E-learning for New Zealand industry training organisations: Analysis of benefits and barriers

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The key findings are presented from the second phase of a research project which was undertaken to ascertain the current status of the use of e-learning technologies by New Zealand Industry Training Organisations (ITOs). The data presented here was derived from a multi-part online survey of e-learning activity in New Zealand ITOs. The benefits and barriers of e-learning for New Zealand ITOs are analysed and major findings highlighted.

Context

There are currently 39 Industry Training Organisations (ITOs) in New Zealand (Industry Training Federation, 2007). The ITOs are funded by the New Zealand government to oversee the growth and development of the industry they represent. They are also charged with ensuring the education and training of their trainees is at an appropriate level and relevant to industry needs.

In the context of education and training in ITOs, the New Zealand Tertiary e-Learning Research Fund (TeLRF, 2007) provided a research grant to enable a study of the current use of e-learning by ITOs. The research project consisted of three phases. The first phase was a comprehensive literature review, both nationally and internationally, of the use of e-learning in vocational/trades education and training (Clayon and Elliott, 2007). The second phase, based on the outcomes of the literature review, involved a number of surveys to determine what New Zealand ITOs were doing in relation to e-learning opportunities for their trainees. The survey also sought to obtain information on what the ITOs considered were the potential or real benefits of e-learning and the barriers which would influence their adoption of e-learning technologies.

This poster presentation provides the key findings from a section of an online survey which requested responses from the ITO's on the benefits and barriers of e-learning for their organisation.

Twenty three of the 39 potential ITOs responded to the survey (approx 58%). For the purpose of analysis it was decided to stratify the sample into 3 types of enterprise, small organisations (enterprises with below 1000 trainees enrolled) medium organisations (enterprises with between 1000 and 5000 trainees enrolled) and large organisations (enterprises with over 5000 trainees enrolled).

The small enterprise group consisted of 10 respondents which represent 25.5% of possible number of ITO respondents (39) and 43.5 % of actual respondents (23). The medium enterprise group consisted of 7 respondents which represent 18% of possible number of ITO respondents (39) and 30.5% of actual respondents (23). The large enterprise group consisted of 6 respondents which represent 15% of possible number of ITO respondents (39) and 26% of actual respondents (23).

Summary of results

The graphs show the response obtained from the ITOs for each of the 24 questions about the benefits and barriers of e-learning. The questions were constructed from information gleaned from the literature review on e-learning in vocational/indutsry education and training nationally and internationally (Berge,2002, Becta, 2005, Muilenburg and Berge, 2001, Ferl, 2007, Learn Frame, 2007, E-skills UK, 2007). 14 Questions were related to benefits of e-learning and 10 to the barriers.

The results indicate that the majority of New Zealand ITOs are conscious e-learning increases organisational flexibility in the presentation of training at the right time (flexibility in time), the design and delivery choice (flexibility of place) and to a number of trainees simultaneously (flexibility of delivery).

The initial implementation and ongoing maintenance costs (time, financial and human) associated with the implementation and maintenance of e-learning approaches is seen as a major barrier to small and medium sized organisations adopting e-learning technologies in their education and training programmes.

Other benefits of significance were related to consistency in teaching methodology through the use of information and communication technologies (ICT) and raising the ICT skill level of the trainees. Major barriers to implementing e-learning which caused concern included a lack of robust ICT infrastructure and support for trainees with low level of ICT competence. Resistance to change and the ability to source appropriate digital content were also identified as major barriers.

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