

# ICT as an Effective Education Vehicle for Employer of Choice

**Abstract:**

An increasing number of Australian organisations are paying greater attention to more effectively utilising skills and motivating their employees. Employer of choice reflects the value and importance an organisation places on their key stakeholder - their staff. Information and communication technology, which reflects the principles of adult learning in keeping with constructivists' beliefs, is an efficient and effective means to providing an education resource reflecting an organisations employer of choice program.

**Key words:**

information and communication technology (ICT), computer assisted learning (CAL), constructivists' theorists, employer of choice, education resource.

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## **ICT as an Effective Education Vehicle for Employer of Choice**

### **Staff Education on EOC Program**

Previous research expanded upon in the paper “The Growing Importance of EOC” (Gill, 2005b) has demonstrated that employer of choice (EOC) status is an emerging and critical part of successful businesses. Global business trends towards accountable and transparent behaviour, Australian government legislation and regulation, and an Australian workforce with the capacity to exercise greater choice in employment means employees are demanding enhanced corporate social responsibility from their employers.

Research, examined in the paper “Developing a Definition for Employer of Choice”, conducted on Australian finance and insurance companies regarding how these organisations publicly address employer of choice criteria demonstrates that these operations, both Australian-owned and foreign-owned, reflect current global developments in corporate social responsibility (CSR) relating to employees for 50 per cent of the identified criteria (Gill, 2005a). Gaps in EOC communication and employee education on the CSR programs execute by Australian finance and insurance employers, demonstrated in the paper “EOC Criteria and Finance Sector Publications”, need to be managed in order for these companies to remain competitive in the market (Gill, 2005c).

Staff education is vital in terms of safety, productivity, lifelong learning, communication, and effective people policies (WorkSafe, 2004). These issues play an important role in the operation of a company and are fundamental to an employer of choice program. Although many finance and insurance companies may support EOC issues, these companies are not effectively conveying all the information on EOC criteria to their staff, or to the public (Gill, 2005c). “We believe Aviva addresses the issues that characterise a good employer of choice – just view our CSR report – however, educating a staff of around 700 on how to make these policies work for them is a concern we need to manage,” said Simon Morgan the Group General Manager Public Affairs, Aviva Australia (2005, May 5).

An internal staff education program in keeping with staff development, adult learning principles and lifelong education can be introduced in order to provide vital EOC information addressing the identified criteria necessary to operate a “best practice” workplace. The education program can also be a vehicle for expanding knowledge

on relevant EOC topics, along with providing the opportunity for staff input into the curriculum development process through feedback and analysis.

A staff education program conducted internally for employees in an office environment would need to be capable of educating large office-based staff numbers “en masse” and have the flexibility to adapt to the culture of the business. As Rance (2005: 2) points out, speaking earnestly of attracting and holding onto well-rounded employees is not enough, as staff need opportunity for growth and development. This is echoed in the KPMG 2005 and IBM 2005 global surveys on human capital (Gill, 2005a).

Training and development opportunities are fundamental to fostering continual success in employer of choice policies. But education and communication programs can be costly affairs, and businesses do not always see immediate dollar-value from the exercise. “Corporate training agendas emphasise the virtues of re-skilling and lifelong learning, but when it comes to action, the cost of taking people off the job for more than a short course are tallied, other options are quickly added,” (Rance, 2005: 2).

Office education can be addressed through online education. An online information resource used to facilitate the development of an EOC education program using contemporary information and communication technology (ICT) has the ability to be a cost-effective education tool capable of operating successfully under office conditions in large organisations. The online resource not only provides EOC information for users, but also has the capacity to pinpoint areas requiring further development, resulting in a more complete and progressive EOC education program.

### **Information and Communication Technology**

Advances in information and communication technology (ICT) have enabled the development of a highly effective and expansive mode of education, known as computer assisted learning (CAL), or more commonly termed as "e-learning". The CAL mode of education provides opportunities to harvest information through a variety of processes including digital and auditory instruction, web research and visual simulation (Wilcox & Wojnar, 2000; Liu, 2001). “The field of instructional design and technology encompasses the analysis of learning and performance problems, and the design, development, implementation, evaluation and management of instructional and non-instructional processes and resources intended to improve

learning and performance in a variety of settings, particularly educational institutions and the workplace,” (Reiser, 2001a, 1/ 53).

ICT has pedagogical capabilities for business education that can attach genuine purpose in the facilitation of learning and extend added value. Pedagogical dimensions are concerned with the aspects of design and implementation of computer assisted learning that directly effects learning (Reeves, 1992: 2). Visually rich means of instruction, direct links between business and instruction, and taking practice from abstraction to realism add real value to the business through online instruction (Reynoldson & Vibert, 2006: 7-12).

Seven distinctive capabilities of ICT-enabled education have been identified by Reynoldson and Vibert (2006: 7). These are: flexibility, customisation, practicable lifelong learning, borderless education, visualisation and simulation, business-in-the-classroom, and theory-practice nexus.

ICT allows flexibility as it removes limitations imposed by traditional timetabling and styles of business education, and replaces them with virtual learning communities. Learners can customise their studies through taking greater control by matching personal needs with programs online. ICT also meets the lifelong learning needs of users, who desire to engage in continuous, or periodic, studies in order to upgrade their skills throughout their working life and beyond. Remote access and access to several different suppliers allows for borderless education. These functions are considered to be positive communication and resource capabilities (Reynoldson & Vibert, 2006).

The use of digital media incorporating realistic simulations and visually rich adjuncts enables ICT to move beyond text-based materials. ICT overcomes the spatial and temporary barriers associated movement between the teaching academy (or training centres, as is the case with many large organisations) and the business through low-cost, online and instantaneous communication as a direct link. Students are able to move in the real world applications, against textbook conceptualisations, and from imagined to actual contexts. These capabilities are deemed to contribute genuine pedagogical potential for a business (Reynoldson & Vibert, 2006: 7).

ICT is an effective tool for business education, not just communication, and has the capability to be programmed to suit the environment in which it is being used.

Businesses with large staff numbers require an educational tool that allows learning across the floor, is time-flexible, allows for employee input and feedback, provides authentic experiences, and is economic to implement. "Since 1995, rapid advances in computer and other digital technology, as well as the internet, have led to rapidly increasing interest in, and use of, these media for instructional purposes, particularly training in business and industry," (Reiser, 2001a, 1/60).

Information and communication technology as an education vehicle has many advantages for large staff numbers in relation to convenience, availability, time and location. ICT is simple to update with many internal intranet systems capable of conveying information instantly. Across the floor knowledge is available to all staff who have computer access.

A CAL tool is time-flexible as it can easily be uploaded to the inhouse drives, and is available at convenient times for staff with access to computers. Computer-assisted learning (CAL) is cost-effective for developing and expanding knowledge in the office environment. The majority of office staff have access to, and are capable in, the basic principles associated with computer operations. "Those who undertake formal learning are also those individuals likely to use ICT," according to Gorrard, Selwyn & Hubert (2005: 84). Most office workers are trained, capable and comfortable working with computers. "Benefits of online learning systems compared to face-to-face training for large staff numbers are many. Such systems are cost effective, transportable, adaptable, and can be programmed to reflect the culture of the company," states Justin O'Brien, Director of Lucent Communication.

It is important the education tool can create authentic activities in keeping with the values and ethics associated with the employer of choice philosophies of particular companies. This is consistent with constructivist theorists (Vygotsky, 1962; Dalgarno, 2001; Dick in Reiser, 1996) who believe learner-centred education is the most effective way to learn. Constructivists base learning on building upon prior knowledge, presenting information within a context in order to relate to prior experience and learner activity rather than teacher instruction (Dalgarno, 2001: 184). Dick (Reiser, 2001b: 2/63) explains authentic learning tasks that reflect the complexity of the real world environment in which learners will use the skills has an effect on instructional design, which needs consideration when adapting learning management systems online.

What and how much is learned is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interests and goals, and habits of thinking (American Psychology Association, 1997). Dalgarno (2001) believes that attention to design can create a learning environment in keeping with constructivists' criteria for effective learning.

The structure of ICT allows for instant feedback in the form of electronic mail (email) and electronic discourse (chat rooms and bulletin e-boards). Users share ownership of the information through their feedback and direct input into the upgrading of information. The online functions of ICT also allows users to expand the information available through links to external websites.

"Computer assisted learning is an obvious mode for training, educating and communicating in an office environment. Staff are usually IT-savvy, and programs can be designed to reflect the culture and authenticity of the particular operations associated with the business. Ninety-nine per cent of Australian offices already have the infrastructure in place to conduct online learning," states John McCann, a director of the Australian Electronic Commerce Centre.

### **Disadvantages of ICT**

However, there are some disadvantages to using CAL as an educational tool in the office. Without a trainer/facilitator's guidance on-hand to answer questions and give immediate feedback, staff may have difficulty completely understanding, to the individual's context, the knowledge without relevant instruction when navigating the system (Alley & Jansak, 2001: 9). "An advantage of face-to-face learning is that you have a facilitator available upon request to answer enquiries and further explain information. Trained educators can recognise when learning is taking place under the right abstraction, something that programmed instruction from computers are unable to identify," states Justin O'Brien of Lucent Communication.

Asynchronous communication (email and bulletin posting) often leaves users feeling isolated and unimportant (Alley & Jansak, 2001: 9). Response times to queries are often delayed and may have the effect of minimising the urgency and importance of the enquiry.

Unsupervised online education may lead to unnecessary and distracted browsing on the Web (Dalgarno, 2001), resulting in tangent investigations and diversions of focus

from the core task.

### **Office Education Design for EOC**

An online learning management system using computer technology aligned with a constructivists' framework (Reiser, 2001a:1/61) is the most effective means of educating on employer of choice for businesses for office-based employees with access to an inhouse intranet (Gardiner in Alley & Jansak, 2001: 3). "Online learning is the most effective and efficient means of educating large numbers of people collectively," states John McCann of the Australian Electronic Commerce Centre (2005). The primary objective of the online system is to provide ongoing access for staff to information on their business' EOC program, including ongoing upgrading of this information.

Curriculum design needs to suit the objectives of the system. "Curriculum is thought of in terms of activity and experience rather than of knowledge to be acquired and facts to be stored in," (Edwards and Kelly 1998: 1). The boundaries for this curriculum need to be permeable in order to support adaptation of the system to varying workplaces. Many theorists and academics have prescribed models of curricula, however, Print's (1993) dynamic model associates with the perceived learners and their input into the curriculum. This complements the constructivists' belief (Dalgarno, 2001:184) that each individual constructs their own representation of knowledge drawing on their own experiences; and everyone's construction of knowledge is equally valid.

The design of the curriculum for specific organisations should include input from a selection of stakeholders ranging from senior management to staff, and external contractors. Due to the nature of the content, input is required from human resources, public affairs and those associated with corporate governance and social responsibility (IBM, 2005: 7; Picket in Human Resources, 2005: 11). The updating of the curriculum as a result of feedback or industry developments can be overseen by the formation of a curriculum committee (Liu, 2001: 19).

The guiding principles in curriculum design for an online education system regarding employer of choice include: learner focussed EOC content, online access, familiar navigation, opportunity for external research, authenticity, reflection of brand and values, open feedback, site-usage data, and the opportunity for further development through integration with other modes of education.

The curriculum's classification is relatively simple in content, yet more complex in framing. The functionality of the system is to educate staff on the employer of choice policies and practices for that business. The principle of classification is concerned with "the (knowledge) categories, contents and relationships to be transmitted", while the principle of framing refers to "the manner of transmission" (Bernstein, 1990: 196). EOC criteria form the basis of the classification, with ICT as the initial transmitter.

The pedagogical philosophy of the system equates with constructivists' beliefs for learner-focussed objectives. The weak framing permits input from learners into the system and allows negotiation within the curriculum through modification and options, also focusing on outcomes. "Strong framing entails reduced options; weak framing entails a range of options," (Ross, 2000: 99).

The directory content contains information on the criteria for being an employee of choice for that business. This classification should address people management issues identified in previous research (Gill, 2005a) regarding effective people-policies relating to: internal and external relationships, occupational health and safety, learning, community involvement, environmental conscience, and financial security. It links to the policy and procedures for the host company, and has access to external websites for further information.

Staff access the system online. The education tool is framed on the company's internal web-system, or intranet, and can be situated on the tool bar, or under the "Human Resources" directory of the company's intranet. The navigation of the user-interface remains simplistic and can be text-based or icon and text-based depending on the format of each intranet system. Access at anytime (particularly relevant to shift workers and client-service staff with strict time tabling) and unrestricted learner-control are strong advantages of this system.

By keeping screen design an extension of the branding of the companies' desktop face allows the tool to remain aesthetically pleasing to management and familiar to staff. The program forms part of the business' communication system, not an alien tool external to the operations of the business. The cognitive load remains manageable with users intuitively using the directory to access information they desire directly. Users can utilise the directory to visit specific sections of the EOC program instantaneously. Mapping in the system follows normal host-intranet

procedure so users can avoid disorientation and view where they have previously visited. Familiarity with the style in which information is presented ensures staff are comfortable with the navigation of the system (Reeves & Reeves, 1997).

Online access permits media integration that extends to the external web, opening the opportunity for external research to be included in any further discourse (Alley and Jansak, 2001: 8). The endogenous constructivists' approach stated in Dalgarno (2001: 186) emphasises the importance of learner-directed discovery of knowledge.

The system should be designed to allow direct email between staff and business units. This complements Moshman's interpretation (Dalgarno, 2001: 190) on dialectical constructivists' theory based on social interaction in the learner's knowledge-construction process, which may be achieved online through computer-mediated communication, ( i.e. asynchronous - email, mailing lists and online bulletin boards).

Constructivist computer-assisted learning tools, according to Dalgarno (2001: 186) draw on hypertext and hypermedia environments allowing learner-controlled browsing of content, and simulations and microworlds that permit active exploration within a virtual environment. Hypertexts are chunks of textual information and hypermedia incorporates pictures and graphical buttons that can act as links in addition to words within texts. A simulation is a model of the real world environment, with a microworld as a simplified version of the real world environment (Dalgarno, 2001: 186). Such systems allow a learner to express what he or she knows, and then engage in web-based activities to merge his or her understanding with that of experts and professionals (Oliver, 2000: 7).

According to Seely Brown, Collins and Duguid (1989) the relevance of the situation and the context are key determinants in the learning process. Effective learning needs to take place in an authentic social setting as the context, culture and situation will impact on the learning process (Alley & Jansak, 2001: 5). An in-house education system enables learners to personally apply information to their immediate situation. Users of the system do so with the intention of learning more about how their company addresses opportunities that will benefit these individuals. Motivation to learn is intrinsic as students take responsibility for their own learning (Alley & Jansak, 2001: 7). Constructivists' believe that activities situated in an authentic context motivate and interest students in learning (Boyle, 1996).

This authentic activity, a feature of constructivist epistemology, can be enhanced through simulations and microworlds (Dalgarno, 2001) using graphics and diagrams of the actual business (Reeves & Reeves, 1997). The use of video messages (e.g. message from the business head) and digital films specific to the business can be introduced and constantly updated on the system. A multi-faceted approach accommodates individual learning styles (Alley & Jansak, 2001; Dalgarno, 2001; Oliver, 2000).

A major advantage of this education system is the curriculum is able to accommodate and echo the values and culture senior management would like to reflect through the program. The e-learning system can be tailored to addressing the values of the company directly from within the resource.

The program is obligated to provide 360-degree feedback, in keeping with constructivists' philosophy. This can be achieved through an open discussion board that eliminates any privilege on discourse for the ongoing development of the education program. Feedback in the system relates directly to practices and policies associated with that business' employer of choice program resulting in concrete experiential value.

Bulletin posting, from senior management through to junior staff, enables reflection and feedback. This allows all staff to contribute new ideas and elaborate on examples of positive practices that they have experienced elsewhere. Cooperative learning is integral to the system. According to Oliver (2000: 6) students must sense some form of ownership in the task if they are to persist and seek a resolution to the situation. Harrison and Bergen (2000: 57) state that a bulletin board, where students and instructors post messages for all to see, is an important component for online learning. Bulletin boards should be monitored with old messages being archived in an electronic file. The system may also provide one-to-one private email to allow confidential enquiries and an email letterbox to particular business units for individuals requesting further information. Oliver (2000: 7) states the reflection and clarification processes allows learners an opportunity to modify misconceptions or improve inadequate understandings.

A key outcome for the EOC information resource is to provide direction in order to facilitate further development and expansion of the education program. The resource

engages employees in EOC and identifies areas for further education development through feedback directly from staff, access data on popular sites, staff enthusiasm, performance management, and discourse for particular criteria and/or sites. Areas of concern, interest and relevance can be pinpointed through these feedback mechanisms. Education strategies can be developed from the resource to address specific identified areas and provide staff with an opportunity for extended learning by expanding knowledge on identified interest areas. This may occur through upgrading of the tool and/or through other more traditional modes of education, including training, lecturing and face-to-face learning.

The above curriculum design of an information resource and associated further development of the EOC education program is in harmony with adult learning principles. "Adult learning is facilitated when the learner's representation and interpretation of his/her own experiences are accepted as valid, acknowledged as an essential aspect influencing change, and respected as a potential resource for learning," (Bundage & MacKeracher in Dewar, 1999). The resource design allows for autonomous and self directed learning, applies value to the learner's prior knowledge and experience, is goal orientated, directly relevant to the users business environment, respects opinion and feedback, and has practical applications (Lieb, 1991; Goodlands, 1995).

### **Conclusion on EOC Education**

Pickett (Human Resources, 2005: 11) stated that an increasing number of Australian organisations are paying greater attention to more effectively utilising skills and motivating their employees, but there is still considerable scope for improvement. He explains that senior executives have a great opportunity to improve key business outcomes by paying greater attention to the way people are managed in their organisation. One of the immutable laws for corporate reputation is to "make your employees your reputation champions", (Alsop in Campbell, 2004: 24).

Employer of choice reflects the value and importance an organisation places on their key stakeholder - their staff. "Organisations that invest in their people are perceived to be better places to work and are more likely to retain key staff and outperform other organisations on financial measures," (Hewitt, 2003). Successful companies, according to Wall Street reputation professional Richard Alsop, ensure the protection and enhancement of reputation through establishing and sustaining an internal culture of high ethical standards of behaviour (Campbell, 2004: 23).

There is a need for an efficient program that educates staff, management and business-policy designers about employee opportunities and making the most out of an organisation's culture. The first step to developing and articulating an EOC brand is internally through the companies' greatest ambassadors: their staff (Australian Institute of Management, 2004). Using the information technology already available in an office environment, computer-assisted learning is an ideal tool to facilitate education for staff on employer of choice. However, the resource needs to be designed in order to address the criteria that relate to "best practice" people management. The Global Human Capital Survey (PriceWaterhouseCoopers, 2002: 1) concludes, "Good people management has a positive effect on a range of issues, from increasing employee productivity and reducing absenteeism through to improving profitability."

The success of the education resource will be reliant on an effective internal communications program within the host organisation. Due to the passive nature of the intranet sites, the effectiveness of such a tool is directly related to frequency of use, in terms of being an educational reference and for site maintenance. Individuals have a vested interest in using the resource, as it directly relates to their working environment and their personal wellbeing. However, an intensive launch program including direct communication and senior management endorsements, combined with ongoing promotion, is necessary to ensure potential users are aware of the tool, have an understanding of the purpose and are encouraged to be active students of the resource. This is key to ensuring feedback reflects the organisation as a whole and that the appropriate advanced programs are developed as a result of this feedback (Tymson & Lazar, 2006)

An education resource that details the relevant key issues of employer of choice allows staff direct access to how their organisation addresses these issues, and provides an opportunity for employees to further their knowledge on such issues in keeping with adult learning principles. The continual improvement of the system is reflected by the opportunity for input from all employees using their previous experience and research capabilities within the system, resulting in the capacity for spiral learning (Alley & Jansak, 2001: 16). Such a system has the capacity to remain contemporary, with an ability to change in order to reflect global and local environments, and allow for continuous improvement.

An education tool that facilitates staff education on the organisation's EOC program has been proven to add real value to a company.

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