2003). Increasing learner involvement and participation. In G.M.Piskurich (Ed.). *The AMA handbook of learning*, pp.99-115. New York: American Management Association.
- Cassidy, S. and Eachus, P. (2002). Developing the Computer User Self-Efficacy Scale (CUSE): Investigating the relationship between computer self-efficacy, gender and experience with computers. *Journal of Educational Computing Research*, 26(2), 133-153.
- Daniell, R. (2004) Access and equity in online learning: Rural and remote learners.
Retrieved on July 28th 2004 from
<http://resources.flexiblelearning.net.au/resources?14@125.UPWra9Pxbaz.o@e7d9fb.June17,2004>
- Echt, K.V., Morrell, R.W. and Park, D.C. (1998). Effects of age and training formats on basic computer skill acquisition in older adults. *Educational Gerontology*, 24(1), 3-26.
- Eklund, J., Kay, M. and Lynch, H.M. (2003). E-learning: emerging issues and key trends. Retrieved on 28th July 2004 from
<http://www.flexiblelearning.net.au/research/2003/elearning250903final.doc>
- Ellet, B. and Naiman, A. (2003). Introduction: Is e-learning better than...? In G.M.Piskurich (Ed.). *The AMA handbook of learning*, pp. 112-36. New York: American Management Association.
- Guglielmino, P.J. and Guglielmino, L.M. (2003). Are your learners ready for e-learning? In G.M.Piskurich (Ed.). *The AMA handbook of learning*, pp.87-98. New York: American Management Association.

- Hall, B. (2003). Using technologies in a blended learning curriculum. In G.M.Piskurich (Ed.). *The AMA handbook of learning*, pp. 305-316. New York: American Management Association.
- Hoadley, C. and Pea, R.D. (2002). Tools for a knowledge-building community. In K.A.Renninger and W.Shumar *Building virtual communities: Learning and change in cyberspace*, (pp. 321-354). New York: Cambridge University Press.
- Joo, Y., Bong, M. and Choi, H. (2000). Self-efficacy for self-regulated learning, academic self-efficacy, and Internet self-efficacy in web-based instruction. *Educational Technology Research and Development*, 48(2), 5-17.
- Kelley, C.L., Morrell, R.W., Park, D.C. and Mayhorn, C.B. (1999). Predictors of electronic bulletin board system use in older adults. *Educational Gerontology*, 25(1), 19-35.
- Kimble, C., Li, F. and Barlow, A. (2000). *Effective virtual teams through communities of practice*. Retrieved on July 28th 2004 from <http://www.mansci.strath.ac.uk/papers.html>
- Labonte, T.J. (2003). E-learning and performance. In G.M.Piskurich (Ed.). *The AMA handbook of learning*, pp. 361-372. New York: American Management Association.
- Mallett, R., Howard, A. and Thompson, E. (2003). Barriers to e-learning in the community pharmacy sector. ANTA.
- McDermott, R. (2001). Knowing in community: Ten critical success factors in building Communities of Practice. Retrieved on 2nd August 2004 from <http://www.co-i-l.com/coil/knowledge-garden/cop/knowing.shtml>
- Mungania, P. (2003). The seven e-learning barriers facing employees. Retrieved on 27th May 2004 from http://www.masie.com/researchgrants/2003/Mungania_Final_Report.pdf
- Nielsen, C. (2001). *Tourism and the media: Tourist decision-making, information, and communication*. Melbourne: Hospitality Press.
- Phillips, V. (2003). Keeping e-learning going: Motivating and retaining e-learners. In G.M.Piskurich (Ed.). *The AMA handbook of learning*, pp. 337-352. New York: American Management Association.
- Ring, J. & Watson, A. (1994) The virtual campus: ECU's development path. In K. Beattie, C. McNaught & S.Wills (Eds.). *Interactive multimedia in University education: Designing for change in teaching and learning* (pp. 205-221). Amsterdam: Elsevier.
- Sharp, J. (1997). *Communities of practice: A review of the literature*. Retrieved on June 23rd 2004 from <http://www.tfriend.com/cop-lit.htm>

- Sheldon, P.J. (1997). *Tourism Information Technology*. Wallingford, UK: CAB International.
- Sloman, M. (2002). *The e-learning revolution: How technology is driving a new training paradigm*. New York: American Management Association.
- Simmons, D.E. (2003). E-learning: Adoption rates and barriers. *The Forum Report*, 1(1).
- Terra, J.C. (2003) Twelve lessons to develop and sustain online knowledge communities. In Proceedings of the IADS International Conference e-Society, Lisbon, Portugal, June 3-6.
- Waller, V. (2002). The e-learning barriers. Inside learning technologies. Retrieved on July 28th 2004 from http://www.learningtechnologies.co.uk/magazine/article_full.cfm?articleid=79&issueis=9§ion=1
- Wenger, E. (1998). Communities of practice: Learning as a social system. Retrieved on July 20th 2004 from <http://www.co-i-l.com/coil/knowledge-garden/cops/lss.shtml>
- Wenger, E. and Snyder, W. (2000). Learning in communities. Retrieved on August 3rd 2004 from <http://www.linezine.com/7.2/articles/ewwslc.htm>
- Williams, S.W. (2003). Discussion groups and chat: Electronic tools for building online communities. In G.M.Piskurich (Ed.). *The AMA handbook of learning*, pp.171-181. New York: American Management Association.

Appendix A: Stage One questionnaire for all QICA members

Your participation in this research is entirely voluntary – simply inform the Manager of your Centre if you do not wish to be involved.

Visitor Information Centre: _____

Position: Full-time Part-time Volunteer Hours per week: _____

AGE: 18 - 29 30 - 39 40 - 49 50 - 59 59+

GENDER: Male Female

1. What is your experience with computers?

none very limited some quite a lot extensive

2. How often do you use the Visitor Information Centre's computer?

several times a day once or twice a day 3-4 times per week

1-2 times per week less than once a week very rarely

3. Has your Visitor Information Centre provided sufficient computer training?
Please explain:

4. a) How often do you contact staff in other Visitor Information Centres?

several times a day once or twice a day 3-4 times per week

1-2 times per week less than once a week

How is this contact usually made?

telephone *Australian Flexible Learning Framework*
 fax email

other, please specify:

5. Please rank the following 'barriers' to accessing e-learning (computer-based training packages, internet etc). Place (1) next to the 'barrier' that you feel most often **prevents you** accessing e-learning at work, a (2) next to the second most important and so on.

___ Lack of computer skills

___ Lack of technical support

___ Poor/slow connection

___ Lack of time

___ Not enough computers

___ Phone lines all used for inquiries – not available for general Internet use

6. How would access to e-learning opportunities be of benefit

a) to you

b) to your Visitor Information Centre?

7. What would make it easier for you to access e-learning?

8. Please indicate whether you agree or disagree with the following statements by circling the appropriate number:

	Strongly agree
Agree	

	Strongly disagree	Disagree	Neither agree nor disagree		
I can deal with most difficulties I encounter when using computers	1	2	3	4	5
I know how to send and receive email messages	1	2	3	4	5
I feel confident in using computers	1	2	3	4	5
I would like to access training materials via the Internet	1	2	3	4	5
Computers make learning more interesting	1	2	3	4	5
I can follow links on a web site to get the information I want	1	2	3	4	5
I know how to search the internet for topics of interest	1	2	3	4	5
My supervisor encourages me to use work computers to access information	1	2	3	4	5
There is someone to help me if I get into technical difficulties using the computer	1	2	3	4	5
I would like to have more time to spend using the computer at work	1	2	3	4	5
I would like to be able to participate in an on-line discussion forum	1	2	3	4	5
I would like to learn how to use the computer more effectively	1	2	3	4	5
I seem to waste a lot of time struggling with computers	1	2	3	4	5

9. Please specify any areas in which you think you need further training (eg. Word/Excel programs; local tourism products; customer service etc):

10. The following is a list of different methods that can be used to deliver e-learning initiatives to Visitor Information Centre staff.

Place (1) next to the method you would most prefer, a (2) next to the second most preferred and so on. If you do not know what the activity is, write N/A in the space provided.

- Access to an on-line discussion forum (links participants via the Internet)
- Telephone conference (links participants via telephone)
- Video conference (links participants in real time via video)
- Video training package (course materials on video)
- CD-ROM (course materials on computer disk)
- Internet (access course materials via the Internet)
- Other (please describe)

Please explain why you selected your most preferred activity:

11. What sources of information would you like to be able to access through the QICA web site?

THANK YOU FOR YOUR TIME AND COMMENTS!

Please return your completed questionnaire to the Manager of your Centre

Appendix B: Stage Two interview questions for manager

How do your staff currently access information?

Do your staff have the computer skills to access flexible learning resources?

Are they interested in upgrading their computer skills?

If QICA were to develop an interactive website with training materials and discussion forum

Would you and your staff require computer training? If so, what?

What online resources would you and your staff find useful?

How would you promote/encourage the use of on-line learning within your centre?

**For more information contact:
National Communication Team
Phone: (07) 3247 5511
Fax: (07) 3237 0419
Email: enquiries@flexiblelearning.net.au
Website: flexiblelearning.net.au**