# Trading Places with Interfaces: An Investigation into Online Training for the Travel Agency Sector within the United Kingdom

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# Trading Places with Interfaces: An Investigation into Online Training for the Travel Agency Sector within the United Kingdom

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"I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material to a substantial extent has been submitted for ward of any other degree or diploma of a university or other institution of higher learning".

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### **Abstract**

Technology and the use of the internet are having a profound influence on our lives, with advancements in information communication technology empowering society on both a personal and corporate level. Changing the attitudes, beliefs and behaviours of consumers, subsequently, altering the focus of retail travel agents.

Extensive studies have been undertaken on the use of the internet; however, limited research exists on the use of the internet as a training tool for the travel agency sector. This study investigates online training and evaluates its effectiveness from a user's perspective within the United Kingdom's travel agency sector. The research adopted a mixed method approach and was based on online questionnaires used for the exploration of specific subject areas and interviews were conducted to provide more in depth personal views and perceptions of the online training programme.

The research revealed that the travel agency sector is constantly evolving, due to changing technological conditions and consumer demand. In order to remain competitive, many travel organisations have implemented survival strategies with greater emphasis being placed on customer service management, and travel personnel with the correct skills set have become valuable company assets. Consequently, travel consultants are continually looking for new ways to improve their own personal skills. The research highlighted the importance of lifelong learning and found customer service skills, selling skills, appropriate IT skills and occupational knowledge all to be essential skills for travel professionals to meet the demands of the consumers.

This study illustrated the positive benefits of e-learning from both a provider's and user's perspective, focusing on the support it offered the travel and tourism sector, convenience, greater access to resources, individualised learning and relevance of materials to support and enhance job performance.

The study demonstrated that the online training provided by Tourism New Zealand was effective in its provision, combining theoretical pedagogical concepts with web design techniques and operational system support to facilitate the learning process. As a result, retention and achievement rates within this study were high. While no major gaps in the provision of the training were identified, it is suggested that Tourism New Zealand continually look for new and innovate ways to enhance the learning experience through the use of online collaboration and advanced multimedia techniques if the training is to remain effective.

### 1. Introduction

The travel and tourism sector is a diverse industry and, as such, covers a variety of organisations, from airlines to travel agents to cruise companies to hoteliers, which range from small independent businesses up to multi-national corporations. According to the World Travel and Tourism Council (2011), tourism employs in excess of 99 million people around the globe and, today, the business of tourism has become an important global leisure activity and a valuable commodity. It is vital for the economy of many countries and generates revenue in excess of USD\$980 billion globally (World Tourism Organisation, 2011). Throughout the world, tourism is now ranked in the top three industries for employment (Goelder & Ritchie, 2006) and the business of tourism continues to grow exponentially, with international visitor arrivals reaching one billion in 2012 (World Tourism Organisation, 2011).

Nevertheless, the travel and tourism industry still remains a volatile industry, often influenced by many internal and external factors that impact upon it. Like many other industries, it has undergone many radical changes influenced by social, political, technological and economic factors. Nonetheless, the most predominant catalyst for change has been advancements in technology.

Today, technology is taken for granted and many individuals have a computer in the office, workplace as well as in the home. Information communication technology is embedded into daily lives, ranging from simple everyday devices such as mobile phones, to digital cameras, to e-mails, to connecting onto the Internet, to more complex devices such as android mobile technology and smart TV's. The internet has revolutionised the way in which communication takes place and is now one of the most important sources of information, allowing collaboration to take place on a global scale.

With over one billion of the world's population having online access (Maruli, 2011), this figure is set to increase each year by approximately 20% (Internet World Stats, 2011). It has not taken educators to realise the web's potential as a tool and there has been considerable interest in the possible delivery of materials online for the commercial sector and, indeed, the travel industry.

Traditionally, the travel industry has always adapted and harnessed technology. Historically, pioneers like Thomas Cook have utilised technology for growth and expansion, from ship to train to plane. Technology has revolutionised the tourism sector, from the download speeds of the Internet networks, to developments in search engine technology, to increased airline carrying capacity, all making both booking systems and methods of travel both quicker and more convenient, thus increasing business and marketing opportunities and making the world a more competitive place.

Moreover, the increasing use of Information Communication Technologies (ICT) and advancements in new technologies has led to improvements in productivity and competitiveness, radically changing and supporting suppliers within the industry, making channels of distribution more effective and efficient.

The travel and tourism sector has constantly utilised technology and, during the 1950's, long before the introduction of the World Wide Web, computer technology was first introduced to the travel industry sector, in the form of computer reservation systems (CRS). By the late 1980's, Global Distribution Systems were introduced which dramatically transformed operational and strategic practices (Emmer, Tauck, Wilkinson, & Moore, 1993). In the twenty-first century Intranets, viewdata, Electronic Data Exchanges (EDI'S) management information systems (MIS), computer reservation systems (CRS) and personal computers are all currently used by travel agents in the United Kingdom (Pease, Row & Cooper, 2007), ensuring computers are now an integral part of the travel industry and critical for operation, with many travel agencies relying on them to handle everyday tasks.

### 1.1 The Role of the Travel Agent

The main function of the travel agency has not changed: it is to book holidays and give advice. It is the policies, practices and procedures that are evolving. The retail business of travel historically dates back to the latter half of the 19<sup>th</sup> Century, with the humble travel agency having its origins in the United Kingdom. It is often suggested that Cox and Kings are the oldest travel agency, establishing their services for wealthy clients in 1758 (Andrews, 2008; Lorie & Sohanpaul, 2000). Nonetheless, it is usually Thomas Cook who is accredited with the pioneering developments of the modern travel office (Andrews, 2008; Page & Connell, 2006).

Even so, the travel agency sector is very diverse and in the United Kingdom alone comprises of many different organisations, each varying in size, specialism or ownership. According to the Association of British Travel Agents (2008), there are approximately 5400 travel agents and 780 tour operators in the United Kingdom and the travel agency sector comprises of three different types of travel agents: independents, miniples and multiples, each varying in size, turnover, and specialism (Beaver, 2005).

Independent travel agencies are usually in single locations and owned and operated privately. Miniples have three or more branches which are concentrated in a specific geographical locality. Multiple travel agency chains have branches nationwide and nowadays form part of vertical integrated companies, such as TUI and Thomas Cook.

Multiple travel chains have dominated the travel industry in the United Kingdom since the late 1980's, with four major players competing for leadership and controlling the tourism field: Airtours (Going Places), Thomas Cook (Thomas Cook), First Choice (Travel Choice) and Thomson Holidays (Lunn Poly).

Airtours was originally founded in 1972 by David Crossland, a travel entrepreneur, who purchased a chain of small travel agents in the Lancaster area, Airtours Plc became one of the largest integrated travel agents and tour operators in both North America and Europe. In the 1990's, through the acquisition of Premiair, Pickford's Travel and Hogg Robinson Travel, the company became a fully vertical integrated holiday provider and the travel agencies were rebranded and changed their name to Going Places. The group included famous brands such as Manos, Panorama Holidays, Cresta, Aspro and Sunquest, each specialising in specific holiday destinations and packages. These were rebranded in 2002 and the group of travel agents and tour operators became known as the MyTravel Group plc.

Thomas Cook is probably one of the most recognised names in the world of travel and tourism and first appeared in the United Kingdom in the latter half of the 19<sup>th</sup> Century (Thornley, 1999), when tours were sold through specific offices in Leicester to the Great Exhibition (Thomas Cook, 2011). Historically, the company has undergone many changes, merging with a variety of different companies on a worldwide scale. Probably the most significant amalgamations to the UK market are the mergers with Carlson Leisure Group in 1999, the merger with the MyTravel Group in 2007, and the merger with the Co-operative Travel Group in 2010 to form the Thomas Cook Group Plc, making Thomas Cook the largest travel agency chain in the United Kingdom, with over 1,200 retail stores (The Co-operative Group, 2010). The Thomas Cook retail chain in the United Kingdom incorporated well known tour operator brands such as Sunset Holidays, JMC, Style Holidays, Neilson and Club 18-30, appealing to a variety of different leisure markets.

Owners Abroad was first established in 1973 and operated the brands of Falcon holidays and Twenties. In 1994, the company was rebranded First Choice Holidays and this started the diversification of the group, both vertically and horizontally, with the purchase of major tour operators including Meon Holidays, Unijet and Hayes and Jarvis in 1999 (Evans, Campbell & Stonehouse, 2003). The retail travel chains of Intatravel and Bakers Dolphin were also acquired to complement the opening of their new retail stores (Travel Choice) and holiday hypermarkets. In 2007, it was announced that First Choice and Thomson Holidays would merge, creating a new force in European tourism (Walsh, 2007).

Lunn Poly became a house hold name in the retail travel agency sector in the 1980's to 1990's when the company expanded its small base of 30 agencies to nearly 500 outlets, making it the largest retail chain in the United Kingdom. The brand has its origins in two separate revival companies: "Lunn Travel" which was established by Sir

Henry Lunn in 1892 after taking a group of churchmen to Switzerland, and "Poly Tours" which was established in 1888 by the Regent Street Polytechnic, under the name Polytechnic Travel Association (PTA) to sell cheap holidays abroad to students. In 1965, both companies were acquired by the British Eagle airline group and the company name was rebranded into Lunn Poly (Syratt & Archer, 2003; Tobin, 2000). In 1972, Lunn Poly was acquired by the Thomson Travel Group, a major tour operator in the United Kingdom, and until 2004 remained the United Kingdom's leading travel agent with over 800 holiday shops. In the year 2000 The Thomson Travel Group, including the brands of Horizon Holidays and Lunn Poly, were acquired by the German conglomerate TUI. Initially, there were no plans to rebrand the Lunn Poly holiday shops, but soon announcements were made to create a "powerbrand" for Thomson Holidays and in 2004 the holiday shops became known as Thomson Holiday shops and carried the TUI smile logo. Today, with the amalgamation of First Choice Holidays Plc and the TUI AG, the travel group is known as TUI Travel PLC and is one of the world leaders in the leisure market sector, employing 49,000 people worldwide and operating 200 brands in 27 different locations (TUI Travel PLC, 2011).

Today, the United Kingdom travel agency sector is dominated by two major travel chains, Thomas Cook and TUI, which account for 80,000 employees and 52.3 million customers (TUI, 2010, Skills Funding Agency, 2010, Thomas Cook, 2011).

New media like the Internet have seen remarkable increases in use over the past decade, enhancing the way in which communication takes place, changing consumer buying behaviour, allowing consumers to search for, gather and access reliable and accurate information to meet their individual needs before, during and after departure (Cantoni & Kalbaska, 2009), empowering them with greater choice and making them more knowledgeable.

A variety of research has outlined the emergence of electronic markets and the onset of e-commerce. Initially, it was thought that the role of the retail sales agent would be eliminated by the consumers using the Internet to purchase travel related products and much controversy and debate revolved around the future of the travel agency sector. Nevertheless, the majority of this research (Buhalis, 1998, 2003; Frew, 2004; Sheldon, 1997) has focused on the impact of the Internet for purely distribution and marketing purposes.

Today, the emergence of the Internet and other Information Communication Technologies has enormous implications on strategic, tactical and operational planning, allowing organisations to differentiate their services and products whilst reaching consumers directly (Buhalis, 2002). Therefore, the role of information communication technology in tourism should not be underestimated as the tourism

industry is highly information intensive. Even so, many businesses within the travel agency sector have been cautious and started implementing survival strategies.

### 1.1.1 Travel Agent Survival Strategies

Literature (Oppermann, 1997; Kendall & Booms, 1989; Palmer & McCole, 1999; O'Brien, 1999) indicates a number of key survival strategies utilised by the travel agency sector, including:

- An online presence
- The growing role as travel information providers
- The need for travel agents to change their relationship focus and place a greater emphasis on customer relationship strategies
- The need for personalised tailored advice

The Internet has transformed the way in which business is performed. Many travel agencies have adapted and harnessed the technology and now have an online presence, in order to conduct business through dedicated websites as well as having retail high street branches.

Nonetheless, regardless of their size, travel agencies act as intermediaries and work on behalf of the supplier, for which they receive commission, and on behalf of the customer to whom they provide travel advice and booking arrangements for transport, accommodation, attractions, and tours. Hence, travel agents have a dual role and serve as an information provider and planning provider and, according to Oppermann (1997), have emerged as one of the top three information sources used by tourists for overseas travel, helping them to bridge the information gap (Richards, 1995).

Even so, it is the travel consultants within the branches that assist travellers by sorting through a vast array of information, ranging from published guides to computer based information sources in order to make the best possible arrangements for the customers. Research during the 1980's predicted the change from sales clerk to sales advisors and, as Kendall and Booms (1989) pointed out, sales agents will continue to need more knowledge to meet the needs and expectations of customers if organisations are to survive. Today, consumers expect travel consultants to be knowledgeable and able give advice and information on the holiday destination, providing information on the weather, exchange rates, travel documentation, along with making recommendations on local attractions, transport, hotels and leisure activities (Patterson, 2006). It is this knowledge, expertise and personal experience that can prove invaluable for consumers, enhancing the company's reputation and service.

It is these services which can differentiate between organisations, setting them apart from the competition. It is common knowledge that people buy people first (Hollman & Kleiner, 1991), therefore the travel consultants need to meet the needs and expectations of their customers, especially in today's competitive market. Competing on price is no longer enough, agents should employ their unique specialised knowledge, to provide useful information and hints to consumers (Satitkit & Everett, 2005). Greater emphasis needs to be placed on customer-relationship strategies and providing personalised tailored advice on destinations and special offers, all of which add value to the product and enhance the consumer's experience. Even so, ongoing personal development is an important part of any travel consultant's role. Learning is a key component of competitive success (Poon, 1993), whether it is learning about new products such as resorts or destinations, or learning new sales techniques; continual learning is both essential and a necessity as the industry is always adapting to meet customer needs.

### 1.2 The Role of Destination Marketing Organisations

Globalisation is the process by which the world is becoming interconnected and this is already evident in most aspects of the tourism industry (Wahab and Cooper, 2001; BBC, 2011). Globalisation has created societal change and transformed the world into a global market place and as competition around the globe intensifies, the role of the Destination Marketing Organisation (DMO) becomes more challenging as economic, environmental and political factors all influence change, along with internal factors from within the travel industry (Gretzel, Fesenmaier, Formica, & O'leary, 2006).

Destinations are competitive in nature since nations develop in competition with each other. Hence, destination marketing organisations are usually non-profit government entities that have been established to market and promote a specific destination to potential visitors. Essentially, the role of the DMO is positive image creation and collaboration with trade partners. Hence, the fundamental goal of a DMO must be to develop and enhance the long term competitiveness of the destination (Pike, 2004). According to Cooper (2008), the "competitiveness of a destination refers to its ability to compete effectively and profitably in the market place". Therefore, in order to remain competitive it is essential that destinations are aware of the factors that can influence both supply and demand.

New Zealand has always been innovative and proactive when it comes to tourism and was the first country in the world to establish a destination marketing organisation, in 1901. The Department of Tourist and Health Resorts, as it was known, was specifically designed to widen participation in tourism and attract overseas visitors (Tourism New Zealand, 2003).

Although the organisation has gone through a variety of name changes and the organisation's role has diversified, its primary focus and purpose has remained the same over the last decade, namely to develop and promote New Zealand has a destination to international visitors and to ensure a positive outcome for tourism (Tourism New Zealand, 2001).

Tourism New Zealand has a strong commitment to the travel industry and is always looking for new and innovative ways to support trade partnerships. In order to maintain trade relations, Tourism New Zealand employs over 120 staff in 13 countries around the globe to market and promote New Zealand as a destination utilising the brand "100% Pure You" (Tourism New Zealand, 2010).

Travel industry training is an integral part of the "100% Pure You" campaign, as overseas travel agents and tour operators can help raise awareness of the destination, products and services available. For that reason training initiatives are available to counter staff in the form of trade events and self learning modules, which are available online as part of an e-learning program (Tourism New Zealand, 2010).

The travel and tourism sector is well suited to the use of e-learning technologies. As technology is central to the tourism process with airlines, tour operators and travel agents make use of computers on a daily basis, from checking airline availability on GDS systems, to making hotel reservations, to gathering destination, visa and travel information. Information is vital in the tourism industry. Buhalis, in 1998, highlighted its importance considering it to be the life blood of the travel industry. The Internet has emerged has a predominate information source, changing the way in which business is conducted, and improving travel service supplies in efficiency, quality and flexibility (Page & Connell, 2006; Pease, Row, & Cooper, 2007).

A variety of different educational courses have appeared on the Internet, dealing with many aspects of the travel and tourism sector, from gaining employment to internationally recognised qualifications. The study time of such courses varies from one hour up to 90 hours. 58% of travel organisations use e-learning and many believe it is the most significant development in training in the last decade (David, 2008).

However, to date, limited research has been conducted on the impact of online training/e-learning on the Travel Agency Sector within the United Kingdom, therefore researching the effectiveness of e-learning from a user's perspective is considered important.

### 1.3 Aims and Objectives

The aim of this study is to investigate the impact of online training/e-learning on the travel and tourism sector, evaluating its effectiveness from a user's perspective. This is accomplished through the following objectives:

- · Identify skills and training needs within the travel agency sector
- Recognise ways in which the e-learning programme provided by Tourism New
   Zealand can support the travel and tourism industry
- Evaluate the effectiveness of Tourism New Zealand e-learning program in terms of provision, content on the site and usability from a user's perspective
- Identify any gaps in provision within Tourism New Zealand's e-learning training program

The outline of this research study is as follows:

**Chapter 2**- The literature review introduces the concept of e-learning, firstly defining e-learning and then explaining the impact the Internet has had on education, society and the tourist sector. The philosophy of learning is explored through different theoretical concepts and then applied to the e-learning environment through different models and modes of delivery. The aim of this section is to identify links between societal change (globalisation), the need for continual knowledge acquisition or learning (life long learning) and place an emphasis on the links between tourism, technology and education. It also explains how e-learning can provide the travel agency sector with the skills required to meet the ever changing needs of consumer demands.

**Chapter 3** – The methodology demonstrates the rationale behind the research project and the methods employed throughout this investigative study. It justifies the relevance of the online questionnaire and interviews utilised and outlines the sampling techniques and data analysis procedures used.

**Chapter 4** – The findings and discussion section explains and presents the findings. Relevant results were analysed, interpreted and then displayed in either table or chart format, each of which is followed by a brief analytical description. Comparisons were then made to previous research in the field of education, e-learning or tourism. Similarities and differences were identified and discussed and the effectiveness of e-learning is emphasised from a user's perspective.

**Chapter 5** – The conclusion summarises the key points raised within this study and answers the research questions. The conclusions show that e-learning has many advantages over traditional teaching and, if utilised by the travel agency sector correctly, e-learning can be effective in giving both the organisation and individuals involved a competitive edge.

### 2 Literature Review

Over the last 30-40 years, technology has been integrated into mainstream education, with greater computer access and Internet connectivity. Most educational establishments in the United Kingdom now offer qualifications and degree programmes using online courses.

However, from a training perspective, colleges and universities around the world have embraced the use of technology at a much slower pace than their commercial counterparts, as businesses are under pressure to have a competitive edge and meet the increasing demands of consumers with their technological knowhow.

Although online learning is a relatively new phenomenon and did not really begin until 1996, instigated by the onset of the Internet, computer based training dates back to the 1940's and was utilised as self study packages by the military and commercial enterprises. However, it was the innovation and creation of the Open University in 1969 that triggered change in both teaching and learning practices and led to the expansion of flexible and distance learning (Perry, 1976).

Nonetheless, it is the World Wide Web that has altered the way in which people communicate and, to some extent, facilitated the growth in learning opportunities available (Duchastel, 1997). Many authors have described the growth in e-learning as astonishing, explosive, unprecedented and unique (Garrison & Anderson, 2003; Haywood, 1998; Keller & Kahin, 1997) and the growing use of electronic channels of communication for educational purposes is predicted to grow by up to 90% over the next decade (Weiermair & Mathies, 2004). According to Chambers (1999 para. 9), predictions were made that "Education over the Internet is going to be so big it is going to make e-mail usage look like a rounding error", and as public interest in the Internet has grown, pressure has been placed on educational establishments and training providers to expand the opportunities available. Consequently, more training packages are being developed to utilise online learning and enhance the educational experience (Lynch, 2004).

### 2.1 Definition

Electronic learning, or e-learning as it is often known, holds a variety of different meanings, and there appears to be no single consensus on its definition. (Bing, 2010). The term "E-learning" was first used in the mid to late 1990's as an abbreviated form of electronic learning (Oxford English Dictionary, 2007). However, since then, E-learning has been defined by many different authors (Cantoni & Kalbaska, 2009;

Friesen, 2009; Lai, 2001) and the way in which the term is used indicates a range of different contexts in the meaning and the use of technology, learning, teaching and education. Sometimes the term is liberally used to explain concepts and practices, at other times instructional design. However, it can encompass many disciplines such as content management, collaboration and traditional learning (Gartner Report, 2002).

It is therefore necessary to clarify the term e-learning with regards to this particular research. Masie (2001, p.35) argues that "the 'e' should be an abbreviation for experience not electronic and it should be about communications with the learner, seeking to increase knowledge", whereas, Collins, Buhalis and Peters (2003, p.485) define e-learning as " the learning that takes place anytime someone uses electronic means for gathering information that is acquired without another live person present". Becta (2007, p.10) give a detailed description:

E-learning refers to those aspects of Information Learning Technology (ILT) which directly support effective learning and teaching. This can take many forms, ranging from the introduction of ILT elements into traditional teaching (for example PowerPoint presentations replacing OHP slides) through to fully online programs delivered to remote locations with minimal levels of tutor intervention."

Even so, the European Union takes this definition one step further and defines elearning as "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration" (Commission of the European Communities, 2001, p. 1).

Nonetheless, Solman's (2002, p.5) version is probably the simplest to understand and the most relevant to the travel sector. "E-learning – the delivery of learning or training using electronically based approaches, mainly through the Internet, intranet or web".

Information Communication Technologies are the backbone of the tourism industry, as the supply and exchange of information is vital to this sector (Buhalis, 1998; Sheldon, 1997). The travel and tourism sector is often described as an information intensive domain (Buhalis, 2003), usually relying on a variety of sources to disseminate, coordinate and process the information through channels of distribution. It is well documented that tourism services and products are intangible and are therefore particularly well suited to an electronic environment (Bennett, 1993; Lewis, Semeijn, & Talalayevsky, 1998). Consequently, the Internet has emerged as a predominant information source, changing the way in which business is conducted (Page & Connell, 2006; Pease et al., 2007), from both business practices to industry structures (Porter, 2001). Within the last ten years or so, numerous publications have dealt with information technology in tourism, highlighting the opportunities and threats to the

industry. Yet, the majority of these have focused on the use of technology from purely a business perspective, for example O'Connor (1996) and Marcussen (1999) discuss distribution, Carter and Richer (1999) review promotion and marketing, Karcher (1997) strategic frameworks, Gunn (2002) planning, whilst Weaver (2006) discusses management and administrative issues. It is well documented that developments in the Internet have revolutionised and reshaped the tourism industry, and tourism and technology go hand in hand (Buhalis, 2003); conversely little attention has been given to the utilisation of the Internet as a training tool for the travel and tourism sector. In spite of this, substantial literature surrounds e-learning and ICT with many authors (Holmes & Gardner, 2006; Hubbard, 2009; Kramer & Bente, 2010) focusing on the impact of economic and societal change, along with globalisation and the changing face of education.

### 2.2 Globalisation and Lifelong Learning

Globalisation is complex. Since the industrial revolution in the later 18<sup>th</sup> to 19<sup>th</sup> century and the onset of technological production, the need for knowledge has increased. Society has evolved at a rapid pace. It may have been the industrial revolution that marked the way for globalisation, but it was information communication technology that transformed the world into a global marketplace (Jarvis, 2007).

Nonetheless, a variety of research emphasises that globalisation is an amalgamation of technology, multinational organisations, distribution systems and new methods of communication such as the Internet. "Globalisation is already evident within most aspects of the tourism industry" (Wahab and Cooper, 2001, p.70).

Today, the travel and tourism industry is undergoing both social and economic change, with many companies competing on a global scale; organisations are altering their business policies and practices in order to remain competitive and many individuals are reviewing their own personal skills and knowledge in order to gain a competitive edge.

Nevertheless, this is nothing new and the United Kingdom Government's Green Paper, "The Learning Age", produced by the Department for Education and Employment (DfEE) in 1998, highlighted the fact "we will all need to develop and add to our work skills. The ability to learn is the most important skill we possess in our capacity to learn throughout life" (DfEE, 1998, p.23). It is evident from this paper that individuals will need to engage in lifelong learning and that initial education or training will not suffice for a lifetime's career in any professional occupation (Gray, Griffin, & Nasta, 2000), and both organisations and nations will benefit from the individual's participation in this ongoing learning.

As a result of advancement in technology, social change, changes to levels of employment and globalisation, it is inevitable that individuals will have to participate in some form of professional development, lifelong learning for employment is vital and employees have a greater need for knowledge. Competition and consumer demand are now some of the major driving forces that are initiating and influencing this change.

### 2.3 Teaching and Learning

Consequently, as society changes, so does the role of education, and this affects the teaching and learning environment. Many new teaching approaches and strategies are being implemented around student-centred learning, with more emphasis being placed on the individual learner.

Although distance learning, or self centred learning, is nothing new and dates back more than 100 years (Galusha, 1997), it has taken on a new meaning due to the expansion of the Internet and technological advancements, allowing greater flexibility and diversity in the delivery of education.

The virtue of teaching and learning has been well documented and researched extensively from many different perspectives, ranging from theories of learning (Cuzon, 1997) to behaviourism (Skinner,1953), methods and modes of instruction (Castling 1996, Petty 1998, Bruner 1966), social development (Piaget, 1969; Bandura, 1963), cognitive and intellectual skills (Weiner, 1935) through to methods of assessment (Boud, 1988), many of which have been adapted and are significant in determining our understanding of online teaching and learning.

When clarifying the term teaching many definitions exist. A number of authors define the teaching product (Reece & Walker, 2000; Smart, 2006) (Fry, Ketteridge, & Marshall, 2009), whilst others concentrate on the teaching process (Tickle, 1999). However, Clark, (1970) as cited in McAleese (1979 p.109) proposes teaching is "activities that are designed and performed to produce changes in student behaviour". Even so, Smith (1961), as cited in Stones and Morris (1973, p.53) suggests "teaching is a system of actions intended to produce learning". This is substantiated by a dictionary definition which states that teaching is: "causing a person to learn or acquire knowledge or skill" Cassell (1995, p.845), while learning follows a similar definition "to acquire a skills or knowledge by study, experience or instruction", Cassell (1995, p.473).

Nonetheless, Gage (1963) analysed both the process of teaching and learning and emphasised the fact that teaching needs to be adapted in order to facilitate learning. Gage proposed that the characteristics of learning are fixed and unchangeable and teaching is an exercise of psychological force in the process of knowledge acquisition.

It is therefore evident from the points raised by Gage (1967) that teaching is continually changing and educators need to ensure teaching materials are adapted for the online environment if e-learning is to be successful and meet the needs of individual learners effectively.

### 2.4 E-Learning

E-learning fits into two categories: synchronous and asynchronous.

Synchronous learning is real time learning that takes place when all participants are involved at the same time: two way video, for example, which allows interaction between student and teacher.

Asynchronous learning occurs when content is built at one time and accessed at another. It allows learners access at their own convenience (Sloman 2002, p.110).

Research investigating and examining e-learning has proven that e-learning has many advantages over traditional methods; it can accommodate different learning styles, enable individuals to proceed at their own pace, and track progress (Hartley, 2001; Kurse, 2004).

From a corporate perspective it is convenient, it saves time, which in turn saves money, therefore making it a cost-effective method of training. More importantly, effective e-learning results in improved learning and improvements in business productivity (Steen, 2008).

For the tourism sector, e-learning offers 24 hour, seven day per week global availability and accessibility and interactivity (Modahl, 2000). It creates new sales and marketing opportunities through enhanced learning, which allows small medium enterprises to remain competitive and forge links with online communities.

Whilst e-learning goes some way to up-skilling the travel agency workforce, it is still unclear whether it effectively fills the skills gap or if any consultation has taken place between e-learning training providers and industry, as limited research has been conducted in this area. The learning programs available all appear to promote the destinations rather than meeting the skills gaps.

However the question still remains, is online training an effective method of teaching and learning?

Many studies have been undertaken to compare the effectiveness of e-learning to traditional instructor lead education, with many compelling arguments prevailing. These include arguments on methods of delivery, differences in learners' ages,

interaction, learner experiences, and industry standards and benchmarks (Urdan and Weggen 2000, and Chute, Thompson and Hancock, 1999).

In order to assess some of these arguments it is necessary to look at the implications on teaching, learning and of course, the individual learning experience. It is well documented that effective e-learning environments require a clear understanding of the learning process and in particular the way in which individuals learn. Therefore, in order to appreciate the effectiveness of the learning, it is necessary to understand the psychology of learning and the workings of the mind. It is perhaps for this reason that traditional educational frameworks, such as behavioural theories, cognitive theories, social theories, and psychological theories are often applied to e-learning in order to enhance programme, instructional design and modes of delivery.

### 2.5 E-learning Models and Delivery Methods

Blended learning, flexible learning, distance learning and online learning are all models incorporated into the e-learning environment.

Blending learning is a mixed method approach, combining different learning environments, usually through a mix of traditional teaching and the use of technology (Thorne, 2003). Although blended learning is widely used both within academic and corporate settings, it is probably an area that is not fully capitalised on by the travel and tourism sector and in particular the tourist boards, as they have limited resources available to reach travel agents on a worldwide scale. Therefore, the tourist boards providing the training cannot offer personalised face to face lecturers or support that is offered by many educational establishments.

Information communication technology has influenced flexible learning immensely, allowing it to take on a new direction and meaning. This flexible learning style usually revolves around student centred learning and is defined by Wade (1994 p.12) as an open learning approach "to education which provides learners with the opportunity to take greater responsibility for their learning and to be engaged in learning activities and opportunities that meet their own individual needs". While flexible learning is not a new idea, and was originally developed during the late 1980's in the United Kingdom, it has the advantage to increase and widen participation on a global scale through Internet access and learning communities.

Although ICT and web based technologies play an essential role in the delivery of distance learning, distance learning is the process by which learning materials are distributed and connected with the learner (Mantyla & Gividen, 1997). Furthermore, distance learning is defined as a formal approach to instruction that takes place without the physical presence of the educator with the learner (Mehrotra, Hollister, & McGahey, 2001).

It is perhaps for this reason that this form of learning (flexible/distance) has been developed by the tourist boards, to give the learners greater access to resources, to enhance their destination and product knowledge, whilst improving productivity on a corporate scale.

Online learning, e-learning and web based learning are all interchangeable terms synonymous in their meaning. Even so these models can vary in their design, with many different platforms and tools available; however, they are usually categorised according to their type and functionality.

Taylor (1980) was probably one of the first authors to consider the role of computers in education, and his models are used as the foundation for many modern structures and drawn upon as a framework to describe many computer applications. Taylor (1980) defines three types of training systems in use: tutor, tutee, tool, each containing its own strengths and weaknesses.

Philosophically speaking, the 'tutor' model is based on the 'tutor being the fountain of all knowledge', with teachers using their subject knowledge to facilitate and advance learning (Cennamo, Ross, & Ertmer, 2009), as essentially the role of any tutor is to engage the students in learning through the provision of resources and the act of content facilitation. The computer as tutor is therefore a teaching machine or a surrogate teacher (Reeves & Hedberg, 2003).

The computer as a tutor model was original introduced by IBM in the 1950's, and involves a repetitive practice strategy, regularly referred to as "drill and practice", usually controlled by the program. These types of programs (directed learning or mastery learning) are still widely used today for examination revision. The computer as tutor model is often linked to the cognitive theory "learning involves associations established through contiguity and repetition" (Good and Brophy, 1990, p.187) and behaviourism (Levy, 1997).

From a software perspective, the main aim of the design is to develop cognitive skills and the success of the tutor model is the reliance on the software being able to recognise areas of weakness, where the student needs assistance to continue with learning and the completion of the task (Jacko & Sears, 2003). From a teaching perspective, limited supervision or knowledge of the content is necessary, as student progress is monitored by the computer application. The downfall to such programs is that learning is usually in isolation, which restricts social interaction and, as Guile (2001 p. 6) points out, "conversation and debate are critical to learning."

When being used as a tutee the computer is 'taught' something by being programmed by the learner (Twining, 2002). By programming the computer as part of the educational experience, learners take responsibility for individual learning and

enhance personal knowledge. LaMont Johnson (2003) argued that problem solving skills are implemented and increased along with higher order thinking skills, thus improving cognitive skills on a number of different levels. From a teaching perspective, the concept of kinaesthetic learning is explored in the tutee model, with participants essentially learning by doing and reflecting on learning through the process of creation.

The computer as a 'tool' model has been widely discussed in academic circles (Crook, 1994; Levy, 1997). When the computer is used as a tool, it can transform information into knowledge (Flippo & Caverly, 2000). Puk (1992) defines the use of technology as a 'tool' as the systematic approach to achieving a practical purpose. The computer as a 'tool' model is perhaps the most conventional model in everyday use, as it allows users to complete personal tasks more efficiently and effectively, utilising packages such as Word for word processing, Excel for spreadsheets and mathematical problem solving, Access for databases and the storage and retrieval of data and the Internet to gather, arrange, analyse, present and communication information (Flippo & Caverly, 2000). When the computer is used as a 'tool' to facilitate learning, it allows design, creativity and free thinking, the onus is placed on the learner, with them taking control of the learning process, rather than being directed. This approach is linked to constructivist pedagogy which sees learning as an active process (Jacko, 2003). Although self paced modules can offer greater flexibility, self discipline, time management and motivation can become problematic.

Dabbagh (2005) defines three different communication tools available online: Web supported, Web-enhanced and Web only, each allowing materials to be delivered differently. The Web only method is used to deliver tutorial instruction and learning (Gandell et al 2000). At present, the tutorial based instruction seems to be the popular type of application being introduced to the travel and tourism sector. This is probably due to the fact that this type of online platform allows materials to be quickly updated, progress to be monitored and achievements recognised, all with either little or no human support systems in place.

When discussing computer based teaching and training, Kearsley (2005) categorised systems into the following:

Computer Managed Instruction (CMI) which involves the computer managing several aspects of instruction including the learning objectives, learning resources and assessment through the evaluation and diagnoses of learners needs (Baker, 1978; Day & Payne, 1987). It could be argued that this is a form of Artificial Intelligence (AI) commonly found in computer programs today, with the computer learning from the input of the student and then adjusting the materials to ensure materials are effective.

Computer Assisted Instruction (CAI) involves a programme of instructional material, including drill and practice (Quershi, 2004).

Computer Assisted Learning (CAL) includes a range of computer programs that individualise learning through self paced and managed resources (Quinn, 2000).

Although many different classifications systems appear in numerous literature reviews, it is worth remembering that, in principle, many of the applications are indeed the same, just in another guise. But regardless of the name or terminology used or the hype surrounding it, e-learning is effectively altering the educational sector, both commercially and academically. Conversely, sceptics (Ettinger, Holton, & Blass, 2006; Waterhouse, 2005) would argue that the growth is not as significant as initially anticipated. Nevertheless, new training programmes are being added on a daily basis and with the ever increasing demand for distance learning, it is expected by 2013, that 18.2 million people will be enrolled in online programs (Education Centre Online, 2010).

The delivery of distance learning modules has been extensively monitored for quality, with particular emphasis on the effectiveness of e-learning systems (Chute, Thomson, and Hancock 1999; Lee, 2005) and associated learner experiences (Lee 2005; Liaw, 2005). When analysing the effectiveness of e-learning a variety of factors need to be taken into account: course design, learner perceptions, expectations, satisfaction, participation, motivation and skill level, all of which impact on the learner experience.

Sharpe, Benifield, Lessner & DeCicco (2005) highlighted the fact that learner perceptions on e-learning had been largely overlooked from a research viewpoint, even though personal perspectives and learning styles can influence how learners interact, both socially within the learning environment and with the technology and learning materials themselves (Colbeck, 2006). Since 2005, a great deal of research has been carried out by educational establishments to rectify this, centring on the various components of e-learning (Smart 2006, Douglas 2007, Journell, 2010). However, this has proved difficult, as perceptions are difficult to define. Although many have tried (Donnelly, 2007; O'Donnell & Garavan, 2003) it has only substantiated the fact that each learner is individual and unique, varying in age, ability and skills, making it difficult to gauge their expectations. Nonetheless e-learning needs to be based on good teaching practice and pedagogy in order to enhance learning and, if basic teaching principals are applied, effective learning should take place.

### 2.6 The Knowledge Society

In recent years, there has been a renewed interest in the search and acquisition of knowledge, as knowledge has been construed as power, and although the term "Knowledge is power" dates back to the late 1500s, (Bacon, 1597 as cited in Ash, 2004)

it could be applied to the use of ICT today, as the Internet has the power to supply knowledge. Knowledge is essentially a collaboration of facts, skills, principles and rules, which are either explicit or implicit (Stonehouse & Pemberton, 1999).

It could therefore be argued that the development of a knowledge society is reliant on the use of communication technology, as it is embedded into daily lives. Society has realised the web's potential and uses the internet and other multimedia communication systems for the retrieval of information. This has contributed to changes in how knowledge is conceptualised and what it means to know. Patterns of business and economic operations are changing, as is the way in which people interact and communicate with each other (Cowie, 2008).

Many governments have made considerable investment in the use of Information Learning Technology/Information Communication Technology as a teaching tool. In the United Kingdom, for example, Information Technology has been a mandatory part of the national curriculum for the last ten years. Other ICT developments are in response to government agendas: The E-learning Strategy, Widening Participation, Skills for Life, Lifelong Learning and others are based on the need to explore the effects of technology on teaching and learning. New Zealand has similar initiatives with the National Digital Strategy Framework 2005, Laptops for teachers, and the Open Learning Initiative. Despite all this radical change and government intervention in education, much debate and controversy still surrounds the use of online learning environments with social, theoretical and pedagogical issues at the forefront of the debate.

Tourism, technology and education have many links and in many ways are intertwined. Tourism grew out of the need and search for knowledge, with the aristocracy travelling across Europe- Paris, Florence, Rome, Naples and Venice (Towner, 1996) to expand their minds in literature and cultural pursuits. Mass tourism could have only been developed as a result of advancements in technology and the introduction of the jet aircraft, allowing growth and the expansion of the "package holiday" and, as Buhalis (2003) points out, the expansion of tourism geographically generates further demand that needs to be resolved by advancements in technology.

Although advancements in technology, particularly the Internet, has brought with it many opportunities, the Internet also poses a potential threat for the travel agency sector. Traditionally, in the United Kingdom consumers were reliant on the travel agents to make their holiday reservations (Poon, 1993) and in 1990 travel agents accounted for 85% of package sales and were a vital link in the distribution chain (Sheldon, 1997). Travel agents held a competitive advantage over the consumer having information at their finger tips; consumers did not understand three letter airport codes; airline fare construction and consumers were unable to book via tour

operator's viewdata terminals. However, the Internet has facilitated change, making information readily available, not only for the travel agent, but also for the consumer, resulting in vulnerability for the travel agency sector, as suppliers no longer need to establish retail sales outlets and can sell direct to the consumer.

### 2.7 Skills Gap

A variety of research has outlined the emergence of electronic markets and the onset of e-commerce. Initially it was thought that the role of the retail sales agent would be eliminated by the consumers using the Internet to purchase travel related products, and much controversy and debate revolved around the future of the travel agency sector.

Essentially, the main function of the travel agency has not changed. It is to book holidays and give advice, it is essentially the policies, practices and procedures that are evolving. Travel consultants within the branches still assist travellers by sorting through a vast array of information sources in order to make the best possible arrangements for the customers. It is this knowledge, expertise and personal experience that can prove invaluable for consumers, enhancing the company's reputation and service. It is these services which can differentiate between organisations setting them apart from the competition. Literature (Oppermann, 1997; Kendall & Booms, 1989; Palmer & McCole, 1999; O'Brien, 1999) reveals a number of key survival strategies being utilised by the travel agency sector, with an emphasis being placed on customer service strategies including:

- The growing role as travel information providers
- The need for travel agents to change their relationship focus and place a greater emphasis on customer relationship strategies
- The need for personalised tailored advice

Despite the strategies being implemented by the travel industry and the fact the industry is service orientated, there is evidence that skills shortages exist within this area (TIA, 2004). A skills shortage or gap usually occurs when the existing workforce do not have the skills required to meet business objectives (Purnell, 2005). Therefore, the reliance on people must be taken seriously in all tourism enterprises, and must include people and skills in their business plans (TIA, 2004). As a consequence of this, a number of government strategies and initiatives have been put in place to up-skill the workforce and these include partnerships between training providers, employers and the Association of British Travel Agents (ABTA), that provide industry training, modern apprenticeships and youth training. Despite this, many employers are still reporting problems in recruiting the right calibre of employee, with interpersonal skills, customer

service and occupational knowledge being the most problematic areas (Green, 2008), which highlights a mismatch in provision and requirements. At present, traditional teaching methods are adapted by many travel organisations, with the majority of staff being trained on the job or in-house. Many are reluctant or unable to offer off-site training due to time and cost constraints. In order to effectively meet demand, tourism businesses are seeking short courses that meet specific business needs with a flexible structure (Haven-Tang, 2005). One possible solution for this is online e-learning, which could be customised to individual learning needs.

### 2.8 Consumer Behaviour

As the tourism market changes, the need to understand consumer behaviour intensifies, as essentially it is customer needs that are changing the face of the travel industry sector. Ultimately, the market place is now consumer driven, and the consumer is being influenced by the internet both in the booking process and the choice of holiday destination. The internet allows travellers to compare prices, check availability and obtain information.

Much debate and controversy has surrounded consumer behaviour, the internet and the role of the travel agent, with many authors reflecting on the demise of the traditional travel agent and loss of employment opportunities (Marvell, 2006; Singh, 2006), while others have focused on the decision process by the consumer and the motivation for booking online or face to face (Cheyne, Downes, & Legg, 2006). It is therefore necessary to understand consumer behaviour and how this may affect the role of the travel agent. However, in order to understand consumer behaviour with regards to tourism, it is necessary to understand the underpinning social and psychology concepts of human behaviour.

Human behaviour is often examined through the use of social psychology, focusing on personal relationships and interaction with other people or in groups and how culture and society can influence this behaviour (Brain, 2008).

Psychology has been studied since ancient times with scholars like Aristotle, Plato and Socrates assessing human behaviour. The term "psychology" has been modified from two Greek words "psyche" meaning "mind" and "logos" meaning "knowledge" and for this reason psychology was originally known as the study of the mind (Benson, 2004). Psychological theories are well documented, ranging from cognitive theories, social development theories and personality theories, the majority of which have been researched in many academic fields, including that of tourism.

Cognitive theories aim to decipher human behaviour by understanding the thought process, such as reasoning, decision making and learning, by addressing internal factors such as emotions, motivations and perceptions, some of which can be

influenced by our external environment. The media, for example, bombard consumers with influential messages in the form of advertising and branding, ranging from persuasive television commercials to pop up messages on computer screens.

Social development theories stem from the works of Freud and Piaget and concentrate on social behaviour, describing how individuals influence or are influenced by peer behaviour, learning to imitate or model others in society through social exchanges and interaction.

Consumer behaviour is a complex area involving many different variables; individual traits like personality, how a person thinks, learns, (cognitive process), feels, believes (intrinsic behaviour) along with external factors such as upbringing (culture, social class, family), all influencing the process. Over the last decade investigations into consumer behaviour have gathered momentum and a number of consumer behaviour models have been designed, their purpose to aid the understanding of these variables and describe behaviour patterns. However, it is worth noting that consumer behaviour involves both a mental decision process (thinking) and a physical activity (action/doing) (Loudon, 1988).

### 2.9 Consumer Information Search Behaviour

At the first stage (need recognition) consumers have no information or knowledge, so they seek information. Information usually comes from two sources, internal and external. According to Peterson and Merino (2003), internal information is obtained by searching the memory and usually occurs prior to any external search. Therefore an external information search includes everything apart from the memory, for example friends, advertisements, newspapers, magazines and consumer reports (Yuan, 2005) and more recently the Internet. Nonetheless, in reality they are both intertwined as many external searches rely on memory and previous experience as a starting point for any search.

External search behaviour is usually triggered by personal wants, needs and desires and consists of problem solving activities (Howard and Sheth, 1969 as cited in Evans, Jamall & Foxall, 2006) and the pursuit of particular goals (Bettman, 1979). However, past research has identified two varying types of external information searches: prepurchase and ongoing (Schmidt & Spreng, 1996). This is an area of much debate and controversy, with many authors (Loudon, 1988; Soloman, 2006) arguing that these areas are one and the same, therefore making it difficult to define, especially with the introduction of the Internet, as many more consumers window shop or browse as a form of personal entertainment.

### 2.10 Online Search Behaviour

The internet has had a profound influence on the travel industry and the channels of distribution. It is evident from research that search engines are a critical component of Internet infrastructure and consumer reliance on the Internet as an information source will escalate in the future. A recent study (Lardinois, 2010, p.1) confirmed that "the global search market grew 46% in 2009".

Over the last decade a number of software programs have been designed to evaluate the behaviour of consumers when using the Internet. However, all have the same purpose to monitor and track user progression through navigation and ease of use, therefore determining the compatibility of the site with the user. It has been suggested that the easier a website is to use the longer a consumer will spend on a site, searching, retrieving and purchasing products.

Consumer behaviour can also be manipulated by the travel sector. Ryan Air, for example, used their website to offer consumers exclusive special offers on flights that could only be booked online, ensuring the Internet was the main channel for booking and distribution, therefore changing the buying behaviour of consumers. This policy has now been adopted by many low cost airlines and also by international carriers like Air New Zealand, who use "grab a seat" to entice customers into booking at certain dates and times, for certain dates of departures, therefore controlling and influencing consumer behaviour via Internet applications. For many consumers and retailers these methods are now considered the norm.

When searching for travel related information on the Internet, social networking sites are also influencing consumer behaviour. Today, social networking is a fundamental part of Internet activity with 67% of the global online population gaining access to various sites (Nielsen, 2009). Although in its infancy, it reiterates social development theories, which outline the need for belonging, social exchange and interaction, along with conformity and social acceptance. Online social networks such as Facebook, Twitter, My Space and Linkedin allow this collaboration to happen in virtual worlds, communities are formed, friendships developed and socialisation begins.

Collaboration plays an important role in these virtual worlds with many users participating in online blogs, instant messaging, e-mails and discussion forums, which allow viewpoints, opinions and thoughts to be exchanged. In the United Kingdom, nine out of ten 25-34 year olds visit a social website, with members discussing every element of their personal life from boyfriends to breakfast to holiday vacations (U Talk Marketing.com, 2010). It is these social exchanges that are influencing consumer behaviour like never before, encouraging independency, yet conformity when evaluating and selecting products.

Statistics on social networking sites are difficult to obtain, but it estimated that over 850 sites are in existence (USA Today, 2010) and growing in terms of their functionality and audience numbers. Moreover, due to the popularity of these social networking sites, their social power is enormous with the capability to influence individual behaviour and it could be argued that social network sites have become today's "reference group", enforcing standards of behaviour or ideologies, changing attitudes and beliefs through the use of blogs and discussion forums.

This is evident through another tourism product: Trip Advisor, which is a web based discussion forum that allows consumers to post their personal experiences/opinions of tourism products online. Accommodation and other tourism products are then graded depending on the reviews received. Although trip advisor is a free travel guide providing travel reviews, a great deal of controversy surrounds the site as to whether the information obtained from the site is unbiased. Nevertheless, the site holds powerful implications for consumer behaviour and demonstrates how social groups are instrumental in determining individuals' buying behaviour (Evans, Jamal, & Foxall, 2006).

Concurrent with online searching, online leisure travel sales are growing at a tremendous rate and account for a third of all travel reservations (Goelder & Ritchie, 2006). In the United Kingdom, 54% of all British holidaymakers used social media websites for recommendations (Sunshine, 2011) and it is estimated that by 2012 as many as 45% of international visitors will use mobile technology to make travel arrangements (Sunshine, 2011).

After evaluating the points raised with regards to consumer search behaviour, it would appear that the role of the travel agent is indeed under threat, influenced by the manipulation of the suppliers (airlines) to book direct and the manipulation of other consumers via social networking sites and the use of mobile technology. In order to survive, the travel agency sector needs to regain a competitive advantage, either by developing niche specialised products which differentiate them from the competition or focusing on the personal service offered to the consumer. It is perhaps for this reason that consumer demand is influencing professional development and altering the behaviour of both the individual consumers and corporations are adapting to tailored personal experiences in order to survive.

### 2.11 Behavioural Learning Theories

Behavioural theories have been extensively studied for centuries, and behavioural views of learning were amongst some of the first theories to be applied to education (Miller & Stoeckel, 2010). Learning by its definition "involves changes to our behaviour in response to experience" (Johnston, 2000).

Behavioural theories attempt to explain observable changes in learning behaviour and are generally not concerned with the workings of the mind or the thought process and, as such, focus more on the impacts of the external environment. Behavioural theories seek to indentify links between stimuli (events), conditioning, response and retention rates (Hite, 1999). Behavioural theories or behaviourism is often associated with the psychologists, Pavlov (1928), Thorndike (1931) and Skinner (1953).

Pavlov's learning theory is based on the premise of association and research suggests that in classical conditioning, connections already exist between the stimulus, the environment, and the response (Newman & Newman, 2007). During Pavlov's research, he deliberately set out to trigger and manipulate response patterns in animals through conditioning, and by doing this, Pavlov was able to demonstrate that the animals could be taught, through automatic responses and reflex actions. It could be argued that Pavlov was probably the first psychologist to establish links between memory and learning and, although his work revolved around animals, it is still significant in the development of some key educational principles and concepts of today, especially in the area of instructional design, multiple choice testing and examination revision (Walker, 1984).

Although Thorndike's theory of learning dates back to the 1800's and is influenced by many of Pavlov's believes and concepts, it is still a powerful influence in many educational establishments of today, as Thorndike's theory underpins the main principles of goal directed learning (Schwartz, Wasserman, & Robbins, 2002). Like Pavlov, Thorndike's work centred on the process of classical conditioning and became known as "connectionism", a process by which the learner formulates connections between stimulus and response, based on the process of repetition and reward. Thorndike argued that the concept of association was central to the learning process and that positive reinforcement was a key concept in the teaching and learning process. Consequently, Thorndike's theoretical contributions to education were two major laws of learning. The first, the law of effect, was a framework influenced by punishment and reward. The second, the law of exercise, recognises that connections are stronger through repetition, in other words "practice makes perfect" (Quinn, 2000).

Like Thorndike, Skinner argued that learning was by association and developed the 'principles of operant conditioning' based on the relationship between stimulus, response and consequence. Skinner believed that individuals learnt from the consequences of actions and adapted behaviour accordingly (Moonie 2005). Skinner's learning theory sought to explain how individuals learn meaning, through shaping and changing behaviour and, as Skinner suggests, most effective educational practices are based on behavioural theories and behaviour modification (Florian, 2007). As Florian

(2007, p.259) mentions "behaviour modification is the systematic application of learning principles or techniques to improve individual knowledge, understanding and performance".

In the late 1950's Skinner designed a teaching machine based on these principles. The programmed learning gave both directed instruction and instant feedback, allowing individuals to work at their pace within a controlled environment (Gilmour, 1962). It could be argued that Skinner's research led to the concept of individual self paced learning or mastery learning. Nevertheless, when considering Skinner's principles of operant conditioning and behavioural change, it is worth noting that behaviourists seek to predict and control behaviour.

In the behaviourist's model of teaching and learning, the dissemination of knowledge is a key concept, making the instructor central to learning process. Evidence would suggest that the focus on knowledge acquisition could be utilised and achieved through e-learning by the use of directed instructional design, mastery learning and drill and practice, all of which could be supported, designed, adapted and managed by the instructor (Bates, 2005).

### 2.12 Cognitive Learning Theories

The cognitive process and the workings of the mind are complex; it essentially involves sensory input, storage and recall to solve problems. Research (Anderson 1983, Bruner, 1990) identifies factors that lead to learning, and it would appear that, in general, "people learn by memorising, understanding and doing" (Walkin, 1990 p.19). Cognitive development theories attempt to explain the mental process of intellectual development and the capacity to learn (Gillani, 2003).

A variety of theorists are associated with cognitivism psychology including Piaget (1952), Bruner (1966), Kolb (1984), Vygotsky (1962), Ausubel (1968) and Dewey (1997). Piaget (1952) argued that cognitive intellectual development was an adaptive process in response to environmental demands and conditioning and, although Piaget primarily concentrated on the developmental stages of childhood, his work is still widely used in all fields of education.

Piaget proposed four key concepts within the internal knowledge structure: schemata, assimilation, accommodation and equilibrium. Piaget considered the building blocks of thinking as schemata, drawing on existing or prior knowledge, which altered or adapted as a process of refinement, the process of assimilation as integrating new information into existing knowledge and referred to accommodation as a process which occurs when the individual is unable to assimilate the new information into existing knowledge, and the schemata is then altered to accommodate the new information. Piaget described the last and final stage of the process as equilibrium, the

re-organisation of knowledge in response to the new learning experience (Gillani, 2003; Holmes & Gardner, 2006; Singer & Revenson, 1978). Piaget's developmental theory of learning and thinking emphasises the fact that both must involve participation of the learner in the construction of knowledge for thinking, reasoning and learning to take place.

Like the theories of Piaget, Bruner's (1966) cognitive theories argued that learning was a developmental process, involving a series of progressive steps towards achievement, that affect development, engagement and learning. Although, Bruner's theory reflects many of Piaget's ideas and concepts, Bruner's theory was not age dependent and emphasised the gradual acquisition of cognitive skills; nevertheless, the learner was still central to the learning process. Bruner believed that learning was an interactive process in which learners constructed new concepts or ideas based on prior or current knowledge (Kearsley & Lynch, 1994).

Bruner's cognitive theory utilised three key factors and were concerned with the ways in which to represent thinking: Enactive, Iconic, Symbolic.

According to Bruner (1966) the first stage, enactive, is associated with Piaget's sensorimotor stage and essentially involves physical actions, direct contact and the use of concrete models of concepts and procedures (Slee, 2002). The second stage, iconic, is the use of graphical or mental images to acquire knowledge or concepts (Salkind, 2004) and the third stage, symbolic thinking, means the use of abstract symbols, namely language, music and numbers to represent concepts and procedures (Nicholls, 2002). Bruner's theory of learning is often referred to as discovery learning or "scaffolding", where individuals begin to expand and enhance their own personal knowledge through the process of critical thinking, sometimes through guidance or instruction.

When considering teaching and learning, Bruner's theory highlights the use of language, communication and instruction to encourage increased mental activities and independent learning. It emphasises the fact that individuals build upon what is already known and construct their own understanding, if learning is going to be meaningful (Tassoni, Bulman, & Beith, 2005).

Kolb expanded on this principle and in 1984 developed the experiential learning cycle, which has been applied to education ever since (Fry et al., 2009). Kolb also believed that learning took place in developmental stages that were structured in logical steps guided by a model of experiential learning, based on the transfer of information through experience (Moon, 2004). Kolb suggested four distinct categories in the continual learning cycle: concrete experience, reflection, abstract conceptualisation and active experimentation.

The first stage in the cycle draws on the individual's field of experience, direct participation or involvement in a new experience. The second stage is reflecting: reviewing the experience. The third stage is theorising: drawing conclusions, processing the ideas and understanding. The fourth stage is concerned with applying the knowledge and skills and preparing for the next stage in the cycle. Kolb proposed that although learning involved four stages, individuals each had preferred ways to enter the learning cycle, making the process of learning both individual and unique.

Like Kolb, Dewey (1938) believed learning was improved out of reflective thought and the concept of reflection brought about deep meaning and understanding (Federal Aviation Administration, 2009) and, although Dewey had a philosophical approach to learning, he argued that experience was the main principle for learning. He believed that learners learnt best by doing and experiencing (Alexander & Winne, 2006).

Dewey's theory illustrated the fact that learning took place in developmental cycles. It emphasised the fact that each cycle would be different to the last, as the level of experience and understanding had changed and that each cycle would build upon the last, thus making learning more comprehendible and meaningful. Another key factor in Dewey's approach to learning was the process of social interaction: communication, engagement, collaboration and participation all being key facilitators to learning.

Vygotsky is considered by many (Holmes & Gardner, 2006; Pastorino & Doyle-Portillo, 2009; Salkind, 2004) to be one of the most influential cognitive theorists, his work focused on how individuals acquire knowledge and understanding and emphasised the role of social development in learning. Vygotsky believed, like the other theorists, that knowledge was a developmental process filling the cognitive gap. However, Vygotsky believed knowledge was acquired through interaction, the learner and the expert (Graham, 2003).

Vygotsky's theory sought to explain how learners progress and the relationship between the instructor and cognitive development. It is based on the concept of the zone of proximal development (ZPD) and considers the developmental stages as what the learner 'can do', what the learner has the potential to do, and what the learner 'can do' with help or guidance.

Vygotsky's cognitive theory highlights the fact that educators should use "scaffolding" techniques to enhance individual learning and aid the acquisition of new skills, understanding and knowledge. Scaffolding is defined as "the role of the teacher and others in supporting the learner's development and providing support structures to get to the next level" (Raymond, 2000), thus initiating confidence and essentially transferring the responsibility for the task to the learner and eventually enabling learners to carry out tasks independently.

Ausubel's (1968) theory of 'meaningful learning' was first established in the early 1960's and addressed cognitive learning and the acquisition and use of knowledge. Like many other theorists, Ausubel believed that learning was a structured and developmental process. Ausubel proposed that new ideas and concepts are organised hierarchically in our heads under existing broader inclusive concepts and that all learning must involve the learner in a specific set of metal, emotional and physical processes (Westwood, 2004). He emphasised the fact "the most important single factor influencing learning is what the learner already knows" (Ausubel, 1968 p.18).

Ausubel disputed the work of Bruner and Vygotsky and claimed that teacher directed learning was more effective than discovery learning and argued that rote memorisation was too fragmented, leading to misconceptions and uncorrected errors in learning (Moseley et al., 2005). In 1966, Ausubel proposed a new teaching approach termed "Advanced Organizer" (Gillani, 2003), where practitioners could 'scaffold' or facilitate learning through a networking concept, allowing the integration of new and existing knowledge.

According to Novak (1998), concept mapping allows individuals to externalise personal knowledge and clarify links between key ideas. As concept/mind maps are usually displayed in diagrammatical format they utilise both sides of the brain, improving both memory and creative thinking, therefore developing cognitive structures which lead to meaningful learning (Kommers, 2004).

Nevertheless, all the above theorists emphasis the internal processes and focus on the individuals fitting new learning into their own existing mental structures.

# 2.13 Social Learning/ Social Cognitive Theories

Social learning theories emerged out of traditional learning and behavioural theories and attempt to explain how individuals are influenced or influence each other. Social learning theories revolve around three key factors: the person, the behaviour and the environment (Cole, 2005). When referring to the person, it includes the internal characteristics that make up the individual, such as cognitive process, personality and demographics, and the environmental factors are the external factors that provide opportunities for social support and interaction (Prasad, Vin, Sahni, Jaiswal, & Thipakorn, 2010).

Social learning theories are concerned with the interrelationships of expectations, reinforcement and observation (Kirk, MacDonald, & O'Sullivan, 2006), whereas a distinct feature of social cognitive theories is that knowledge is acquired through the cognitive thought process (Shaffer, 2008). Therefore social cognitive theories attempt to explain the combined interrelationships of internal and external factors that influence learning.

Bandura's (1963) social cognitive theory is probably the most recognised theory that is applied to the educational setting. Although Bandura believed that learning stemmed from modelling or imitating behaviour, his research suggested the most important mechanisms for learning are personal motivation, self efficacy and self regulation. Self efficacy is the belief in one's own ability to perform and reach the required goal (Roberts, 2006). Bandura believed that individuals should be proactive in learning and behavioural change and this could be achieved through self organisation, self reflection and self regulation. After all, the main purpose of any educator is to equip students with the intellectual tools and self regulatory capabilities to educate themselves (Bandura, 1993).

Therefore, social cognitive learning theories focus on the learning experience, personal perceptions and the belief in one's own ability to interpret information. When evaluating the points in relation to the online learning environment, educators and web designers need to ensure e-learning is purposeful and meaningful with differentiation and flexibility built into a distance learning programmes.

# 2.14 Motivational Learning Theories

Much has been written regarding the relationship between e-learning, human behaviour and individual learning preferences, with motivational frameworks being utilised to assess effectiveness and perceptions. Motivation is defined as "the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal" (Robbins & Judge, 2010, p.305).

Learner motivation is generally the individual's desire to participate in the learning process and the underlying pursuit of academic activities (Kids Source, 2000). Brophy (2004, p.4) defines motivation as the "level of enthusiasm and the degree to which students invest attention and effort in learning". He goes on to say that motivation to learn is slightly different and it is a "competence acquired through general experience directly from modelling, direct instruction, communicating and socialising".

Motivational theories have been extensively researched and seek to explain the force that stimulates, energises, directs and sustains behaviour over a period of time (Gill & Pio, 2007, Krause, 2010). When considering motivation and applying to an educational setting or online environment, there are a variety of key concepts that need to be considered and addressed. These include instinct and extrinsic motivation and the affects of emotions such as anxiety, arousal, and interest on personal motivation (Hays, 2006). Motivation plays an important part in learning, from the initial stages of engagement through progression and success.

Intrinsic motivation usually comes from within the individual, feelings of excitement, curiosity, confidence and satisfaction (Whitney & Hirsch, 2007), whilst extrinsic

motivation occurs from external influences that manipulate behaviour by providing incentives or rewards (Walker Tileston, 2004).

Approaches to motivation vary and therefore motivational theories are usually divided into content and process theories. Content theories focus on the external factors that motivate individuals, with Maslow (1982), McCelland (1987) and Hertzberg (1968) probably being the most cited content theorists.

Maslow's theory focused on a five tier hierarchical system and utilised the premise that the more individual's want or desire something the more motivated they will be to acquire it, however once the need was satisfied the motivation would disappear.

Like Maslow, McCelland's theory emphasises the need for achievement and attempts to explain strategies that individuals use to gain success and avoid failure. McCelland (1987) argued that needs were acquired as a result of environmental conditioning or through personal experience.

While Hertzberg's theory describes the association between job satisfaction, performance and motivation, it outlines the correlation between satisfaction achievement, recognition and the willingness to work harder.

The research theories of Maslow, McCelland and Hertzberg, although not focusing on intrinsic motivation, suggest it can be influenced and increased by a sense of achievement, recognition and satisfaction. If the behaviourist view of learning is adopted, it could be argued that praise and recognition are all forms of reinforcement that enhance motivation.

Process theories focus on the intrinsic factors of motivation and seek to explore the cognitive and behavioural processes behind the motivation (Pyne, 2008) and usually include equity, expectancy, goal-setting, and self-efficacy theories (Schermerhorn, 2006).

Adams' (1963) equity theory as cited in Gill & Pio,(2007), focuses on the comparisons between effort made and reward received; it outlines individual perceptions of whether or not the reward is fair, it stresses the importance of striking a balance between input (effort) and output (reward) and being treated as an equal.

Vroom's (1995) expectancy theory provides an understanding of the thought processes that individuals use to motivate themselves and form opinions and perceptions of products. Vroom assumes people are motivated by their expectation of reward, thus the expectancy of the reward results in increased effort leading to increases in performance (Gill & Pio, 2007).

Goal setting theory was proposed by Latham and Locke (1984) and identifies the notion of a goal as a motivational force, to which behaviour is modified by the use of challenges and attainment. Hence the more difficult tasks require more commitment and usually result in harder work, whilst more specific tasks or goals that require clarity and precision generally increase productivity (Gorman, 2004; Griffin & Moorhead, 2007; Landy & Conte, 2007).

Self-efficacy theory is derived from social cognitive theory (Bandura, 1996) and provides a comprehensive understanding of the influences on performance through personal choice, and explains how individuals persevere in the face of adversity (Gibson, 2001). This is based on the view that individuals are more likely to engage in learning when they believe they are capable of successfully performing a task (Schwartz et al., 2002). Self-efficacy therefore invokes a positive feeling of wellbeing through accomplishment and intrinsic satisfaction, resulting in improvements in motivation and personal performance.

Moreover, learners who enjoy what they are doing when completing the tasks and who learn for the sake of learning, are believed to be intrinsically motivated (Ryan & Deci, 2000). Motivation can therefore stimulate curiosity, empowering the ability to grow or develop to better oneself and stimulate the sense of fulfilment through engagement in learning.

Many authors (Barkley, 2010; Fink, 2008) are in agreement that motivation, engagement and interest are interconnected and this needs to be given serious consideration when designing and implementing online learning environments.

Previous research in the field of education (Ainley, 2006) illustrates the way in which interest can support or detract from the learning experience. Interest consists of both an affective state and cognitive state and can increase attention and concentration within individuals, through positive feelings of wellbeing which increases effort and willingness to learn (Krapp, Hidi & Renninger, 1992).

Nevertheless, motivation can determine the direction of study and the depth and level of interest maintained. Individual interest varies and develops over a period of time to reflect a growing base of knowledge in a particular subject area. Conversely, interest can be aroused by triggers within the environment (Krause, Bochner, Duchese & McMaugh, 2010) which can stimulate understanding and increase comprehension and recall (Clarke, 2001).

Motivation and engagement are often utilised to describe the same type of behaviour and forge links between the individual and the activity (Smart, 2006). Previous research in education outlines the behavioural concepts of engagement, such as paying attention, whereas the cognitive processes show engagement through focus

and goal setting, and emotions reveal engagement through boredom or interest (Long, Wood, Littleton, Passenger, & Sheehy, 2000). Nevertheless, engagement plays a crucial role in the learning process.

The motivational theories of expectancy and arousal are both intended to understand behaviour within an organisational setting and are often used to measure individual motivation towards organisational goals. Workplace or organisational motivation is defined as "the willingness to exert high level of effort towards organizational goals, conditioned by the effort's ability to satisfy some individual need" (Robbins, 1998 p.168).

Motivation, engagement and interest are essential elements in the teaching and learning process and represent individual qualities that directly affect learning. Therefore motivational theories focus on the learning experience, linking together internal and external influences.

Extensive research has analysed learning theories and the cognitive process (Mergel, 1998, Patsula, 1999) to aid the development and design of online systems and, by utilising some of these factors and theories, learning opportunities can be identified and developed within the online environment. Generally, it would appear that learning is an active process, utilising prior knowledge that occurs best through social interaction, collaboration and reflection.

While behavioural theories such as Skinner's (1953), emphasise the importance of meaningful learning, they also adopt a conventional approach that identifies specific measurable goals. Theories such as Banduras' (1963) social cognitive theory emphasise the need for self management skills, and self directed learning, whilst motivational theories reflect the individual qualities and differences that directly affect teaching and learning.

Each of the above learning theories has added to the understanding of how individuals learn and a variety of systems have been developed, based on their basic principles. For example, both theorists, Banduras (1963) and Skinner (1953) support the concept of analysing a task, breaking it down, establishing objectives and evaluating performance (Mergel, 1998) and by combining some of these concepts, active learning environments have been created, improved upon and individual needs have been met.

### 2.15 Individual Differences in Learning

Research in the field of education (Resnick, 1983; Glaserfeld, 1984) highlights the fact that many learners construct concepts from prior knowledge. Prior learning is learning that has occurred in the past and could be derived from everyday life rather than artificial learning experiences (Walkin, 1990). Prior knowledge is a key step in learning and most teaching practices build upon existing skills and knowledge. It is therefore

vital that educators understand how prior knowledge affects learning to help students make the most of a new experience (Roschelle, 1995).

#### 2.15.1 **Gender**

When analysing gender and technology use, many studies (Bromley & Apple, 1998; Garson, 1995; Klein, 2007) have compared and contrasted gender use and literature on the subject acknowledges the fact that gender bias exists. Some suggest this is based on societal influences such as parental beliefs and attitudes, whilst others comment on media influences in promoting stereotypical roles and that technology is a male domain.

Gender bias in computing is also reinforced by the educational experience (Garson, 1995). According to Baron-Cohen (2004), boys are described as 'systematisers' and when this is applied to an educational setting, it would suggest boys prefer a systematic method of learning, therefore opting for subjects that reflect this teaching concept such as science, mathematics and technology. Baron-Cohen (2004) goes on to say that girls are described as 'empathisers' and prefer methods of learning that revolve around discussion and debate. Literature reveals there is a significant difference between the number of females enrolled on computer courses to males (Sohn, 2006) and, historically, females have less confidence in using technology (Klein, 2007). Certain authors (Fox & Rosser, 2006; Gattiker, 1994) put this down to the fact that programs are designed by males for males. Historically, ICT has been a field dominated by males and characterised by masculine language (Trauth, 2006). Nevertheless, "women want information and to engage in communication that will improve their livelihoods and organizations are aware of the power of information technologies and understand that, given the opportunity to do so, women will use them to advance their needs and strategic interests" (Odame, 2005 p.13). However, Sweetman (1998 p.3) points out "the valuable technological skills and knowledge that women do posses have often gone unrecognised and unnoticed".

# 2.15.2 Learning Styles

It is well documented that learning styles can affect and influence the learning process and many authors (Carliner, 2004; Clark & Mayer, 2008; Garrison & Anderson, 2003) have reflected on the way in which learning styles can be utilised to individualise and differentiate learning within the online environment.

Learning styles are the ways in which individuals interact with and respond to information in a learning context (Jonassen & Grabowski, 1993). Dunn and Dunn (1975) as cited in Dimmock (2000, p.117) define learning styles as "the stimuli that affect a person's ability to absorb and retain information, values or facts". Learning styles usually focus on four key areas of learning, visual learning, auditory learning,

kinaesthetic learning and reflective learning, with different methods or approaches being adopted into teaching design to assist learners and enhance the learning experience (Sims, 1995). Learning styles are often viewed as the characteristics that affect cognitive and physiological behaviour and, according to Sims (1995), serve as indicators of how learners perceive, interact and respond to the learning environment. Recent research (Tapscott, 2008) suggests that the way in which learning takes place is changing and confirms the "net generation" born between 1982 and 2002 are able to absorb more information visually and prefer multitasking rather than focusing on one thing. When considering these points from a design perspective, online educators need to ensure visuals are an integral part of course development and design if learning is going to be effective.

An extensive review of cognitive learning styles (Reece & Walker, 2000; Richards, 2000; Sims, 1995) has emphasised the theory of brain lateralisation. In this style of learning, specific areas of the brain are believed to be responsible for different functions of learning. 'Left brain learners' are characterised as verbal, analytical, logical thinkers, while 'right brained learners' are believed to have greater creativity, visual thinkers (Sousa, 1995). Conversely, changes in brain patterns have come under much scrutiny because of advancements in technology and research suggests that modern technology such as the internet is changing the way in which we think (Carr, 2008). Aronson (2005 p. 9) believes "that new technologies are transforming the very structure of our thoughts and perceptions, in turn affecting the way in which we create and understand".

Furthermore, a consensus of research (Naughton, 2010; Tapscott, 2008; Greensfield, 2010) suggests that our brains are adapting to the use of electronic devices with the 'net generation' being able to multi-task more effectively than previous generations. The internet is bombarding individuals with vast amounts of information in the form of text and images, therefore individuals are now learning and placing greater emphasis on scanning and skim reading to obtain snippets of information, and visual icons are creating and stimulating areas of interest. When these points are considered in the context of this study, it gives an understanding of how learners acquire, process and organise information is obtained.

## 2.15.3 Types of Learning

Research in the field of education has identified many different approaches to learning, and the terms 'deep' and 'surface' learning are widely acknowledged in the world of academia. It is well documented that deep and surface learning are not attributes of individuals, but methods that are adapted at different times of learning. A study by Zimmerman (1998) found the key component to any type of learning is the individual learner themselves, as all learners try to self regulate and put strategies in

place to aid the learning process. Nonetheless, Zimmerman (1998) linked deep learning with intrinsic motivation and surface learning with extrinsic motivation.

James and Gipps (1998) describe surface learning as a passive approach, that accepts ideas, concepts and information, generally without challenging or questioning the content, however surface learning can be very effective in recalling informational facts. Deep level learning draws on previous knowledge to enhance the capacity for understanding and memory, making information fit into conceptual frameworks, thus learning can be more effective and meaningful for the learner.

By understanding how learners acquire, process and organise information, online providers can create opportunities that are meaningful and actively involve the learners, therefore enhancing the overall learning experience.

# 2.16 Development and Evaluation of Websites

A consensus of research suggests (Juhdi, 2006; Steen, 2008; Smart & Cappel 2006), that participation and active learning are critical elements affecting the success of performance in e-learning, so effective course design is essential to support and engage learning. Substantial literature surrounds course design (Carliner, 2004; Carliner & Shank, 2008; Khan, 2005) and it is an area that should not be overlooked when considering the effectiveness of education and training, as it covers many different aspects from the management and maintenance of the course, through to the integral design and development of the course.

Unfortunately, from a design point of view, developing materials can be difficult as teaching and learning theories need to be combined with technological techniques such as programming and graphic design, as well as subject knowledge, as "each course is unique and there is no one size fits all" (Steen, 2008, p.526). Even so, course designers can influence effort through "motivational design" by rearranging the learning environment, thus making the content of materials more relevant and as interesting as possible to the user, so that the learners have the expectation of success and achievement (Kellar, 1987). In spite of this, the motivation that comes from beyond the classroom is out of the span of control of the instructor, or indeed the designer (Januszewski & Molenda, 2008).

It is for this reason that motivational approaches to learning are often linked with theoretical learning concepts along with course design, and although motivation affects all aspects of our life, what actually inspires and motivates individuals to learn?

The answer is of course, choice, the ability to evolve and adapt (Sullo, 2007), power, competence, achievement and mastery (Fisher & Frey, 2008) and the need to "acquire

information that will allow us to fill gaps or discrepancies in our thinking" (Brophy, 2007, p.343). Nonetheless, it could be argued that individuals wish to evolve and adapt to retain meaningful employment or gain promotion.

Clark (1997, p. 283) took a philosophical approach to education and training, and elaborated on the differences between inspiration and motivation. He stated that "all we can hope to do is inspire one another to motivate our self". Many authors agree with this concept and theorists argue that motivation is an intrinsic element including self-will, determination, and personality (Gill & Pio, 2007). By contrast, a variety of other academics (Brophy, 2010; McLean, 2009) argue that motivation encompasses a variety of different elements, both intrinsic and extrinsic, including emotions, peer pressure, status, wealth, expectations, and employment opportunities. Even so, when motivation is generally defined, it is the force that stimulates and directs behaviour towards achieving a goal (Romando, 2007). When applying motivation to learning or education, motivation can stimulate curiosity, empowering the ability to grow or develop to better oneself and stimulate the sense of fulfilment.

Research investigating and examining learning motivation has been ongoing for the last twenty years, and motivation has been identified as a potential problem associated with e-learning, not only because participants work in isolation, but because of the inability to organise study time effectively and facilitate their own learning. Many students in a corporate setting are without a desire to learn (Bonk, 2002), and their only motivation is to pass the test (Kurse, 2004). If benefits are linked either through personal interest or incentives, interest, stimulation and motivation usually increase (Walkin, 1990, p.2).

Learner frustration, anxiety and confusion have all been linked with technical problems and can be very demotivating, hence web design needs to ensure information can be accessed, navigated and retrieved easily and the e-learning sites are useable by the audience. In other words, sites need to be user friendly (Smith, 1997).

Web usability is often referred to as a software quality factor and describes the interaction between individuals and technology (Mendes & Mosley, 2006). It is a person's ability to do something, and this is usually task related on the Internet (Thurow & Musica, 2009). Systems that operate good standards of usability understand how people operate socially, psychologically, ergonomically and within organisations (Kukulska-Hulme & Traxler, 2005). Preece et al. (1994) examined usability from a user perspective and found sites that were aesthetically pleasing, entertaining, fun, creative and helpful were more satisfying and fulfilling. However, O'Malley (2003) highlights the fact that usability should always address two sets of users: those that access the content and those that create the content.

To highlight the requirements of usability in teaching and learning, researchers and educationalists have conducted usability studies to identify strengths and weaknesses within training programs. From an educational perspective, researchers have grouped usability into a number of categories. For example Muir et al (2003) described usability in four levels: technical, general, academic and content specific. The technical and general levels referred to the hardware and software, the academic level referred to pedagogy, and the content specific level referred to the outcome of the course. Kukulska-Hulme & Traxler (2005) focused on accessibility, reliability and consistence as technical issues, cooperation and added value for learners as pedagogical concerns. Shackel (1991) proposed speed, effectiveness and error effectiveness, whereas Constantine and Lockwood (1999) identified usability in terms of efficiency in use, rememberability, learnability, reliability and user satisfaction. Numerous authors (Jacko & Sears, 2003; Nielsen, 1993; Rosson & Carroll, 2002) have stressed the importance of content, design, structure, navigation, visual appeal, performance and the use of multimedia.

Usability testing is strongly associated with the use of the Internet and web design. It is a technique that measures a website's ease of use by testing it on users (Chapparro, nd). It is used to measure performance, accuracy and emotional responses (Jerze, 2002). Many of the principles are based on the well known "Kirkpatrick model" (1959) of evaluation, a proposed system for assessing the effectiveness of specific training activities, utilizing: reaction, learning, behaviour and business results (Adelsberg & Trolley, 1999; Carliner, 2003).

Usability testing is "a quantitative and qualitative measurement of the design of a user interface, grouped into five key factors: learnability, efficiency, memorability, errors and satisfaction" (Bainbridge, 2003, p.48). The quantitative methods focus on the general performance of the website and the qualitative methods are usually based on the user's thoughts and opinions (Banati, Bedi, & Grover, 2006).

Since the Internet is a multi-dimensional tool, a number of usability testing tools and programs are in existence to evaluate the effectiveness of websites. Surprisingly though, little work has been conducted on who performs good usability testing and who does not (Cleborne, Maddux, Johnson., & Ewing-Taylor, 2002). From a commercial perspective, when assessing usability a two prong approach is usually adopted, the inspection method and the user test method (Brinck, Gergle, & Wood, 2002; Casteleyn, Daniel, Dolog, & Matera, 2009).

Research suggests that the inspection method is a cognitive walkthrough of the program and design, allowing software engineers and designers to find errors or predict potential problems. "Heuristic evaluation is the most informal of the inspection

methods" (Casteleyn, 2009, p.276) and consists of a panel of experts who examine the website against a set of established principals. The user test method is an observational technique used to collect and analyse data from actual users, probably the most commonly used methods are click through tracking and eye tracking.

Click through tracking is an analytical tool designed through observation techniques to assess navigation and ease of use within a website. The completion time of tasks is tracked and measured to assess the effectiveness of the site. Data is then compared to provide valuable insights into expected perceptions of users and the effectiveness of the site.

Eye tracking is a sophisticated technique, which is usually performed in specially designed computer laboratories, and allows the observer to view the website through the eyes of the participants. It essentially involves software that scans the eye motion and position of the eye and tests for fixations. Patterns are then analysed using hotspots, which assess content through engagement. These patterns then form gaze trails. Data comparisons are then made on the gaze trails which divulge how participants read, respond and react to text, therefore assessing both the learner and human behaviour (Duchowski, 2003).

Nevertheless, both methods have the same purpose: to monitor and track user progression through navigation and ease of use, therefore determining the compatibility of the site with the user. Effective usability can be linked with retention and achievement, and it has been suggested that the easier a website is to use the longer a person will spend on a site, searching, retrieving and studying products. It is therefore essential to eliminate any errors, not only the design but in the interaction process. By utilising these techniques, e-learning designs can then be adapted and modified to improve the efficiency of learning.

In principle, usability testing results in the discovery of mistakes users make when using an interface (Nielson 1994). Virzi (1992) found that five users will uncover approximately 80% of usability problems.

Managing the daily operation of online training is a diverse task with many corporations having strategic plans and policies in place to address technical issues, usability and program development. Student effectiveness and success is directly affected by actions and policies (Kibbee, 2005, p.107) and "Organizational structures for online education are an important element to program success" (Shelton, 2005, p.37).

# 3 Methodology

# 3.1 Problem definition and approach

The literature review revealed that extensive studies had been undertaken on the use of the internet on the travel sector, with the main focus incorporating the internet into the tourism industry as part of a distribution tool or for marketing purposes (Emmer et al., 1993) and the fact that academic researchers (Law, Qi, & Buhalis, 2010) had supported the importance of assessing website effectiveness. However, limited research had been conducted on the use of online training within the travel agency sector in the United Kingdom. When considering the issues that were raised in the literature review, the decision was taken to research this new and emerging area, focusing on personal perceptions, and usability of the websites as a training tool.

After reviewing literature on both educational research and tourism research, it became apparent that a number of different approaches were applicable to this research project. Ethnographic research literally means "writing about people" and generally encompasses the study of a group to gather information on behaviour. It is often associated with education and typically evaluates perceptions and the acquisition of classroom knowledge (Burns, 2005). Whilst the naturalistic approach to research highlights the importance of the individual experience with a focus on qualitative analysis (Keeves & Lakomski, 1999), tourism research literature (Veal, 2006; Weaver & Lawton, 2006) emphasised the importance of research philosophies and the study of general problem solving techniques. It also underlined the concept of the phenomenology approach and inductive reasoning. Usually a phenomenology approach is concerned with interpretivism, focusing on meaning and trying to understand what is happening (Veal, 2006), and is therefore relevant to this study as the main focus is personal perceptions and usability.

Based on the above review of literature, a variety of different research techniques were explored within the context of this investigation. Although the research is predominantly analysing personal perceptions and usability of the website, a philosophy problem solving approach utilised both question and statistical analysis to improve the quality and reliability of the results obtained and to enhance understanding. The study was conducted in two phases, combining both primary and secondary data analysis.

The first phase evaluated current issues, theory and debate through the use of secondary data. Although a review of trade publications was undertaken, it proved a difficult area of study, as the subject under review was not extensively documented. Therefore the author decided to concentrate on academic journals, books and web

based research. As this is an emerging area of study sources were limited, so the author concentrated on other aspects of e-learning delving into teaching and learning theories, lifelong learning, the internet, globalisation, and general literature on the concepts, use and design of e-learning. The use of secondary data analysis allowed the author to build on existing knowledge and make comparisons with other work in this field through the use of previously compiled material to explore and assess any strengths and weakness in the area of study, therefore enhancing understanding of professional theory and practice.

The second phase concentrated on the use of primary data and a suitable population and sample size was identified.

### 3.1.1 Population

In the United Kingdom, the travel agency sector comprises of three different types of travel agents: independents, miniples and multiples, each varying in size, turnover, and specialism (Beaver, 2005). Independent travel agencies are usually in single locations and owned and operated privately. Miniples have three or more branches which are concentrated in a specific geographical locality. In contrast, multiple travel agency chains have branches nationwide and nowadays form part of vertical integrated companies, such as TUI, Thomas Cook and First Choice. Although, there are no official statistics on the number employed within the travel agency sector in the United Kingdom, most travel agents belong to the Association of British Travel Agents (ABTA). ABTA has 5,500 members nationwide and, in the Yorkshire and Humberside region, where most of the sample came from, there are 7,200 people employed selling holidays and making travel arrangements (Department for Business Innovation and Skills, 2009).

### 3.2 Sample

Although ideally the whole travel agent population would be incorporated into the study, this was not feasible due to the time limits, resource and cost constraints and the fact that not all agents are undertaking the study programme. Therefore a sample was selected.

Combinations of different sampling techniques were undertaken for this research project: convenience sampling, snowball sampling and self selection sampling, each having their own distinct advantages.

A convenience sample is a sample that is easily available to the researcher, usually by its means of accessibility. For this reason, it has the advantage of having a good response rate (Bryman, 2007), it is cost effective as minimal resources are required, resulting in low costs and quick availability (Burns & Burns, 2008). "Convenience sampling is commonly practised in qualitative research and involves the deliberate

selection of certain cases to build up the sample" (Weaver, 2006, p.399). "In studies of cognitive functions such as perceptions and memory, convenience sampling can be used without too much sampling error affecting the results" (McBride, 2010, p121).

Snowball sampling is a technique used for finding research participants; the initial participants give the researcher the name of potential participants, who in turn provide another name, thus creating a chain of referrals within a group of acquaintances (Berg, 1988, Vogt, 1999), and this type of sample takes advantage of a social network (Scott, 2000). Consequently, snowball sampling has the advantage of providing the researcher with an ever expanding set of potential contacts (Thompson, 1997), which can produce in-depth results very quickly (Brewer, 2003). It is therefore an "invaluable tool for gaining access to informed and experienced people, who may provide in-depth information" (Gray, 2007, p117). The snowball sampling technique also allows the researcher to concentrate on individuals who have particular characteristics of interest to the researcher (VanderStoep & Johnston, 2009).

Snowball sampling is a form of convenience sampling (Bryman & Bell, 2007), commonly utilised in quantitative research to establish links to theoretical concepts. It is an informal method of sampling often used in academic research to reach a target population (Brewer, 2003; Wimmer & Dominick, 2006).

As many convenience samples consist of volunteers (Sim & Wright, 2000), previous work colleagues were e-mailed invitations to participate in the research project and, as part of the self selection process, decided by individual choice whether to participate in the project or not. Self selection sampling has a number of merits; individuals usually participate as they have personal views or opinions on the research questions and this is exactly what the researcher requires (Saunders, Lewis, & Thornhill, 2000). It therefore has the advantage of obtaining willing respondents, thus making it a cheap and easily accessible method (Buglear, 2005).

#### 3.3 Data Collection Methods

## 3.3.1 Case Study

At the onset of this research project a number of potential online travel training websites were investigated and compared by the author. However, due to cost and time constraints it was deemed necessary to focus on one particular online training package. As the researcher originates in the United Kingdom and is now living and working in New Zealand, the researcher thought it would be interesting to see what the agents in the United Kingdom knew and could learn about New Zealand, and therefore the Tourism New Zealand online training website was selected as the case study for this investigation.

Tourism New Zealand is committed to the travel industry and, due to the geographic location of New Zealand and remoteness of the destination, Tourism New Zealand is always looking for new and innovative ways to support trade partnerships. E-learning provides these opportunities as it provides global accessibility and availability of resources 24 hours a day, seven days a week, whilst creating new sales and marketing opportunities through enhanced learning. E-learning is convenient and saves time, therefore making e-learning a cost-effective method of training for Tourism New Zealand.

The travel industry is an integral part of their '100% Pure You campaign'; as such Tourism New Zealand provide free training opportunities for travel staff in the form of self study online training modules. The online training package consists of ten modules, with built in online assessment (Tourism New Zealand, 2010). According to Tourism New Zealand's website, the main aims and objectives of the training are:

- To demonstrate to clients that you are an expert at selling destination New Zealand
- To increase the profitability of sales
- To add to your portfolio of destination knowledge
- To expand your knowledge of the individual regions (Tourism New Zealand, 2010)

Although previous research has been conducted by Tourism New Zealand into the effectiveness of their online training site, the information is not available in the public domain, as the information is kept confidential so improvements can be made to their website and to give them the competitive edge (Lewis, personal communication, December 10, 2010).

The case study in this research therefore comprised of twenty one participants that undertook the ten training modules operated and designed by Tourism New Zealand, to explore the development and design of e-learning and the Internet as a training tool. User perceptions and the usability of the website were the main focus, to determine the effectiveness of the internet on the travel agency sector within the United Kingdom.

The case study approach was useful as it allowed issues and problems to be explored in depth and information to be contextualised. From the researcher's perspective, a case study aids and develops critical thinking, allowing theoretical concepts to be challenged or confirmed. The use of case studies in the tourism sector is well documented (Dale, 2008; Gunn, 2002; Veal, 2006) and Rosch (1978) defines case studies as describing events within a framework within a set environment. Bassey (1981, p.86) states "a successful case study will provide a three dimensional picture

and will illustrate relationships, issues and patterns in a particular context". Therefore, it enables links between theoretical concepts and practical situations.

# 3.3.2 Mixed Method Approach

For the purpose of this study a mixed method approach was adopted. Mixed method research is where both qualitative and quantitative techniques are combined within a single study (Johnson, 2010). According to Bryman and Bell (2007), qualitative data can allow researchers access to the perspectives of the people they are studying, whereas quantitative data allows researchers to explore specific areas of interest. After reviewing research methodology literature the decision was made to gather primary data using an online questionnaire and telephone interview. The questionnaire was sent directly to the participants straight after they had completed the online modules to gauge their initial thoughts and perceptions. The same participants were then interviewed by telephone a month later. The researcher made the decision to leave the telephone interviews until one month later in the hope that the participants would have time to reflect on their personal experiences and formulate in depth responses.

# 3.3.3 Online Survey - Questionnaire

As this research project evaluated online training, it seemed logical to obtain data via an online survey. The survey obtained information which was then analysed, patterns extracted and comparisons made. A Lickert scale of five categories of agreement/disagreement was utilised to evaluate participants' responses and assess their attitudes and opinions. Researchers in a variety of disciplines have discussed the Internet as a potential research tool and an interesting way of data collection (Litvin, 2001), with many researchers starting to explore its potential for effective data collection. However, online surveys can be conducted in two ways, via the website or via e-mail (Saunders, 2007).

Published research reveals a number of problems with the e-mail type survey, mainly concerning Internet protocols, anonymity and netiquette (Ross, 2008, Wright, 2005). As the participants within this study had volunteered, these problems did not become an issue.

Online surveys have the ability to gather information quickly and conveniently, regardless of their location and, compared to traditional survey methods, are usually less expensive (Schleyner & Forrest, 2000). Many authors (Russell & Purcell, 2009; Sue & Ritter, 2007) expand on the above points, firstly the ease of distribution, e-mails are self administered and give instant access to a world-wide population, regardless of their geographical location. They do not require any additional software packages (Wimmer & Dominick, 2006), standard software packages usually allow the user to precisely track the delivery of the item. The sender (researcher) is also aware of any

items that are undelivered, opening times or if items have been deleted (Paolo, 2000). This can not only improve response time, but also improve the sampling process.

Secondly, it is well documented (Schafer and Dillman, 1998, Selwyn and Robson, 1998, Sheehan and McMillan, 1999) that e-mail questionnaires cost less in time and are more economical than traditional surveys. According to Sheehan & Hoy (1999), e-mail questionnaires cost between 5%-20% less than paper based surveys due to the elimination of paper and postal costs.

The greatest advantage to e-mail questionnaires is the speed of the response, as recent studies prove that e-mail surveys have rapid response rates. Reid and Bojanic (2008) found responses to online surveys took less than two weeks, whilst Schafer and Dillman (1998) concluded that online surveys were 58% faster than their paper equivalents. Within the context of this study, once the modules had been completed, the majority of the participants returned the questionnaires within a three week time frame, which was within the time limit initially set for the participants.

Various studies have examined response rates (Coomber 1997, Tierney, 2000) and this clearly appears to be a disadvantage of online surveys, as response rates in general are lower than traditional methods. By taking into account theories of behaviour, motivation and social exchange at the design stage and ensuring surveys are kept simple, easy to complete, of an appropriate length, and when combined with purposeful and targeted sampling and immediate relevance of the survey to the respondent, response rates can be enhanced.

## 3.3.4 Usability Testing

Quantitative and qualitative data is often collected through the use of usability testing. Usability testing research focuses on the behaviour and interactions of a product or service. Usability testing is strongly associated with the use of the Internet and web design. It is a technique that measures a website's ease of use by testing it on users (Chapparro, nd), it is used to measure performance, accuracy and emotional responses (Jerze, 2002). The data collected provides insights into expected perceptions of users.

Previous research into usability testing (Virzi, 1992, Nielsen, 1993, Laudauer, 1993 and Lewis, 1994) has revealed a sample size of only five users is sufficient for effective analysis to take place and conclusions to be drawn, however more recent studies (Faulkner, 2004, Spillers, 2005) have highlighted benefits of increasing the sample size to 15 users. The sample size utilised within this study was 21 agents which ensured validity and reliability.

#### 3.3.5 Interviews

Usability testing is often combined with interviewing. Interviews are merely two way conversations in which people talk to each other (Jennings, 2001). Interviews allow relevant information (qualitative) to be gathered with valid and reliable data sets. A variety of different interview techniques or types are in existence, ranging from fully structured (standardised questions) to unstructured (in-depth), each with their own distinct purpose. After comparing different interview techniques, in depth one to one telephone interviews were undertaken as they allowed the interviewee to probe, develop and explore participants' responses, therefore providing valuable personal insights into feelings and motivations. Moreover, phone interviews have long been a dominant interview technique in the field of qualitative research (Opdenakker, 2006) and, as the participants were located in the United Kingdom, it seemed the ideal way to reach the participants.

### 3.4 Pilot Studies

## 3.4.1 Questionnaire

A pilot study is a feasibility study or trial run to identify any potential problems (Bell, 1999). A pilot study with one agent was undertaken. It initially involved the written questionnaire and was used to evaluate the design and structure of the questions. The pilot study ensured the questions were fit for purpose, had the correct flow, and gave an indication of the completion time.

#### 3.4.2 Interview

The aim of the interview pilot study was to establish the effect the interviewer had on the questions by evaluating the method of delivery, interaction and response. It was also used to establish the structure and flow of the questions. From the pilot study, it became apparent that structured questioning techniques were useful, but an unstructured laddering approach building on the interviewee's point would give greater insights, and therefore this method was utilised within the study. The pilot study also highlighted the importance of planning, as a problem was encountered due to the time differences between the United Kingdom and New Zealand. The pilot study emphasised the fact there was only a small window of opportunity available to the researcher, as the participants had to be contacted during working hours (9am to 5pm UK time) and less busy periods of the day, so timing was imperative, so as not to interfere with the participant's schedules and other work commitments.

### 3.5 Data Analysis Plan

Quantitative analysis is achieved through statistical tests of coded data that assess the significance of the findings, whilst qualitative analysis is a process of uncovering and discovering themes in raw data (O'Leary, 2004).

# 3.6 Descriptive Analysis

Once the data was collected a descriptive analysis was given on each variable. The analysis explains the process of how the information was gathered; it summarises the features of the data, reviews their significance and explains how links were made. Results for each variable are then displayed in a graphical format and the findings, implications and recommendations discussed.

# 3.7 Questionnaire

A Lickert scale of five categories of agreement/disagreement was utilised to evaluate participants' responses and assess their attitudes and opinions. As the participants were studying online self paced modules, the responses were staggered in their return. However, on average, the participants returned the questionnaires within a three week timeframe, once the training modules were completed. In order to analyse the responses from the participants, the researcher decided to set a deadline/cut off point of four months for data collection, which allowed the participants to complete the training modules and then complete the questionnaires; twenty one were completed in total by the cut off date. Once the questionnaires were received data analysis began. The researcher analysed each question in turn, firstly turning the questions into tally charts to assess the positive and negative scales of agreement. Each variable (content, usability, product knowledge) was then analysed and data was converted into averages (mean) by the use of percentages. Averages are often referred to as central tendency and are a good way of assessing what people generally think. Tables and charts were then produced, to give a general overview of the participants' perceptions.

#### 3.8 Interviews

A manual approach was adopted and notes produced not only to remind the researcher of the verbal content and context of the setting, but also to allow content analysis. Once the notes were completed, key phrases were identified and highlighted with use of colour coding. The content was then summarised with abbreviations in the margin, theorising ideas and their relationships noted (Glaser, 1978). To ensure data was manageable, key words were identified, placed on data cards and arranged into a matrix conceptualising themes. Mind mapping provided inspiration and the generation of new ideas, as they accelerate the researcher's learning due to their visual interpretations and non linear format, making it easy to link and cross reference material (Russell, 2007).

# 4 Findings and Discussion

Within the context of this small scale investigation, a number of analytical devices, namely questionnaires and in depth interviews, were used to evaluate e-learning's effectiveness in terms of provision, website content and usability from a user's perspective.

It was anticipated that approximately 25-30 travel agents within the United Kingdom would undertake the training programme. However, this number diminished due to political turmoil and civil unrest in a some major European holiday destinations (Egypt, Greece, Tunisia and Italy), confirming the volatility of the travel industry, as consumer safety took priority over training and new sales opportunities.

# 4.1 Personal Profile of the Participants

The interviews were utilised to establish the demographics of the participants by measuring the length of service within the travel industry and the roles held within the organisation. This was useful to the researcher in assessing prior knowledge and the level of experience of the participants, as prior knowledge and experience can influence performance (Furham, 2008) and learning (Ross, 2008). A consensus of research (Resnick, 1983: Glaserfeld, 1984) highlights the fact that many learners construct concepts from prior knowledge. Prior learning is learning that has occurred in the past and could be derived from everyday life rather than artificial learning experiences (Walkin,1990). Prior knowledge is a key step in learning and most teaching practices build upon existing skills and knowledge. It is therefore vital that educators understand how prior knowledge affects learning to help students make the most of a new experience (Roschelle, 1995).

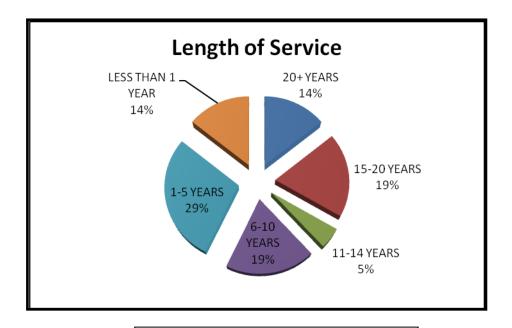


Figure 1 illustrates the length of service the participants have within the travel agency sector. The research shows that 43% of the participants are relatively new to the industry with less than five years service, hence the results highlight the importance of participating in new training opportunities. The literature review also emphasises the fact that the tourism industry is constantly evolving and changing, so it could be argued that the 14% of participants with over 20+ should not get complacent with their knowledge as this needs to be kept current and up to date, and new training opportunities are just as important for this segment if they are to be effective in their role.

The length of service can also be used to give an indication of age. For example, the three participants with less than one years experience, although employed by the organisations, were in fact on modern apprenticeship schemes. Modern apprenticeship schemes form part of the government's on the job training for school leavers aged sixteen to eighteen. It can therefore be assumed that three of the participants were within this age group.

When considering the other end of the scale, three of the participants had at least 20+ years of experience, so it can be assumed that these participants are in their late thirties, early forties and fall into demographical category often referred to as "generation  $\mathbf{x}$ ".

Establishing the approximate age along with the length of service was useful to the researcher as much has been written (Billings & Kowalski, 2004; Johnson & Romanello, 2005) regarding age and learning and how technology can influence learning. Recent research conducted in the United States confirms the generation born between 1982 and 2002, referred to as the "net generation" are experienced with digital media and expect to use technology as part of their learning. Other research (Tapscott, 2008) suggests that the "net generation" are able to absorb more information visually and prefer multitasking rather than focusing on one thing. The characteristics of "generation x" category suggest these participants adapt well to change, are comfortable with technology and self directed learning (Billings & Kowalski, 2004; Johnson & Romanello, 2005).

In addition, the interviews established the roles held within the organisation. The results of the interview are shown in figure 2 and reveal that the majority (90%) of the participants were front line counter staff. The other 10% of the participants were employed in managerial positions.

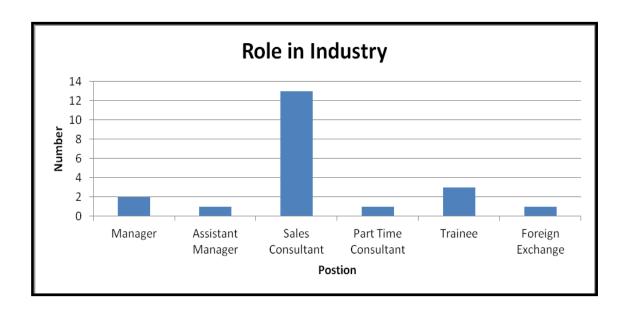


Figure 2- Positions held within Organisation

As the participants in this study worked for a variety of different organisations with varying structures, many of the sales staff had different job titles (travel advisor, sales consultant or sales advisor). For the purpose of this study they have been grouped into the sales consultant role as their main responsibility is to sell package holidays, transport, accommodation, attractions, tours and provide advice and make recommendations on holiday destinations for individual customers. Most of the participants (86%) were employed in a sales role on either a full or part time basis.

However, technically speaking it could be argued that all the participants within this study, including those in managerial positions, are responsible for sales. Despite the significant differences in the daily operational roles, managers are usually responsible for developing strategies to ensure sales targets are met or exceeded by implementing new initiatives that drive sales across the sales team, motivating the sales team to achieve while providing encouragement and sourcing new products.

Traditionally, travel agents act as intermediaries and act as a distribution point for tour operators, airlines, and suppliers, for which they receive commission. They work on behalf of the customer to whom they provide travel advice and booking arrangements for transport, accommodation, attractions, and tours. Even so, it is the travel consultants within the branches that provide the service to the customers based on their personal knowledge, expertise and personal experiences. It is these services which can differentiate between organisations, setting them apart from the competition, and the travel agents role is constantly evolving and adapting to reflect the changes within the industry and to meet the demands of the consumers. Research

during the 1980's predicted the change from sales clerk to sales advisors and, as Kendall and Booms (1989) pointed out, sales agents will continue to need more knowledge to meet the needs and expectations of customers if organisations are to survive. It therefore makes sense that the sales consultants would want to undertake the training to improve their personal knowledge and expertise in order to assist the sales process, as, after all, travel agents are important information sources.

Although the question of gender was not asked, the interviews established that that the majority of participants were female and the research clearly indicates a female dominance within this study. The research results confirm previous work in this field where it was found that 82% of the workforce within the tourism industry were female (Department of Innovation and Skills, 2009).

When analysing gender and technology use, many studies (Bromley & Apple, 1998; Garson, 1995; Klein, 2007) have compared and contrasted gender use, and literature on the subject acknowledges the fact that gender bias exists. Some suggest this is based on societal influences such as parental beliefs and attitudes, whilst others comment on media influences in promoting stereotypical roles and that technology is a male domain. Gender bias in computing is also reinforced by the educational experience (Garson, 1995) and literature reveals there is a significant difference between the number of females enrolled on computer courses to males (Sohn, 2006) and, historically, females have less confidence in using technology (Klein, 2007). Certain authors (Fox & Rosser, 2006; Gattiker, 1994) put this down to the fact that programmes are designed by males for males. Nevertheless,

"Women want information and to engage in communication that will improve their livelihoods and organizations are aware of the power of information technologies and understand that given the opportunity to do so, women will use them to advance their needs and strategic interests" (Odame, 2005 p. 13).

Sweetman (1998 p.3) points out "the valuable technological skills and knowledge that women do posses have often gone unrecognised and unnoticed". Conversely, the travel agency sector contradicts this statement as most people, namely women who work in the travel agency sector, know how to access and operate in-house reservation systems. The issues of competency and skill level are addressed in more depth in the usability section of the study.

When evaluating the effectiveness of e-learning from a user's perspective, it was deemed necessary to establish the type of organisation in which the participants were employed in order to ascertain the knowledge requirements; henceforth the

participants were divided into the type of organisation. In the United Kingdom, the travel agency sector comprises of three different types of travel agents: independents, miniples and multiples, each varying in size, turnover, and specialism (Beaver, 2005). Independent travel agencies are usually in single locations and owned and operated privately. Miniples have three or more branches which are concentrated in a specific geographical locality. Multiple travel agency chains have branches nationwide and nowadays form part of vertical integrated companies, such as TUI and Thomas Cook.

The results are outlined in the figure 3

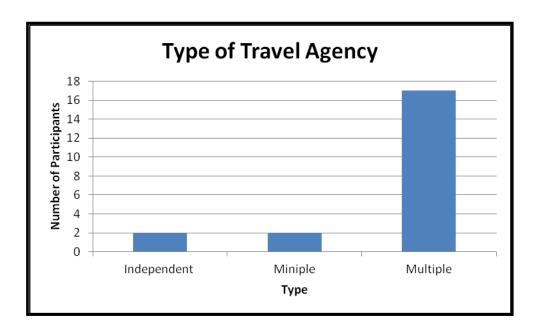


Figure 3 – Type of Agency

Today, the United Kingdom travel agency sector is dominated by two major travel chains, Thomas Cook and TUI. Thomas Cook is probably one of the most recognised names in the world of travel and tourism and first appeared in the United Kingdom in the latter half of the 19<sup>th</sup> Century (Thornley,1999), when tours were sold through specific offices in Leicester to the Great Exhibition in 1851 (Thomas Cook, 2011). The merger with the Co-operative Travel Group in 2010 to form the Thomas Cook Group Plc, made Thomas Cook the largest travel agency chain in the United Kingdom, with over 1,200 retail stores (The Co-operative Group, 2010) with approximately 31,000 employees (Skills Funding Agency, 2010).

TUI Travel Plc, previously known as Lunn Poly, which became a household name in the travel agency sector in the 1980's, is now one of the world leaders in the leisure market sector employing 49,000 people worldwide and operating 200 brands in 27 different locations (TUI Travel PLC, 2011). According to Evans (2001), these two

organisations now control over 40% of retail agency units and represent approximately 80% of United Kingdom package sales.

It was, therefore, no surprise that 80% of the participants were employed by multiple travel agencies, with 10% being employed in miniples, small chains of agencies located in specific geographic areas and 10% being employed in owner operated independent agencies.

"A perfect representative sample is one that represents the exact population from which it was taken" (Saunders, 2007 p.212). When evaluating the sample used within the study it is evident from the research that, although the sample size used was relatively small, the characteristics of the participants such as gender, length of service, role and type of organisation are representative of the larger travel agency sector, as they resemble the population from which they came. As the results reveal, a good mix of multiple, miniples and independent agencies, covering a variety of ages, sales experience, and roles and positions held, were each represented in the correct proportions. Consequently, the sample utilised within this research project can be deemed a representative sample and used to make generalisations about the travel agency sector in the United Kingdom.

### 4.2 Usability

To highlight the requirements of usability in teaching and learning, numerous studies have been conducted (Jacko & Sears, 2003; Nielsen,1993: Rosson & Carroll, 2002). When considering usability in the context of this study, the opinions of these authors were taken into account and usability themes identified (access, content, design and navigation). These were then analysed both from a quantitative and qualitative perspective.

After initially completing the training modules, the participants were asked to record their responses to a series of questions, each based on their own personal perspectives and viewpoints. Each participant completed a questionnaire and indicated whether or not they agreed or disagreed with a number of statements. To gauge a more in-depth response, a month later the same participants were interviewed by telephone, so they could reflect on their experience.

The statements from the questionnaires and the responses from the interviews were then analysed for each of the usability themes: **Access, Design and Content**, identified by the authors in the literature review, and sub categories were then identified, the results of which are highlighted in Figure 4, each of which is analysed within the context of this study.

Figure 4- Access			
Access	Logging on (Easy)		
	Download speeds		
	Registration		
	Support from employer		
Design	Navigation/Links		
	Instructions		
	Completion Time (Quick)		
	Recovery from mistakes (Easy)		
Content	Learning (Relevant)		

Figure 4 – Access

#### 4.3 Access

Access or Accessibility is viewed as the "ability to access" some kind of information or computer system, with access being related to the design functionality of either software (operating systems) or hardware products (Parsons, 2008). Following a brief review of literature, accessibility is often described as a service or device by which individuals gain Internet connectivity and is categorised as the equipment, ease of use (usability), personal skills and personal ability, speed and geographic location of use (Jannell, 2000).

In order to address the issue of logging on to the training program the interview questions were utilised to establish how easy it was to log on to the training system. The responses were then categorised according to the reply, the results of which are shown in figure 5, over the page.

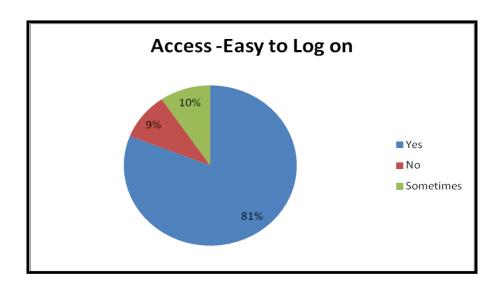


Figure 5 - Ease of Access

Figure 5 indicates that, generally speaking, the majority of the participants found logging onto the website straightforward and easy. Four out of 21 participants experienced difficulty at the initial stage of training with login and software compatibility problems. For example:

Participant [15] stated "I had difficulty logging onto the website, this only happened on my computer at home, but it was OK at work'.

Participant [17] commented on the fact that she had problems with logging in.

"I couldn't log on, it got frustrating, I kept going round in circles and in the end I quit".

Literature reveals that if technology does not work properly, it has the potential to become a barrier to learning. Barriers to learning are defined as "obstacles that are typically beyond the student's control" (Zhang and Perris, 2007, p. 258). Much has been written that focuses on barriers or challenges to electronic learning with many assumptions being made about the learners and their technological insecurities and limited know how (Knapper, 1988). However, within this study it was interesting to analysis the barriers to learning, as it contradicted previous research (Knapper, 1988) in the field of education. In this study four out of 21 of the learners experienced difficulties. Of those learners, none indicated having any concerns with the use of technology and did not have any issues with the level of personal information technology skills. For example

Participant [3] rated her skills as "Fairly good".

Participant [15] rated her skills as "average to OK".

Participant [17] rated her skills as "Fairly good".

Even so, Kobayashi (2008) points out although that barriers can include technical limitations, they can also include aspects such as the cost of the Internet and slow connectivity. Rossett (2002) reported that learners would become resistant to training if technological problems persisted and avoid using technology if there were too many interruptions. North et al (2000) highlighted the fact that if problems were not resolved within ten minutes, people would quit because of feelings of frustration or anger. This was certainly the case for a couple of the participants within this study.

With the use of open ended questions, the interviews revealed that all the participants who experienced technological problems were located in the same geographical area and lived within close proximity of each other. Further questioning highlighted the fact that two out of four were working from home and using the same Internet provider. Add to this the adverse weather conditions, and it can be surmised that these factors contributed to negative learning experience.

A review of literature highlights the fact that download speeds can affect both individual access and performance, with speed being the second most significant factor after website appeal in encouraging individual usage. Even small changes in response times can impact on the individual experience, with slower loading pages being perceived as inferior quality and being given lower creditability to their counterparts (King, 2008). Further research shows that individuals who are engaged whilst on the website will learner faster and show improvements in attitude and behaviour (Clarke, 2003).

For the purpose of this investigation, when analysing the download speeds and registration for the training program the questionnaire was utilised, the results of which are outlined in figure 6, located over the page.

Figure 6-Download Speeds and Registration								
	Question	Undecided	Strongly	Disagree	Agree	Strongly		
			Disagree			Agree		
1	It was quick to download the website	0	1	0	10	10		
	(Percentage of participants)	0.0%	4.8%	0.0%	47.6%	47.6%		
2	It was easy to register for the training	0	1	0	11	9		
	(Percentage of participants)	0.0%	4.8%	0.0%	52.4%	42.9%		

Figure 6 - Download Speeds and Registration

Comparisons were made between the scales on the questionnaire, with the majority of the participants falling into the Strongly Agree and Agree category (95.2%) By utilising the data in this study, it can be concluded that the download speeds were adequate and fit for the training purpose.

Figure 6 indicates that overall the participants had no problem with the technological side of the training program, with download speeds adequate (95.2%) and registration straightforward (95.3%). This comes as no surprise as accessibility is widely documented as one of the advantages of the Internet and indeed e-learning. From a corporate perspective it is convenient, it is available 24 hours a day, seven days per week, it can reduce training costs when employees are geographically dispersed or large numbers are participating. Many authors have described the growth in e-learning as astonishing, explosive, and unique (Garrison & Anderson, 2003). Literature reveals that e-learning is now becoming the method of choice for many companies within the travel industry (ABTA, 2008).

With over 1 billion of the population having online access, and with this figure increasing by approx 18% each year (Nielsen, 2005), for the purpose of this study it was assumed that all the participants had access to the Internet either on a personal or

company basis. Today, it is taken for granted that, in the western developed world, individuals have a computer in the office, workplace or at home, and information communication technology is embedded in our daily lives, ranging from simple everyday devices such as mobile phones, to digital cameras, to e-mails, to connecting onto the Internet, to more complex devices such as Wifi technology.

In order to evaluate the ability of the participants in gaining access to computer systems and the Internet, participants were asked via the telephone interviews to categorise their level of computer skill. The results are shown in the Figure 7 below.

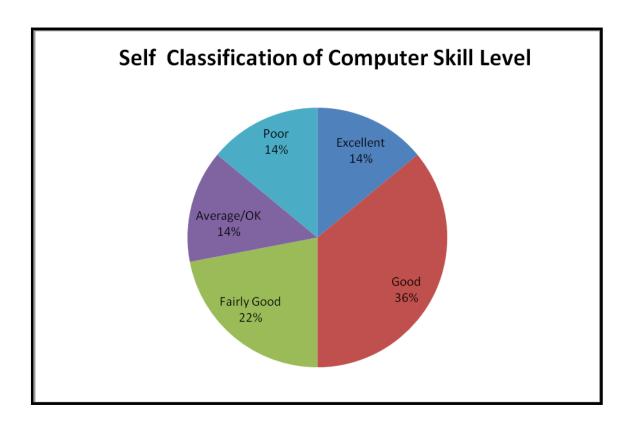


Figure 7 - Self Classification of Computer Skill Level

Interestingly, but not surprisingly, the majority of participants fall into the good (36%), fairly good (22%) and excellent (14%) category, with 72 % of the participants feeling competent in the use of Information Communication Technology. It could be argued that this is because the travel consultants use technology every day as part of their daily routines and are very familiar with companies operating systems.

### Participant [2] even went as far as saying

"I have excellent computer skills, I use the systems at work every day, I like to keep up to date with technology, I enjoyed computing at school, but I am not a computer geek or anything, but I like to go on facebook and I use my iPhone all the time".

The research outcomes confirm statements made by Buhalis (1998) and Poon, (1993) who point out ICT is the backbone and life blood of the tourism industry, it is an information intensive domain, relying on a variety of electronic sources for the supply and exchange of vital information. This is substantiated by Cooper, Fletcher, Gilbert, Wanhill, & Fyall, (2008) who state that technology has become an irreplaceable tool for travel agencies, providing instantaneous reservation systems and information that support intermediation between suppliers and customers. In addition, many travel agencies have seen improvements in internal organisation, with technology streamlining and integrating both the 'back office' and 'front office' processes ensuring customer service is faster, effective and more efficient (Marvell, 2008).

Moreover, the travel industry has always adapted and harnessed technology, making use of developments in GDS systems, to download speeds, to improved search engine technology to make booking systems quicker and more convenient, thus increasing business and marketing opportunities.

Since access is an important element of e-learning, it was essential to ascertain whether companies had helped or hindered employees with access to training. As Warren (2008) points out, even though the training resources are not owned or controlled by the company, reliable access is imperative to learning, performance and success. Telephone interviews were utilised to obtain the information. Figure 8, shown over the page, compares the number of participants and the type of organisation for which they worked.

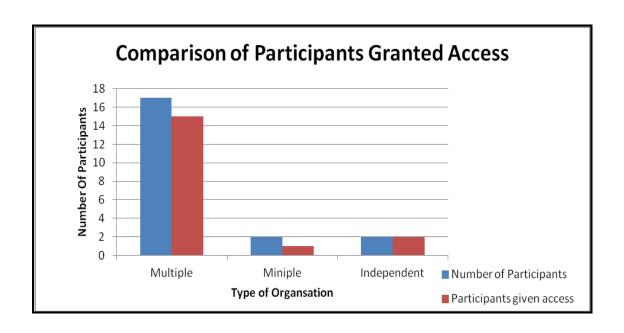


Figure 8 - Comparison of Participants Granted Access

The interviews revealed that 88% of participants from multiple agencies, 50% of participants from miniples and 100% of participants from independent agencies were allocated time to access training and, generally speaking, employers were supportive of the training programme utilised within this study.

Participant [5] commented on the fact that she was

"asked by her employer to do it and I am given one hour first thing in the morning to complete the tasks on the training".

Participant [6] explained the fact that all staff

" are encouraged to do training when the business is slow, it doesn't matter what we do as long as we update our product knowledge and selling skills ready for the rush, which usually takes place in January". She went on to say "that time was allocated to her for the training; however she did a couple of the training modules at home as it was more convenient with less interruptions".

Participant [9] remarked that her employer "allowed time in our shop training session on Tuesday morning"

This substantiates ABTA's 2010 findings which confirmed that, although the country was going through an economic recession, companies still valued training and were still heavily investing in a variety of training opportunities to survive and achieve their company goals. Previous research suggests that training budgets are expected to increase during a recession as training is perceived as an essential area in gaining and

maintaining customer relations (Berman, 2008), and organisations with strong values are carrying out learning in the workplace (Rosenberg, 2001). Further research into the success of organisations emphasises the fact that regular training is key to profitability and achievement (Goad, 2010), and organisations often use human resource management practices to influence employees' competencies and development (Epstein, 2004) as training makes people more valuable.

Most of the time allocated was at the beginning or end of the day and consisted of informal training sessions, where the employees worked through the modules at their own pace. Reactions to this were mixed.

Participant [14] was enthusiastic about the fact that

"the training was done as part of the one hour per week in-house training, and that discussions could take place with colleagues, to check understanding, which boosted personal confidence on products".

Participant [1] commented on gaps in provision and stated that

"I missed the interaction with others; if I got stuck it took ages to work things out, whereas if I had someone to ask or talk to, it would have been quicker".

This confirms Guile's (2001) theory that technology should enhance learning and that learning is fundamentally a social activity with the role of conversation and debate critical to learning. The behaviourist model of learning suggests that motivation to learn can be increased and reinforced through thoughtful and frequent contributions to discussions (Barkley, 2010). Collaborative learning is well documented for enhancing the learner experience through higher level thinking skills (Petty, 1998), building self esteem (Walkin, 1990) and encouraging problem solving techniques (Weller, 2002).

Social learning theories revolve around three key factors: the person, the behaviour and the environment (Cole, 2005). Social learning theories attempt to explain the combined interrelationships of internal and external factors that influence learning and the learning experience. Human behaviour is complex, involving many different variables; individual traits like personality, how a person thinks, learns, (cognitive process), feels, their believes (intrinsic behaviour) along with external factors such as upbringing, (culture, social class, family) all influence the learning process. Theories such as Banduras' (1963) emphasise the need for self management skills and self directed learning. These theories may explain why other participants commented on the fact that the informal training sessions took away the flexibility and individualism from the training. For example:

Participant [14] said "although time was allocated in the weekly training session, I sometimes prefer to do things on my own, as it is easy to concentrate".

Participant [2] reflected on the way she completed the training and stated "I did the training at my desk between customers, 10 minutes here and 10 minutes there, I lose concentration easily so the weekly training session was far too long for me to work on my own".

Participant [11] A company Manager commented on her staff's ability and highlighted the fact

"that experience, skill and knowledge were vital to move the company forward in this difficult time". She went on to say that "the company invested in many different types of training from educational trips to self paced learning modules and that employees are encouraged to continually learn, sometimes rewarded with incentives such as pay increases, overseas trips or bonus payments".

In spite of this, it is clear from the research that the participants interviewed were not pro-active in seeking out new training opportunities, mainly because of time and work pressures. However, 98% were willing to undertake any necessary training when asked to do so by their manager or employer. Some individuals even preferred to do this in their own time. This was not surprising as taking work home is common within today's society and is often expected as part of the organisation's corporate culture. Research (Rutherford, 2011; Nicholas, 2011) suggests there are a variety of reasons that this culture exists, the majority of which revolve around personal motivation to catch up and finish daily tasks, relieve workplace stress and pressure from work colleagues or simply for individuals to maintain their position within the organisation by keeping up to date with industry and product developments. The findings from this research go some way to confirming these points, for example:

Participant [1] "I usually did the training before the shop opened, as it was quieter and easier for me to concentrate at my desk".

#### Participant [15]

"I only work part time, so I worked on a couple of the modules at home, one to keep up with the others and two because I was enjoying what I was doing".

Participant [19] "I plan my own time to do this-usually evenings and weekends".

#### Participant [6]

"I did a couple of modules at home, as I am happy to blur the line between work and home, by doing this it allows me to work at a time that suits, so I can concentrate better, generally with little or no interruptions".

It could therefore be argued that people rely on managers to effectively carry out their role and the expectations of continual professional development and training opportunities need to be clearly identified within organisations.

A review of literature confirms how managers can influence performance and behaviour. Bacal (2004), for example, highlights the fact that formal performance reviews can be used as a motivational tool to increase and improve awareness of training opportunities and capture the essence of performance together, whereas Miller (1995 p.27) identifies "the sales manager's beliefs, by themselves, can directly influence how their employees perform and what they expect of themselves", while Schiemann (2009) confirms that good managers offer specific guidelines for staff to upgrade their skills.

The responses from the participants confirm the connections between social learning theories, management theories and learning theories and go some way to emphasising the interrelationships of personal expectations, social interactions and knowledge acquisition.

### 4.4 Design

Over the last decade research into course design, and indeed e-learning, has caused much discussion and debate amongst academics (Conole & Oliver, 2007) and technological advisors, with many different guidelines and examples been given on how to engage learners and facilitate the learning process. Pedagogical theories that underpin learning have come under scrutiny and research examining e-learning has found that the design element of e-learning is key to its success or failure (Bates, 2005), and that programme design can either aid or hinder the learning process.

A consensus of research suggests (Juhdi 2006, Steen 2008, Smart & Cappel 2006), that participation and active learning are critical elements affecting the success of performance in e-learning, so effective course design is essential to support and engage learning. Substantial literature surrounds course design (Carliner, 2004; Carliner & Shank, 2008; Khan, 2005) and it covers many different aspects, from the management and maintenance of the course, through to the integral design and development of the course. Further studies on the subject of e-learning emphasise other aspects of effective design, from special design techniques to student involvement. The design element of any training program is therefore critical to its overall effectiveness as the design is interlinked with many different components, henceforth it was deemed necessary to analyse the design of the training program.

When evaluating the website design from a user's perspective, the interviews were utilised to address the general design and layout of the website; predominantly the

results were positive and revealed that the site was generally consistent in its design, well thought out and organised. For example:

Participant [3] commented that "the design and layout was excellent, very easy to follow and I like the way in which you could start and stop without losing data'.

Participant [6] said "I like the consistency in the layout, it made the modules easier to complete, the more I did the quicker I got. Generally though instructions were clear and links informative".

Participant [15] said "the site was well planned, easy to navigate with simple steps provided".

Participant [5] explained she "liked the split screen, it made it easy to read and answer the questions".

Participant [2] responded that she "thought the layout and design was good and very practical".

During the interview process, it became apparent to the researcher that the participants' perceptions on design shared a number of similarities or common themes. Therefore the researcher decided to evaluate their significance and level of importance by converting the key themes into numerical data. A tally chart was utilised and the top themes were then ranked in descending order. The key themes that were identified are outlined in figure 9.

Ranking	Theme	Number
1	Easy to follow	6
2	Visuals- images/icons	5
3	Links	4
4=	Clear instructions	3
4=	Well planned	3

Figure 9 - Participants Perceptions

It was encouraging to see that from a design viewpoint the participants found the e-learning site easy to follow, with clear instructions and appropriate links and the site gained user acceptance. It is well documented (Hills, 2003; Mills & Law, 2005) that website interface features such as "ease of use" are useful in measuring the appeal and effectiveness of a website, as ease of use can significantly affect the decisions to accept e-leaning and influence the user's ability, acceptance and intention to use a site.

It was interesting to see that visuals such as icons ranked second and links ranked third, as most of this data refers to the accessibility of the information on the site and substantiates the findings from earlier in the study that stresses that access is a critical element in the learning process. Hence, website designers need to ensure information can be accessed, navigated and retrieved easily and are usable by the audience. In other words e-learning sites need to be user friendly (Smith, 1997).

It is also worth noting that the visual appeal of the site was ranked in position 2. It is well documented that first impressions count and, according to Leung (2008), individuals make instantaneous decisions and assess appeal of websites within as little as 50 milliseconds; and therefore the graphic design and image elements need to be given careful consideration during the design process in order to facilitate interest and learning. Research suggests there is a positive link between images and recall, as Spielberger (2004 p.58) points out "text is very complex resulting in more elaborate cognitive processing, whereas images are processed more holistically so can therefore be remembered easier". Feinstein (2006) highlights the fact that "most learners take in more information visually than any through any of the other senses" and, as Marguiles (2005 p. 12) confirms, "the use of visual tools can create a shift in classroom dynamics altering student behaviour from passive learning to interactive learning." Research in the field of education (Reece & Walker, 2000) and psychology (Jarvis, 2005) found that images can enhance learning, engagement and increase motivation: that is probably why a great deal of educationalists incorporate different learning styles into online learning design.

Dunn and Dunn (1975) as cited in Dimmock (2000 p.117) define learning styles as "the stimuli that affect a person's ability to absorb and retain information, values or facts". Learning styles usually focus on four key areas of learning, visual learning, auditory learning, kinaesthetic learning and reflective learning, with different methods or approaches being adopted into teaching design to assist learners and enhance the learning experience (Sims, 1995). Learning styles are often viewed as the characteristics that affect cognitive and physiological behaviour and according to Sims (1995) serve as indicators of how learners perceive, interact and respond to the learning environment.

## 4.5 Navigation

Utilising the data obtained in the questionnaire, figure 10 outlines the statistical analysis of the participants in this e-learning study. The results reveal that 91% of the participants found the modules easy to navigate. Previous research in the area of web navigation links the ease of navigation to increased web usage (Sohb, 2008), thus facilitating more effective learning. Indeed, navigation is the single most important usability aspect of a website (Broughton, 2004).

Figure 10	Undecided	Strongly Disagree	Disagree	Agree	Strongly Agree
I found it easy to navigate through the website	5%	0%	0%	43%	52%
The menu buttons followed a logical order	5%	0%	0%	57%	38%
It was easy to move from page to page	5%	0%	5%	47%	43%
It was easy to find and follow instructions	5%	0%	5%	43%	47%
I could complete the tasks in a reasonable time	10%	0%	10%	33%	47%
The website responded quickly to my requests	5%	0%	5%	61%	29%

Figure 10 Navigation

The results from the questionnaire support both cognitive and motivational theories and the fact that the easier a website is to use, the longer a person will spend on the site, searching, retrieving and engaging in learning. Individuals learn "by memorising, understanding and doing" (Walkin, 1990 p. 19), therefore it stands to reason that the more time spent on a site, the greater the ability to understand and engage in learning. The findings also emphasise the point that for technology to be effective it must deliver well designed instructions in a method that facilitates learners' motivation and effort (Brown and Ford, 2002). Some of the responses to interview question 15 on motivation reiterate these points, for example:

Participant [2] commented that "the training was well designed and materials well presented, and I like the fact you can print them out as well".

Participant [4] said "the training was designed in small chunks for completion, which meant I could keep saving the information and going back, which made it more enjoyable".

Participant [5] revealed she liked the fact that the assessment questions were

"Quick to answer and the fact you could re-do the tests straightaway, after receiving instant feedback".

The interview responses given by the participants also go some way to explaining the links between the practical side of the e-learning applications and theories proposed by Anderson, (1983), Bruner, (1990) and Piaget (1952), in the fact that they demonstrate that intellectual development and learning were adapted and built upon through a number of small steps, namely the small chunks within the modules in the programme and that progression was achieved through the assimilation of knowledge by memorising, doing and re-doing the multiple choice tests.

Bruner's cognitive theory highlights the use of language, communication and instruction to encourage increased mental activities and independent learning. It emphasises the fact that individuals build upon what is already known and construct their own understanding (Tassoni et al., 2005). This indeed happened within this investigation as the interviews show.

Participant [18] stated that "the tasks were interesting, practical, and relevant to my job and I improved my own personal ability and awareness of the destination".

Participant [5] explained she "liked the split screen, it made it easy to read and answer the questions".

Participant [15] commented that "I liked the way in which I could decide what to do and select the modules".

Participant [19] responded "I like the way in which the answers were written and given as four options as it helped me to make choices".

Another important issue that was raised within the literature review was the area of motivation and learning. Motivation plays an important part in learning, as it accounts for an individual's direction and persistence of effort towards obtaining a goal (Robbins, 2010) from the initial stages of engagement through progression and success. When considering motivation and applying it to an educational setting or online environment, there are a variety of key concepts that need to be considered and addressed. These include instinct motivation and the affects of emotions such as anxiety, arousal, and interest on personal motivation (Hays, 2006).

The research theories of Maslow and Hertzberg suggest that intrinsic motivation can be increased by a sense of achievement and satisfaction. Intrinsic motivation usually comes from within the individual, feelings of excitement, curiosity, confidence and satisfaction (Whitney & Hirsch, 2007).

The interviews reiterate these points and demonstrate that successful navigation and ease of use can increase personal confidence and internal motivation, resulting in positive attitudes towards the training and increased actual usage, as learners have a greater sense of control when they become familiar with the tasks. For example:

Participant [6] Commented that "I liked the consistency in the layout, it made the modules easier to complete, the more I did the quicker I got".

Participant [16] mentioned that "it encouraged me to learn, by the fact you could stop and start and revisit modules".

Participant [1] responded that she liked "the multiple-choice questions, and the fact you could reattempt them, over and over again, until you got it right, it made it easy to complete".

Learners who enjoy what they are doing when completing the tasks and who learn for the sake of learning are believed to be intrinsically motivated (Ryan & Deci, 2000). Motivation can therefore stimulate curiosity empowering the ability to grow or develop to better oneself and stimulate the sense of fulfilment through engagement in learning.

Bandura's (1963) social cognitive theories emphasise this point and his research suggested that the most important mechanisms for learning are personal motivation and the belief in one's own ability to perform and that if learners are proactive in learning, they often experience success through self management and self directed learning.

Upon the examination of the results and comments from the interviews, it would appear that a number of the participants were empowered by the flexibility in the design and the opportunities the training program provided, which in turn motivated them into learning. For example:

Participant [18] expressed the opinion that the training was more enjoyable because "I design my own learning path".

Participant [19] was motivated by the fact "I could jump from one section to another, and nothing was predetermined".

Participant [1] said "my favourite part of the training was the training's flexibility, it allowed you to jump around to answer the exercises".

Despite the positive findings, designing open and flexible learning can be challenging as individual motivations vary from person to person, while motivational theories emphasise the impact of motivation on achievement, self esteem, personal confidence

and independence. It is well documented that effective websites are difficult to design, as websites usually follow a non-linear format (Corio, 2003) and are very tree-like in structure allowing pieces of information to be linked to other pieces by the use of hypertext. However, Shapiro (2008) suggests that support systems can be incorporated and embedded into the learning environments by simply using highlighted links or proposed pathways tailored to individual needs.

Considering the comments from the interviews and referring back to figure 9, hyperlinks (links) ranked in position 3, and it would appear that essential design elements such as hyperlinks are important to learners. It could be argued that Tourism New Zealand has used this function correctly and to their advantage by linking to specific locations such as industry related sites which make the learning more relevant to job performance, thus designing the e-learning site effectively to meet the needs of the users.

### 4.6 Instructions

Many different discussions and debates (Anderson, 2008; Bonk & Zhang, 2008) have revolved around the delivery of online learning and a variety of instructional design models (Inoue, 2006; Power, 2009) and strategies (Dabbagh, 2005) are in existence. Some are based around the satisfaction levels of the learners while others focus on the pedagogy that underpins learning.

Cook (2005, p.65), for example, states "that instructional design and the development of online learning must be pedagogically driven". When considering this comment and relating it to previous literature reviewed, it could be argued that conventional teaching and learning theories are key to creating a personalised approach that is critical to the learning process.

As noted earlier in the study, e-learning does not follow a linear format and hyperlinks are used to navigate around the screen linking one page to another or to other sources of information, creating individual programmes of learning. The clarity and ordering of online information in relation to course content needs to create a connection between the learner and learning material (Inoue, 2006), otherwise it may create a barrier to learning. Instructions therefore have to be precise as users can move anywhere around the screen and link to a variety of different sources or pages. Consequently, users can navigate in a variety of ways to suit individual needs. It is these aspects that make web design difficult, and many organisations outsource the design elements to private specialist agencies to improve the effectiveness and efficiency of the site.

As with any other type of teaching and learning, it is the teacher who is responsible for facilitating learning and, as online learning revolves around student centred learning, instructions need to be unambiguous and precise. Instructors therefore need to be

aware of learning theories and take different learning styles into account when designing online training instructions. In order to clarify the effectiveness of the instructions used within the training program, the questionnaire was utilised and the results are shown in figure 11.

Figure 11	Undecided	Strongly Disagree	Disagree	Agree	Strongly Agree
It was easy to find and	1	0	1	9	10
Fercentage	5%	0%	5%	43%	47%

Figure 11 - Effectiveness of instructions

The results clearly show that the majority of the participants found the instructions easy to follow and a clear direction can control the pace and level of learning. This substantiates the findings of Albi (2007) who found that participants emphasised the need for clear direction, instruction and links to other websites that supplemented course materials if study was to be successful.

## 4.7 Completion Time

"A successful design facilitates learning, with learners focusing on what they are doing, unaware of the passage in time" (Proctor & Vu, 2005 p.462).

Question 10 of the interview addresses the issue of completion time for each of the training modules. As the sample selected is representative of the population under investigation, the travel agency sector in the United Kingdom, generalisations can be made. Twenty one responses were received and analysed. The results are shown in Figure 12, over the page.

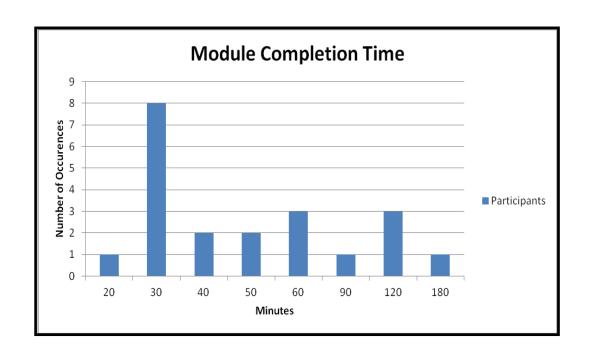


Figure 12 - Module Completion Time

A frequency table was utilised to organise the data, this gave a clear indication of the number of times data appeared. This type of distribution allowed the researcher to identify recurring variables within the data set and build up a more accurate picture of the time scales involved. The information provided was used to evaluate the time and effort spent on each module. According to Tourism New Zealand, each module should take approximately three hours to complete. It was therefore interesting to see that the majority of participants (38%) took around 30 minutes to complete each module, while 14% of the participants took around one hour to complete each module, making the completion time on average a lot quicker than anticipated, and contrary to previous research, that suggests that information is harder to process from a computer screen (Nielsen, 1995). Even so, the findings are in line with Hinds' et al (2001) research which found trainees who received instructions from experts were able to perform quicker and more effectively. It could therefore be argued that Tourism New Zealand are providing in-house destination experts, who are conveying the knowledge and understanding of the destination to the trainees, albeit through the use of technology.

Nevertheless, the completion times within this research project raised a couple of questions about the level of learning provided.

1. Is the training just surface learning or deep level learning? and

2. Which type of learning is required to fulfil the participant's role as a sales consultant?

James and Gipps' (1998) explanation of surface and deep level learning goes some way to answering these questions, as their literature points out the fact that surface learning is a passive approach, that accepts ideas, concepts and information, generally without challenging or questioning the content. However, surface learning can be very effective in recalling informational facts. Deep level learning draws on previous knowledge to enhance the capacity for understanding and memory, making information fit into conceptual frameworks, thus learning can be more effective and meaningful for the learner. Even so it is apparent from the research that both surface learning and deep level learning play an important part in the role of the sales consultant and the level of effort and individual engagement determine whether or not the training is deep or surface learning.

It can therefore be argued that the participants used a combination of surface learning to acquire knowledge, and deep level learning skills through the combination of prior experience and knowledge of other destinations to acquire ideas and processes of learning, thus speeding up the learning process allowing a great deal of information to be processed within a short space of time. This reiterates the points of Pavlov's (1903) behavioural learning theory of automatic conditioning and Ausubel's (1968) cognitive theory that pointed out "the most important influence in learning is what the learner already knows".

When evaluating the results on module completion time, generally speaking it can be assumed the participants (13 out of the 21) within this study, found the tasks relatively easy as they completed the modules in less than 60 minutes, so it could be argued that most of the tasks were completed without any deep level thinking, resulting in a quick completion time, for example:

## Participant [8] said

"I just read the questions and then searched for the answers, if I got them wrong I redid the multi choice tests at the end until I got the correct answers".

## Participant [5] commented

"It was easy to click from one page to the next, sometimes I didn't complete all the tasks in the module, I liked the way you could select things that were relevant to you. I found if I had missed something that appeared in the multichoice questions at the end I could go back and just search for the information, as most of the time the questions were simple one liners, easy to read and easy to follow".

Participant [15] stated she liked the "multi-choice questions as they were quick to answer and it was usually things that you could remember, occasionally there was a tricky one".

Participant [7] made some interesting comments on the way in which the training had been conducted, she said

"We completed the modules together in our weekly training session", "because we did this, we completed the multi-choice questions in no time as we discussed the answers and if one person didn't remember, usually some-one else did, it made the modules easier and saved us time".

The comments from participant [7] confirm previous research (Guile, 2001; Parr, 2005) that learning is fundamentally a social activity and collaboration can make learning fun.

Conversely, research by scientists in the United Kingdom has come up with a new theory (BBC, 2004) to evaluate how having fun speeds up time. The theory shows that if tasks are engaging and challenging brain patterns change and time seems to pass more quickly as individuals are immersed in the tasks. Hence the expression "time flies when you're having fun". Moreover, changes in brain patterns have come under scrutiny because of advancements in technology, and research suggests that modern technology such as the internet is changing the way in which we think (Carr, 2008). Aronson (2005 p. 9) believes "that new technologies are transforming the very structure of our thoughts and perceptions, in turn affecting the way in which we create and understand".

A consensus of research (Naughton, 2010; Tapscott, 2008; Greensfield, 2010) suggests that our brains are adapting to the use of electronic devices, with age being a distinguishing factor and the 'net generation' are able to multi-task more effectively than previous generations. The internet is bombarding individuals with vast amounts of information in the form of text and images, therefore individuals are now learning and placing greater emphasis on scanning and skim reading to obtain snippets of information and visual icons are creating and stimulating areas of interest.

In order to evaluate if age influenced the performance time, the data from the interviews was utilised and comparisons were made between the average completion time and length of service, with the length of service and interviews being used to give an indication of age and year of birth.

There is a correlation between age and completion time. For example, all of the participants who on average completed the training modules in 30 minutes or less fell within the 'net generation' category born in the 1980's or 1990's. The findings reiterate Tapscott's (2008) and Johnson & Romanello's (2005) research that suggests

that the 'net generation' prefer multitasking and skim reading to obtain snippets of information. It could therefore be argued that the 'net generation' expect to use technology as part of their learning and are adapting their learning behaviour accordingly, resulting in faster completion times. When these points are considered in the context of this study, it may go some way to explaining the quicker than expected completion time of each of the modules. Even so, it is evident from both previous research in the field of technology and from the findings of this study that fun and interest still motivate the learning process and the comments from the participants confirm this. For example:

Participant [6] thought "the tasks were interesting, challenging and fun and relevant to my job role"

Participant [4] thought "the module on Maori culture was very interesting and enjoyable, showing the uniqueness of New Zealand".

Participant [5] "found some of the tasks interesting, but challenging, especially the map work, trying to remember the places from memory".

When these comments were cross examined with the answers from the questionnaire, figure 13 shows that interest levels were indeed high in most participants. Therefore it can be concluded that if interest is maintained, tasks have a much quicker completion time. However the level of learning cannot be ascertained from this study, as numerous factors need to be taken into account.

Figure 13					
Content	Undecided	Strongly	Disagree	Agree	Strongly Agree
		Disagree			
I found	3	0	1	10	7
the learning	14%	1%	5%	48%	33%
materials					
interesting					

Figure 13 -Interest Levels

90% of the participants thought the training was worthwhile, and most participants (81%) felt their personal confidence and ability to sell New Zealand as a destination had increased. For example:

Participant [6] stated that "I feel I can improve my service to customers, it is easier for me to make recommendations on places and what there is to see and do".

Participant [3] commented on the fact that "any training is beneficial; my knowledge base has grown which has enhanced my confidence to sell New Zealand".

Participant [1] indicated that "I learnt about travel times and the size of the country which will help me sell to customers and improve my service".

Cognitive theorists such as Ausubel (1960), Novak (1998) and Vygotsky (1962) support these comments and emphasise the importance of meaningful learning that is relevant to individual needs, while both motivational theories and self concept theories explain how individuals implement strategies to achieve success. At this point it is worth noting that time and effort are both resources and how individuals choose to use these resources are down to individual values and needs.

A variety of research exists on the concept of time versus effort and the effect on learning and motivation. Vroom's (1995) expectancy theory, for example, assumes people are motivated by their expectation of reward, thus the expectancy of the reward results in increased effort, leading to increases in performance (Gill & Pio, 2007). Brophy (2004 p. 4) defines motivation as the "level of enthusiasm and the degree to which students invest attention and effort in learning".

The comments from the participants go some way to confirming these expectancy theories, as it is evident from the interviews that 55% of the participants were interested in monetary rewards and 30% of the participants were interested in personal promotions, for example:

Participant [9] thought "as my knowledge increases, I have a better chance of increasing my sales, resulting in higher levels of commission, therefore an increase in my salary".

## Participant [12] said

"competition for promotion is increasing, and our Area Sales Manager has now started looking at sales targets as a way of monitoring our ability, therefore I need to look for ways in which I can increase my sales if I am to gain the promotion I desire."

A number of participants also commented on the fact that, because the modules were quick and easy to complete, their motivation to learn had increased, and the questionnaire revealed that 94% of the participants were willing to undertake other training programmes from this provider.

## 4.8 Recovery from Mistakes

The delivery of online and distance learning has been extensively monitored for quality, with particular emphasis on the effectiveness of the systems. Previous research has revealed there is a correlation between retention and achievement and online organisational support (Anandarajan, 2002). It is evident from this research that appropriate support mechanisms need to be in place if e-learning is to be successful. It is well documented that effective online support increases productivity, saves time and makes e-learning more accessible (Bates,2005; Simpson, 2002). It can therefore be concluded that any organisation that uses e-learning should ensure support services are in place (Remenyi, 2005). Online organisational support is defined as management support or technical support (Sheldon, 2005). Within the design of the training programme utilised for this study, it would appear that the training provider has strategic plans and policies in place to develop the materials in line with travel industry requirements and technical support is offered by the use of e-mail.

In order to review the design and provision of the training programme, the participants were questioned, via question 10 on the questionnaire, about their ability to recover from mistakes within the training. When evaluating this point, it is necessary to consider both the technological side of the program and the learning process. Figure 14 outlines the responses by proportional percentages.

Figure 14					
Usability	Undecided	Strongly	Disagree	Agree	Strongly
		Disagree			Agree
I could quickly	0	1	0	13	7
recover from my mistakes	0%	5%	0%	62%	33%

Figure 14-Recovery from Mistakes

Overall, the majority of the participants (95%) felt they would recover relatively quickly from their mistakes. By utilising the data extracted from the interviews and applying the behavioural theories of Thorndike (1928), Skinner (1953) and Kolb (1984), it could be argued that the participants had modified their behaviour in response to their experience and learned from their mistakes, as the programmed learning gave both directed instructions and instant feedback, allowing the participants to work at their own pace. Research suggests that behavioural learning principles or techniques improve individual knowledge, understanding and performance through self-reflection (Florian, 2007), hence learning by definition "involves changes to our behaviour in response to experience" (Johnson, 2000). It would therefore perhaps be fair to say that the learning environment utilised for the purpose of this study was well designed, as it allowed the users to quickly recover from their mistakes and continue on with the module training. A significant proportion (15%) of the participants remarked on the ability to re-do the modular tests instantly and, when questioned further, it appears that this increased personal motivation within a number of the participants. For example:

When participant [5] was asked how the training motivated her, she replied "quick answers and you could re-do the tests straight away".

Participant [15] explained she "liked the multi choice questions, made it easy to check my knowledge and to re-do the tests while the information was fresh in my head".

When reviewing the technological side of the programme, however, this was not as positive as the participants made the following comments:

### Participant [17] said

"I spent a lot of time trying to log on and register for the training, I kept going round in circles, it got very frustrating, I needed more personal support especially around the use of technology, in the end I quit and didn't continue with the training".

Participant [1] remarked "sometimes the training was a little too slow".

Participant [15] stated "I had difficulty logging onto to the website, this only happened on my computer at home, but it was Ok at work'.

Participant [6] said "it wasn't easy to log on to start with, but I persevered, and sometimes it was slower at home".

#### 4.9 Content

After examining a number of e-learning sites and reviewing literature on the subject of e-learning, it would appear that sometimes e-learning training packages are

homogeneous in their design and types of delivery and not always relevant to individual roles or specific enough to enhance job performance. It was therefore encouraging to see that a wide number of the participants found the training interesting, engaging and relevant to their job performance, confirming not only that the content was relevant, but also confirming the training was pitched at the correct level for the participants.

On the whole, the results of the questionnaire were positive with 10% agreeing and 62% strongly in agreement that the content was relevant to their job role and performance. Question three of the interviews revealed the following comments on how the training would assist the participants in their role:

Participant [6] stated "the selling tips will help with my service".

Participant [16] suggested the fact that that she could "make recommendation to customers on journey times, where to stay and what to visit, which should improve my sales and service".

Participant [9] believed that she "could give advice on destinations, journey times and attractions".

These comments were substantiated by Participant [7] who commented "I can now tell customers about accommodation, driving times, distance and help them plan their holiday; it helps me improve my service".

Previous research (Willis, 2009; Holmes & Gardner, 2008) highlights the fact that elearning poses many new challenges, that conventional teaching does not, therefore elearning applications need to be adapted to the level of student and to specific content in order for the students to be satisfied with the experience. Literature reveals that these issues are difficult to address, as material development needs to combine technological techniques, such as programming and graphical design and subject knowledge (Steen, 2008). It is maybe for that reason that many instructional designers consider ways in which to inspire and maintain individual motivation by rearranging the materials to make the content more relevant and appealing (Keller, 2008).

Learner motivation is generally the individual's desire to participate in the learning process and the underlying pursuit of academic activities (Kids Source, 2000). Brophy (2004, p. 4) defines motivation as the "level of enthusiasm and the degree to which students invest attention and effort in learning". He goes on to say that motivation to learn is slightly different and it is a "competence acquired through general experience directly from modelling, direct instruction, communicating and socialising".

In order to evaluate and determine motivation, the telephone interview was utilised, key themes were identified and the results are outlined in figure 15.

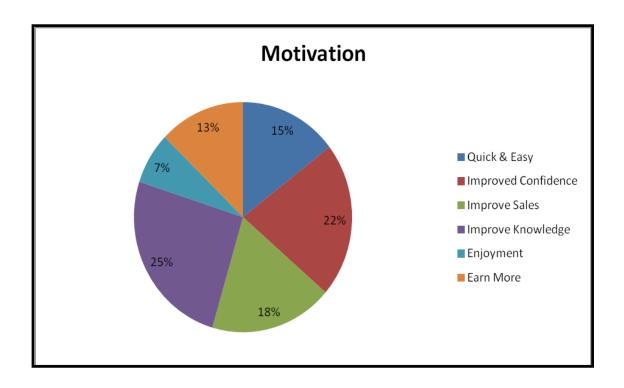


Figure 15 - Motivation

The chart shown in Figure 15 illustrates the responses of participants. It is interesting to see that the majority of participants did not undertake the training for personal pleasure or enjoyment, and as a result it could be argued that training is now a necessity. This reiterates the United Kingdom's government policy on lifelong learning that emphasises the fact that individuals need to engage in learning to develop and add to work skills (DfEE, 1998). However, the results of the research suggest that the majority of the participants (25%) completed the training to improve personal knowledge (25%) and this was often linked to improvements in personal confidence (22%) and the ability to increase sales (18%) and earn more commission (13%). Moreover, the results clearly indicate a link between personal motivation and organisational motivation.

Literature reveals that the motivational theories of expectancy (Vroom, 1995) and arousal (Hanton & Connaughton, 2002) are both intended to understand behaviour within an organisational setting and are often used to measure individual motivation towards organisational goals. When considering these theories in the context of this study, it would appear that the participants were aiming not only to improve their

personal sales and earn more commission, but also looking to improve customer service which would enhance the company reputation, thus giving the organisation an advantage over the competition.

Work place motivation is defined as "the willingness to exert high level of effort towards organizational goals, conditioned by the effort's ability to satisfy some individual need" (Robbins, 1998 p.168). This statement by Robbins is clearly identifiable within the context of this study as a few of the participants interviewed felt there were a number of personal benefits from the training, for example:

Participant [3] liked the fact "you could become and promote the fact you were a specialist in this area".

Participant [11] thought the training was enjoyable and "gave a real insight into what was on offer.... I would now like to visit New Zealand."

Participant [6] stated "I will earn more from the commissions I receive".

Participant [7] thought "my personal sales should increase; not only giving me the chance to earn more commission, but the higher level of sales increases my chance of promotion within the company".

These comments from the participants also go some way in describing Adams' Equity theory (1963) and the association between effort and personal reward. It could also be argued that the comments are interlinked with McClelland's motivational theory (1987) that explains how individuals utilise learning strategies to enable them to succeed; this is usually a result of environmental conditioning. When considering these points in the context of this study, environmental conditioning occurs within most organisations as part of the organisational culture. In the travel sector it is often created by the sales targets set by the organisation and the personal promotional opportunities it creates to internal sales staff through enhanced job performance.

Personal benefits can also be referred to as intrinsic motivation. Much has been written regarding the relationship between e-learning, human behaviour and individual learning preferences, with motivational frameworks being utilised to assess effectiveness and perceptions. The literature review emphasised another important point that intrinsic motivational theories are usually divided into content and process theories and, although a vast variety of literature is in existence, Maslow (1943), McCelland (1987) and Hertzberg (1968) are probably the most citied content theorists and, when applied to the context of this study go some way to explaining the feeling of curiosity, confidence and satisfaction when performing or completing a task, for example:

Participant [14] said "I was curious to see what New Zealand had to offer as a destination and the prices of products, I have learnt it is good value for money".

Participant [15] commented the training tasks "improves my product knowledge, which gives me confidence".

Participant [19] indicated that the modules completed "gives me confidence to sell New Zealand".

Process theories like Vroom's (1995) expectancy theory provide an understanding of the thought process that individuals use to motivate themselves and form opinions and perceptions of products. Motivation plays an important part in learning, from the initial stages of engagement through progression and success.

When analysing the personal motivation behind the e-learning programme the responses to the interview were varied, but fell into a number of distinct categories: ease of use, completion time, relevance and reward, for example:

Participant [1] liked the "multichoice answers, that could be attempted over and over again, it improved my confidence without anyone else knowing if I got them right or wrong".

Participant [10] enjoyed "the hands on tasks and practical examples, because by doing something, I tend to find it easier and find I remember it more".

Participant [4] liked the fact "that the modules could be completed in small chunks, which saved time going back and made the training more enjoyable".

Participant [5] benefited from "it was quick to answer the questions and you could redo the tests straightaway".

All of these statements by the participants confirm Bandura's theory (1996) of self efficacy and emphasise the fact that everyone is different and personal choice plays an important part in stimulating curiosity and empowering the ability to grow or develop and indeed learn.

Motivation and engagement are often utilised to describe the same type of behaviour and forge links between the individual and the activity (Smart, 2006). Previous research in education outlines the behavioural concepts of engagement such as paying attention, whereas the cognitive processes show engagement through focus and goal setting, whilst emotions reveal engagement through boredom or interest (Long et al., 2000).

Still, engagement plays a crucial role in the learning process, therefore in order to ascertain the levels of engagement and the areas of engagement within this study, both the questionnaire and interview questions were utilised.

Firstly, each participant completed the questionnaire, section 1, question 8 and indicated whether or not they agreed or disagreed with the statement made in the question. On the whole the results of the questionnaire were positive, with 5% of the participants agreeing and 52% of the participants strongly agreeing that they were actively engaged in learning. Secondly, the interviews were analysed to determine if the modules were pitched at the correct level. This was then analysed further using a laddering interview technique to examine the engagement of each module. The results are outlined in figure 16.

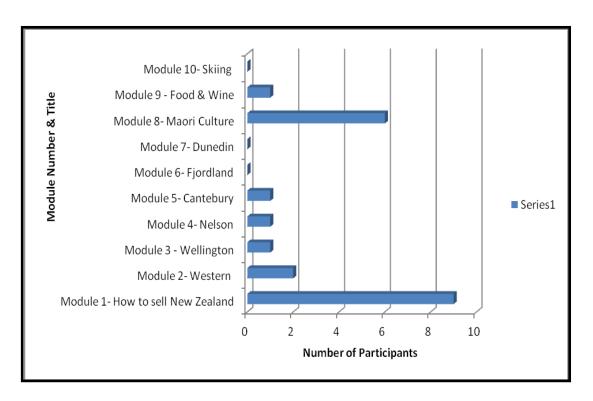


Figure 16 - Module Engagement

The results revealed that Module 1 -How to Sell New Zealand, was usually the first module to be completed by the participants and it appeared to be the most engaging. It could be argued that high levels of engagement combined with personal enthusiasm were present at the beginning of the course as the program was a new concept in learning, arousing curiosity and excitement, and the participants' enthusiasm started to falter as they continued on with the other modules. Nonetheless it is worth noting that the modules do not have to be completed in a set order; this is determined by

individual preferences. It was therefore interesting to see that, when analysed against other comments in the study, the majority of the participants were interested in improving their own personal sales to New Zealand and this too may have improved and maintained their level of engagement within this module.

Figure 16 also demonstrates there was a preference and high level of engagement in Module 8- Maori Culture. It could be argued that this is a unique feature of New Zealand as a destination and, by understanding the culture, it could enhance the sales opportunities for the participants affirming the high level of engagement in this material.

Conversely, Module 10- Skiing, suggested little or no engagement, however this is not surprising, as the participants were based in the United Kingdom, and New Zealand is not a big ski destination for most UK visitors, as travel agents have a variety of other places to offer much closer to home to offer such as Switzerland, Italy and France, so again it could be argued that this was less engaging as it did not create sales opportunities for the participants.

Another important issue raised within the literature review (Barkley, 2010; Fink, 2008) and within the context of this research is that motivation, engagement, curiosity and interest are interconnected and are all essential elements in the teaching and learning process. They all represent individual qualities that directly affect learning and this needs to be given serious consideration when designing and implementing online learning environments, hence the need to understand engagement and arousal theories.

Engagement theories utilise the constructivist approach to learning and emphasise the need for meaningful and worthwhile learning and this would certainly appear to be the case for the participants within this study, the questionnaire revealed that 95% of the participants found the modules a valuable learning experience, with the scenarios used being realistic and the hints and tips provided enhancing job performance, for example:

Participant [7] remarked on the fact "that lots of information was available at your fingertips and you could directly link to suppliers websites".

Participant [12] said "the 'have a go tasks' placed you in real situations, finding out information, the same as you would for a customer".

Participant [9] commented "I liked the key selling points in each section of the course, it gave you an overview of the area on things a customer might ask like beaches, national parks, attractions and cities without having to read too much information".

As stated in the literature review, motivation can determine the direction of study and the depth and level of interest maintained. Individual interest varies and develops over a period of time to reflect a growing base of knowledge in a particular subject area. Conversely, interest can be aroused by triggers within the environment (Krause, Bochner, Duchese & McMaugh, 2010) which can stimulate understanding and increase comprehension and recall (Clarke, 2001).

Interest consists of both an affective state and cognitive state and can increase attention and concentration within individuals, through positive feelings of wellbeing which increases effort and willingness to learn (Krapp, Hidi & Renninger, 1992).

Ainley's (2006) research in the field of education illustrates the way in which interest can support or detract from the learning experience, and it was therefore vital to assess the level of interest of the participants involved in this small scale investigation. Figure 17 indicates the responses to the questionnaire.

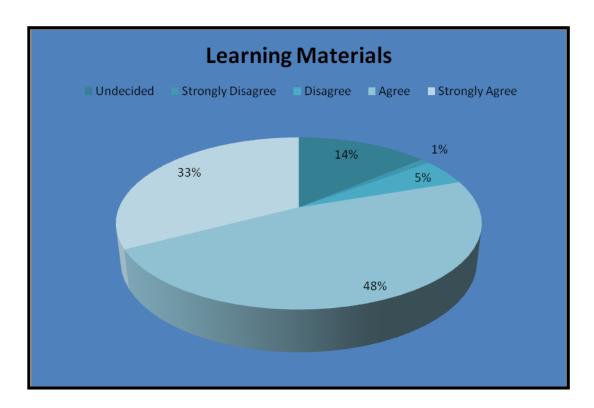


Figure 17 - Interest in Learning Materials

48% agreed and 33% strongly agreed that the learning materials were interesting. However, in order to assess the type of learning materials the participants found interesting, all the interview questions were analysed and placed into key themes. The emerging themes are outlined in figure 18.

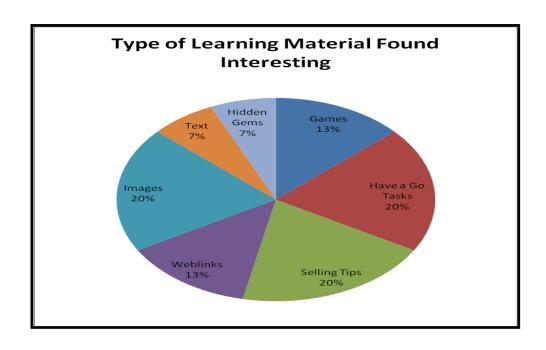


Figure 18 - Types of Learning Materials Found Interesting

It is evident from the research that the most popular learning tools as far as the materials were concerned were the 'have a go tasks' (20%), the 'selling tips' (20%) and the use of images (20%). The research reiterates previous work in the field of education that states "learners prefer trying things out rather than reading or following step by step instructions" (Carroll & Mack, 1985 p.51). This approach is linked to the constructivist pedagogy which sees learning as an active process (Jacko, 2003) with the learner taking control of the learning process, rather than being directed, and Puk (1992) defines the use of technology as a 'tool' as the systematic approach to achieving a practical purpose.

The research findings also demonstrate again the clear link between relevance, role and job performance, as it could be argued that there is a direct connection between the practical have a go tasks, selling tips and customer satisfaction. Nevertheless, if analysed using a theoretical concept, behavioural theories argue that learning is by association and this could certainly be the case within the context of this study when applied to the participant's job role. Even so, it is well documented (Crompton, 1979, Baloglu & McCleary, 1999) that destination image is often used to manipulate and stimulate interest in a destination and this would certainly appear to be the case within this study, for example:

Participant [11] said "I want to go on holiday now.... The landscape looks stunning".

However, when analysing the data from the interviews, it is worth pointing out that the above figures did exclude the participants (16%) who just commented on the fact that the training was interesting and did not specify a particular preference to any of the above themes.

The point of interest was analysed even further by the use of open ended questions, where the participants were asked to discuss their favourite parts of the training. Of those interviewed, 47% commented on the cultural element of the training, for example:

Participant [15] said "I found the 'hidden gems' fascinating, it aroused my curiosity and it was great to learn about the myths, stories and legends of this unique culture".

Participant [10] explained she "enjoyed the section on pronunciation, we listened on screen and then we had a laugh trying to pronounce the Maori words, it made the training fun".

Participant [11] stated that "although the Maori experience module was optional, I am pleased I did it as I feel it gives you the true feel for New Zealand".

However, upon further analysis of the question of interest, it is significant to note that some of the participants referred to the way in which the materials were organised and presented as points of interest. For example:

Participant [19] commented that the "tasks were reasonably interesting, however it might benefit from having a variety of different formats for the questions and answers".

When examined, interest in the context of the questionnaire it would appear that 95% of the participants felt images played a significant part in learning. The results are detailed in figure 19:

Figure 19					
Content	Undecided	Strongly Disagree	Disagree	Agree	Strongly Agree
The images	1	0	0	13	7
helped me learn	5%	0%	0%	62%	33%

One participant [10] even went as far as saying "that photos of the national parks were missing from the training package".

Previous research in both psychological and educational fields (Goodman, 2001, Wolfe, 2010) emphasise the fact that images can enhance the learning experience and aid motivation. Feinstein (2006) noted that learners can acquire more information visually, than any other sense and the use of visual materials can change student behaviour from passive to interactive learning (Marguiles, 2005). This is probably why learning styles are often incorporated into programmes of study.

### 4.10 Provision

Although e-learning has now been around for the past ten to fifteen years. E-learning is still considered by many to be in its infancy and online learning is still the subject of much discussion, debate and controversy (Morrison, 2003; Ruhe. & Zumbo., 2009; Wallace, 2004), with sceptics arguing e-learning is not as effective as traditional teaching methods.

The results of this study give valuable insights into the personal experiences and perceptions of e-learning and measure its effectiveness in terms of personal benefits related to job performance, enjoyment and usability.

In order to answer the question regarding the effectiveness of provision, conversations were held with the provider (Tourism New Zealand) and the users (Travel agents) were interviewed simultaneously.

Additionally, to assess personal perceptions, the participants (users) were presented with a series of statements via a questionnaire and requested to indicate whether they agreed or disagreed with the statements. Figure 20, located over the page, indicates the results of the questionnaire.

Figure 20 Personal Perceptions					
Statement	Response Rates ( Percentage)				
	Undecided	Strongly Disagree	Disagree	Agree	Strongly Agree
The modules were relevant for my business needs	5%	0%	0%	68%	27%
I was actively involved in my learning	10%	1%	5%	51%	33%
I feel more confident in selling New Zealand as a destination	10%	0%	10%	51%	29%
The knowledge I have gained will help with my work	5%	0%	10%	57%	28%

Figure 20 - Personal Perceptions

Generally speaking the questionnaire revealed there was a positive recognition for the benefits of the e-learning programme, with an overwhelming 86% of the participants agreeing that the modules were relevant for business needs. Again the information contained in the questionnaire was cross examined with the comments from the interview to further aid the researcher's analysis and establish the relevance of the modules, for example;

Participant [2] commented that "the materials have deepened my understanding of the cities, attractions and culture", and when participant [2] was asked "does the training help with your role" she overwhelming replied "Yes, it helps with service and knowledge".

Participant [5] stated "Yes, it gives a better idea of prices and distances, so I can advise my customers" and

Participant [12] eagerly said "the 'have a go tasks', placed you in real situations, finding out information, the same as you would for a customer".

85% of the participants in the questionnaire (figure 20) thought their personal knowledge and confidence in New Zealand had increased and the interview revealed the following:

Participant [5] said "I know a bit more about the country, attractions and culture".

Participant [11] commented "I have never visited New Zealand only Australia, it gave me a real insight into what it has to offer and showed how different it is to Australia".

The questionnaire (figure 20) also indicated that 86% of the participants gained knowledge that would help with their job performance, and the interviews reiterated, this for example:

Participant [6] said "by having a better understanding of New Zealand, the landscape, the cities, it is easier to make recommendations, and therefore I will earn more".

# Participant [7] stated

"I can now tell customers about accommodation, give them advice on where to stay, standards explain Qualmark, give advice on driving times and distances as before I was unsure as to the size of New Zealand and help them plan their holiday routes, I also have a better knowledge of the tour operators in each area, which helps improve my service to the customer".

While the majority (85%) of the participants in the questionnaire (figure 20) felt they were actively involved in their own learning, the interviews revealed that:

Participant [15] "liked the way in which I could decide what to do and select the modules, it allowed me to stay focused, you could see when you logged on what you had completed and what was left to do".

Participant [1] "liked the way you could jump from one section to another".

Participant [4] "liked the fact you could learn in small chunks, save work and go back to it, skip sections that weren't needed and select areas of interest".

Participant [5] said she liked "the way in which the test was available at the bottom of the computer screen at all times, it made it quick to answer and if you got them wrong being able to re-do the tests straightaway".

## Participant [9] commented on the fact that

"you didn't just have to work at the computer, you could print off the modules for reference, I preferred to do this and I highlighted information that I thought would be useful for me and customers in the future. Sometimes I read the information whilst I was waiting for the bus home, I have still got the information in my desk drawer so I can quickly refer to it if I need to".

When considering the points raised within this study and relating them to the literature reviewed on teaching and learning theories, it would appear that Tourism New Zealand has managed to individualise the learning process and actively involve the participants in the learning process. It could therefore be argued that learning is relevant to the individual's job role as each individual has selected their own course material.

The results substantiate previous research in the field of education that confirms that active learning is more relevant when learners take responsibility and control (Jacko, 2003, Prince, 2004). The purpose of active learning is to teach, reinforce and practice content that meets individual needs (Schwartz Green & Casale-Giannola, 2011). If analysed utilising theoretical teaching concepts, it could be argued that the participants have utilised mastery teaching principles, by taking control of their learning and adapted their behaviour accordingly, as Skinner suggested "behaviour modification techniques improve individual knowledge, understanding and performance" (Florian, 2007). From a motivational viewpoint it would appear from the research that the interactive course design, hands on approach, personal challenges and level of achievement actually inspired and motivated the individuals to learn.

The results were not surprising however, as, when interviewed, the online training coordinator for Tourism New Zealand advised that the e-learning training programme had been running for many years and was constantly evolving and being updated to ensure it was relevant to the needs of the tourism industry, (Lewis, personal communication, December 10, 2010).

Moreover, previous research reveals that Tourism New Zealand has invested heavily in the online training program using external web system designers to design the technological side of the program and in-house destination experts to provide the knowledge and understanding of the destination.

Additionally, the support systems that Tourism New Zealand have in place seem to complement the e-learning modules. Nonetheless, managing the daily operation of online training is a diverse task, with many corporations having strategic plans and policies in place to address technical issues, usability and program development. Research over the last few years has proved that support is a vital element in the success and effectiveness of any online training programmes (Kibbee, 2005; Lynch, 2004), with support systems playing an essential role in both retention and achievement.

Upon examination, the responses to the interview questions suggest that the benefits of e-learning provision are two-fold and need to be considered from both a personal and company perspective, as it could be argued that in effect they are both the users of the training systems.

The literature review established that the personal benefits of e-learning are well documented with literature emphasising a flexible approach to learning, accommodating different learning styles and self paced learning.

Research examining the organisational benefits of e-learning have been ongoing for the last decade and include greater accessibility, cost reductions, convenience, improvements in business productivity, global availability, new sales and marketing opportunities through enhanced learning and providing organisations with the competitive edge of the competition (Modahl, 2000; O'Donnell & Garavan, 2003; Steen, 2008). Support has been offered to organisations from central government, who have made considerable investment in the use of Information technology and implemented e-learning strategies to widen participation and improve lifelong learning.

Today many tourism organisations such as the market leaders, Thomas Cook, TUI and Co-op Travel Care (ABTA, 2008), are reviewing their business policies and practices in order to take advantage of the opportunities supported by e-learning and the reliance on people is being taken very seriously. People and personal skills are ranking highly in these plans and many individuals are embarking on programmes of lifelong learning.

Lifelong learning has been instigated by both internal and external pressures placed on both organisations and individuals due to ever changing customer needs and demands. In today's society a job is no longer for life and many individuals are reviewing their own personal skills and knowledge to gain the competitive edge. Learning is a key component of this success (Poon, 1993) and continual learning is both essential and a necessity in an industry that is constantly adapting and evolving to meet consumer demands. The use of ICT is therefore central to the acquisition of knowledge. When reviewing the benefits of the e-learning training, on a personal level the results of the open ended interviews revealed a number of key themes, which are detailed in figure 21.

Figure 21	
Key Benefits	Percentage of Participants Agreeing
Improved confidence	81%
Improved job performance	86%
Improved Product Knowledge	81%
Improved Customer Service	86%

Figure 21 - Benefits of E-learning

It is evident from the results, that 81% of the participants now feel confident in making personal recommendations to customers. For example:

Participant [6] expressed the view that "it is easy for me to make recommendations and therefore I will earn more commission"

Participant [16] declared "I learnt about destinations and it helps me improve my sales and service to customers".

Participant [14] stated "I learnt lots! I can now sell holidays here".

In addition, a few of the participants indicated that there was a link between incentives such as educational trips or increases in commission and the completion of the training programme. So it would appear from the research that the underlying motivation of a few of the participants was personal financial gain. However this is nothing new, extrinsic motivation is well documented (Evans et al., 2006; Gill & Pio, 2007) and numerous theories, Vroom (1995) and Adams (1965), have tried to explain both motivation in a workplace setting and in the role of education. In the role of education, extrinsic motivation is often associated with rote learning (Krause, Bochner, Duchesne, & McMaugh, 2010). Rote learning is a technique which focuses on the memorisation of content by repetition (Hayes, 2010). If used in this training context it would be extremely effective, as the participants involved in the training, namely the travel agents, have to remember and recite factual information in order to make a sale.

The purpose of this training is to raise and improve awareness of New Zealand as a destination. It could therefore be argued that the provision of training is effective in doing this, as 81% of the participants thought the modules within the training package had improved their personal knowledge.

Even so, between 5%-10% of the participants were undecided as to whether the knowledge and increased confidence levels would result in an increase of actual sales. When this point was investigated through the interview questions it was found that the majority of agencies involved in the training only did a few holiday bookings a year to this long haul destination, with most customers visiting friends and relatives or customers making once in a lifetime trips.

At the time of interviewing, 86% of the participants involved in the training had not seen an increase in sales. At this point it is worth noting that all of the agencies within this study were in the same geographical proximity and the training took place during an historically quiet booking period, so it may have been the location of the agencies that influenced the booking process, or the time of year in which the study was undertaken. Even so, when considering these points, it raises a couple of questions regarding the provision of the training.

Firstly, if the agents aren't achieving a high sales volume of bookings, what is the point of doing the training? Secondly, should Tourism New Zealand be conducting research into specific areas within the United Kingdom that are susceptible to booking and targeting the agents in those areas? And thirdly by doing this would it mean the training has been ineffective in creating awareness of the destination and the training has failed to meet the learning outcomes specified by Tourism New Zealand?

Despite these unanswered questions, other participants were optimistic about the opportunities to increase sales and thought that improvements in confidence levels, improvements in destination awareness and forthcoming events like the Rugby World Cup sales may increase the possibility of sales, for example:

Participant [6] indicated "that we do a lot of business to Australia, I can now suggest New Zealand as well, as an add on destination".

### Participant [16] said

"I feel a lot more confident on what New Zealand as a destination has to offer, it's not just the scenery and culture that is appealing, I now know that New Zealand has some fantastic beaches on the North Island and the South Island is full of adventure, with some exciting activities to see and participate in".

## Participant [7] stated

"I can now tell customers about accommodation, give them advice on where to stay, standards, explain Qualmark, give advice on driving times and distances as before I was unsure as to the size of New Zealand and help them plan their holiday routes, I also have a better knowledge of the tour operators in each area, which helps improve my service to the customer".

In spite of this, extensive literature exists on the lack of customer service skills within the travel industry (ABTA, 2009; Green, 2008; Haven-Tang, 2005; Purnell, 2005), with occupational knowledge being the most problematic area (Green, 2008). However with the increased confidence levels in New Zealand and indeed the product, the participants are going some way to rectifying this problem by improving their personal knowledge and expertise on a long haul holiday destination.

Figure 21 indicates the key benefits of the training from a personal perspective and at this point it is worth noting the participants rated improvements in customer service as a benefit. This is probably because the tourism industry is service oriented and greater emphasis has been placed on customer relationship strategies, with the quality of service being the deciding factor in distinguishing one organisation from the other.

Although the training program devised by Tourism New Zealand is not specified in their learning outcomes as a customer service tool, it could be argued that the product knowledge it supplies equips the agents with the skills and knowledge to provide a more effective and efficient service, adding value to the product and enhancing the customers experience, therefore improving customer service levels. The comments from the participants illustrate this, for example:

Participant [1] indicated that "I learnt about travel times and the size of the country which will help me sell to customers and improve my service".

Participant [6] said "the selling tips, will help with my service to customers, things like pre booking the ferry crossing across the Cook Strait, will make me look more professional".

Participant [7] stated "I can now tell customers about different types of accommodation and ensure it meets their needs, make them aware of driving times and distances and help them plan their holiday; it helps improve my service to them".

Participant [16] commented that she felt more confident

"As I feel more confident in my knowledge of New Zealand, I can make recommendation to customers on where to stay and what to see in the different regions, I can also use the information to up sell products and try to entice them into pre-booking as many products as possible, therefore saving them time in New Zealand and enable me to improve my service while earning more commission".

## Participant [3] said

"the more I know about a place, the more I can sell it, it is impossible in this job to go everywhere, (mores the pity), so by doing this training I feel I have been down the narrow twisty roads of the Coromandel". When asked to elaborate on this participant [3] said "Once I started looking at the different regions, the Coromandel instantly appealed to me, so I looked in brochures as well on the training site, I have read and studied it that much I now feel like I have been there, of course this will really help with customers, and the service I can offer, I know all the resort names and local attractions, I would love to go,".

According to literature (James, 2006; Joyce, 2008), it is these services which can differentiate between organisations, setting them apart from the competition. It is therefore the consultants within the branches that are ultimately providing their personal knowledge and expertise and enhancing the companies reputation. Hence, this service—orientated approach will subsequently result in sales opportunities for travel agents.

Consequently, Customer Relationship Management is emerging as a key concept within the tourism industry, with organisations paying particular attention to customer interaction in the hope they can maximise customer satisfaction and create customer loyalty (Shanmugasundaram, 2008).

With regards to identifying any gaps in provision, the interviews were utilised to analyse any gaps in provision and identify any areas for future improvement. The results were generally very positive with 15 out of the 21 participants feeling that there were no major gaps in the training provision and it met their needs and expectations. Despite this, when considering areas for future development, a couple of predominant themes came to the forefront; the use of multimedia (movie clips) and collaboration.

Interestingly, but not surprisingly, 19% of the participants stated the use of multimedia technology such as movie clips should be integrated into the training program. From a teaching viewpoint, it does make sense to incorporate movie clips into learning materials, as images can enhance learning through engagement and increase motivation (Jarvis, 2005). Furthermore, research in the field of multimedia studies revealed numerous benefits to this type of teaching, including sensory stimulation (visual and auditory), and greater understanding through the collaboration of ideas

and discussion, whilst collaboration was the other theme, suggested by 12% of the participants, for example:

Participant [2] thought that "discussion boards and chat rooms were missing from the training program".

Participant [18] commented that "team tasks or group activities were missing, as within the agency we often work together to secure a sale".

Participant [4] said the training could be improved "by creating something around team work".

Participant [1] stated "interaction was missing from the modules".

The comments from the participants confirm psychological research that highlights the fact that learning is a social activity and learning in isolation can be detrimental to the learning process. As Guile (2001, p.6) points out "conversation and debate are critical to learning".

Previous research suggests that social learning revolves around three key factors: the person, the behaviour and the environment (Cole, 2005). When referring to the person, it includes the internal characteristics that make up the individual such as cognitive process, personality and demographics, and the environmental factors are the external factors that provide opportunities for social support and interaction (Prasad et al., 2010).

Even so, the benefits of social interaction and learning are well documented (Aragon, 2003; Scott, 2000). Collaborative learning, with or without technology has proven to be an essential part of learning and social relations (Lipponen et al, 2002) with collaboration and learning being inseparable (Beyerlein, 2006), since group activities increase motivation (Parr, 2005) and enhancing critical thinking skills (Petty,1998). From a teaching perspective it allows the students to construct new knowledge, by sharing and building on others ideas, and from a student perspective it helps make the learning more enjoyable or even tolerable. Social Learning theories are important mechanisms for learning and this social approach to learning has its origins in behavioural theories, which attempt to explain how individuals are influenced or influence each other.

Social networking sites like Facebook, Twitter and My Space are illustrating the fact and persuading individuals, especially the "net generation" to collaborate online. It could be argued that social network sites have become today's "reference group", enforcing standards of behaviour or ideologies, changing attitudes and beliefs through the use of blogs and discussion forums. It could therefore be contended that societal

and cultural changes have influenced individual preferences in learning and indeed elearning, as new media and advancements in technology bombard our lives, learner demands are changing and becoming ever increasingly complex and evolving at a rapid pace to keep up with the demands of globalisation and technological trends.

When considering the participants' comments on the adequacy of the provision and areas for future improvement, it could be argued that although the participants were satisfied with the learning experience, Tourism New Zealand need to continually look for new and innovating ways to enhance the learning experience, like the use of multimedia clips and online collaboration if it is to remain effective.

## 5 Conclusion

The development of new and more powerful Information Communication Technology systems has empowered society on both a personal and corporate level and over the last decade society has evolved at a rapid pace. Today, technology is taken for granted and many individuals have a computer in the office, workplace as well as in the home. Information communication technology is embedded into daily lives, ranging from simple everyday devices such as mobile phones, to digital cameras, to e-mails, to connecting onto the Internet, to more complex devices such as android mobile technology and smart TV's. The internet has revolutionised the way in which communication takes place and is now one of the most important sources of information, allowing collaboration to take place on a global scale.

Changes in technological conditions are instigating social change and, as such, are transforming the world into a global marketplace and as society changes, the role of education evolves to keep pace. ICT is now an integral part of learning, and learning is now an integral part of society. Globalisation, increased competition, and consumer demand are now some of the driving forces influencing lifelong learning and individuals are required to adapt quickly to improve knowledge and technological knowhow. The use of ICT is therefore central to the development of a knowledge society and multinational corporations, along with Small to Medium Sized Enterprises are embracing e-learning as part of the training process.

The travel industry, like many other industries, has undergone radical changes due to advancement in technology. New media like the Internet have transformed the way in which business is conducted, from the download speeds of the Internet networks, to search engine technology. Travel agents no longer have the competitive edge over the consumer, as the Internet provides reliable and accurate information to met consumer needs. Therefore the role of information communication technology in tourism should not be underestimated, as the tourism industry is highly information intensive. In order to survive, the travel agency sector needs to regain the competitive advantage by focusing on the personal service offered to the consumer.

Traditional travel and tourism businesses are looking for flexible training solutions such as e-learning, to upskill the workforce. The travel industry is well suited to the use of e-learning technologies, making use of computers on a daily basis, and many organisations are implementing strategic plans and company infrastructures to support the use of Information Communication Technologies.

## 5.1 Identify skills and training needs within the travel agency sector

It is evident from the findings in this research that the travel agency sector is constantly evolving due to advancements in technology, globalisation and consumer demands. Consequently, the consultants within the branches need to continually update their personal skills in order to remain in employment, therefore lifelong learning is now a necessity within the travel agency sector.

When identifying the skills and training needs within the travel agency sector, it is apparent that, along with the ability to learn throughout life, the core training needs and skills are customer service, occupational/product knowledge, selling skills and appropriate information technology skills.

The travel agency sector in the United Kingdom is diverse and comprises of many different organisations ranging from independents to miniples to multiple travel agency chains. Owing to the emergence of electronic markets and the onset of ecommerce, competition between travel agents is fierce and travel organisations are looking for new and innovative ways to gain and retain the competitive advantage over rival organisations in order to survive.

When considering the skills and training needs from a company perspective, many organisations are implementing survival strategies that revolve around the demands of the customer, with greater emphasis being placed on customer relationship management strategies, and the reliance on people within the organisation is being taken very seriously in order to improve the levels of service.

Customer service can therefore be identified as the first skill required by the travel agency sector. Customer service is a combination of different elements (occupational product knowledge and personal expertise) that allows the travel consultants within the branches to enhance the service available to customers. Therefore, organisations are relying not only on customer service, but the occupational product knowledge and personal expertise of the workforce to set them apart from the competition, enhancing the company's reputation and service provided.

The second skill identified is occupational/product knowledge, as customers expect travel consultants to be knowledgeable and be able to provide advice on weather, exchange rates, travel documentation, along with making recommendations on attractions, accommodation and leisure activities. It is this knowledge that gives the travel consultants the expertise allowing the sales process to be enhanced by individualising products. This ability to adapt and tailor requirements to meet customer needs improves personal self esteem, instils confidence, which in turn develops selling skills and techniques.

The ultimate goal of any organisation is to increase profitability through increased sales opportunities. Hence, selling skills are the third skill to be identified in this study and an essential skill for the travel consultants within the branches. Selling skills generally incorporate two important elements, which are interlinked, the knowledge of the products and the concept of self belief or self confidence.

The fourth skill evident from this study is the need for appropriate IT skills and, although the participants within this study generally felt confident in their personal IT skills, it is evident that the travel agency sector is an information intensive domain relying on a variety of electronic sources for the supply and exchange of information and if travel consultants are to be effective in their role, they need appropriate IT skills for information retrieval to deal with consumer enquiries in a quick and efficient manner ensuring customer satisfaction is met and exceeded.

## 5.2 Recognise ways in which e-learning can support the travel and tourism industry

The emergence of the internet has placed increased emphasis on the use of technology and, like many other destination marketing organisations, Tourism New Zealand has utilised the technology to provide online training opportunities for the travel agency sector. Research suggests that e-learning has many advantages over traditional teaching and that certainly appears to be the case within this study.

From the provider's perspective, the online environment helped raise awareness of the destination, products and services available. E-learning was a cost effective method of training that conveniently offered global availability of learning resources that were available 24 hours a day, and it created sales opportunities for travel agents through enhanced learning. It allowed Tourism New Zealand to forge links with the online communities of travel consultants, therefore enhancing the long term competitiveness of the destination.

From a corporate perspective, it is evident that the e-learning training packages provided by Tourism New Zealand allowed the organisations greater access and flexibly in their training requirements, allowing staff to complete the modules within the office or their own time, saving valuable time and financial resources. Thus, also makes e-learning a cost effective method of training for the travel agency sector.

From a personal perspective, the online learning proved to be both flexible and convenient, allowing the participants the opportunity to study at a time and location that suited their individual needs with a number of the participants studying at home, whilst others utilised the work environment to discuss tasks or to access learning materials. It was evident from the participants that the training provided greater control over individualised learning and provided differentiation in the pace of delivery and the way in which the content was provided as the participants could select the order and relevance of the modules selected, therefore supporting their personal role within the organisation.

Furthermore, it was also apparent there was a positive recognition for the benefits and support that e-learning could bring to travel professionals working within the industry, with the modules improving the participants' confidence levels and knowledge of the destination.

In addition, although the training program devised by Tourism New Zealand was not intended as a customer service tool, the product knowledge it supplies equipped the travel consultants with the skills and knowledge to provide a more effective and

efficient service. Therefore the e-learning package also supports customer service on both a personal and corporate level, which in turn can improve productivity on a corporate scale.

With regards to whether e-learning had supported the sales process, this is inconclusive at this present time, and an area worthy of further investigation. Since the participants within this study reported mixed results, a few of the organisations within the study had experienced a slight increase in sales to New Zealand, whilst other organisations had seen a decrease in sales, as a result of the current economic climate within the United Kingdom. However, the results clearly confirm that the travel agency sector is susceptible to change and, although e-learning is a valuable mechanism for enhancing product knowledge and assisting the sales process, it cannot be used in isolation to increase sales as other influencing factor prevail within the travel industry.

## 5.3 Evaluate e-learning's effectiveness in terms of provision, content on the site and usability from a user's perspective.

Generally speaking, effective e-learning involves examining pedagogy and learning, and utilises web design techniques to differentiate and facilitate learning. It is clear from research that for learning to be effective the learners need to be actively involved in the learning process and e-learning is no exception to this. The results of this study clearly indicate the majority of the participants were actively involved in the learning process, taking personal control and responsibility for pace and level of learning, selecting relevant online tasks to suit their own individual and organisational needs and generally recovering quickly from any personal mistakes.

Still, a major element in the provision of any training program is the support systems in place by the training provider and to a certain extent Tourism New Zealand appear to have this right, with dedicated teams available by e-mail to give help, guidance and advice. Therefore the online training provision was effective in facilitating the learning process, resulting in high retention and achievement rates.

On the whole, the participants had a positive e-learning experience, which proved in a number of ways to be successful and effective for the participants involved in this project, with improvements in self confidence and motivation, product knowledge and awareness of the destination, which in turn resulted in improvements in levels of customer service.

From a personal perspective, the results of this study measured the effectiveness of the provision in terms of personal benefits related to job performance, enjoyment and usability. The participants found the provision effective as the site was easy to use and flexible in its design, which allowed the participants to individualise their programmes of study, therefore ensuring relevance to their job role, whilst meeting the needs of the business. Typically the training modules improved confidence levels, occupational knowledge and supplied the travel consultants with the skills and knowledge to provide a more effective service, adding value and enhancing the customer experience. Therefore, in this instance, the e-learning experience was effective in its provision.

Whilst addressing the issue of content: content on e-learning sites is renowned for being homogeneous in its design and methods of delivery. The results of this study were therefore encouraging as the participants found the training interesting,

engaging, relevant to their job performance and role and suitable for the needs of the organisation.

A consensus of the participants confirmed the content within the training was motivating and personal reasons for this included the fact that the online training was easy to use, permitting modules to be completed quickly, thus allowing instantaneous knowledge acquisition, with participants hoping the knowledge would lead to improvements in sales. This study also substantiated the fact that although the training modules gave the opportunity to improve personal skills, the underlying motivation of the participants was to enhance their potential earning capacity.

The majority of the participants did genuinely appear to be interested in learning and the e-learning modules gave valuable insights into the customs and cultures in New Zealand and improved awareness of the destination through the practical hands on examples, multiple choice quiz and selling tips throughout the course. A number of the participants found the learning materials interesting, engaging and relevant to their job performance, and felt more confident in their own personal abilities from both a technological view point and product knowledge perspective, resulting in a more effective and efficient service for the consumer and a more motivated workforce. It is apparent from this study that the e-learning content is effective, fit for purpose and relevant to job performance.

When contemplating usability from a user's perspective a number of key factors were identified: access, content, design and navigation, all of which are interlinked and can affect the overall user experience. In terms of usability the majority of the participants found the site to be easy to use and "user friendly".

Generally speaking the majority of the participants felt confident in their own personal IT ability in order to gain access to the online training program and logging on and registration appeared simple for the participants. As a rule the employers were supportive of the training program with the majority of organisations permitting access to the training during the working day, however some participants did prefer to complete the training at home, therefore the training was accessed from a variety of locations.

When considering the usability from a design viewpoint, the participants had no problems with the technological side of the programme, with download speeds adequate and progression and navigation basically straightforward. Access to materials was easy as the programmed learning gave both directed instructions, instant feedback, links to relevant materials and additional websites allowing the participants

the freedom and flexibility to work at their own pace. It can therefore be surmised from a usability perspective the e-learning environment was effective and well designed.

## 5.4 Identify any gaps in provision within the training program

With regards to identifying any gaps in provision, there were no major gaps in the training provision and it met the needs and expectations of the users. Despite this, when considering areas for future development a few predominant themes came to the forefront, the use of multimedia (movie clips) and collaboration.

Learning is fundamentally a social activity, which allows both students and lecturers to share and disseminate knowledge and throughout history has proved to be an essential part of learning. Today it is no different with social networking becoming an integral part of life making learning both fun and more enjoyable.

When considering the adequacy of the provision and areas for future improvement, although the participants were satisfied with the learning experience, Tourism New Zealand need to continually look for new and innovating ways to enhance the learning experience, like the use of multimedia clips and online collaboration if it is to remain effective.

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