



Scoping the Potential of E-Learning in Rail

The CRC for Rail Innovation has completed a research report, *Scoping the potential of e-learning in rail* (P4.108), to identify the different approaches to e-learning both outside and inside the rail industry. Drawing on ten case studies from rail organisations and comparative organisations, the project assessed the applicability of e-learning to a rail context, and identified the major benefits and the barriers to successful implementation.

The report findings indicate that e-learning can contribute to the capability development of rail employees and play a role in the future of the industry, however further action is needed to reap maximum benefit and to determine the most appropriate and effective form and use of e-learning in the rail industry. Factors such as organisational differences, rail workforce diversity, learning and development issues, and technology are among the considerations of the potential of e-learning in the rail industry.

The key issues identified in the report are:

- Improved data on workforce capability is needed to establish the technological literacy of the rail industry workforce is needed to assess the extent to which e-learning can be utilised, and in which situations.
- To effectively develop or implement e-learning in the industry, data is needed regarding the perceptions of e-learning within the industry, to ascertain the willingness of employees to use this form of learning, and managers' knowledge of the benefits and requirements of this type of delivery.
- The industry needs to look at ways of sharing e-learning resources, and the report suggests the creation of an industry level "learning objects repository" which could comprise access to tools, learning objects and generic courses that which could be customised for different organisations.
- Collaboration is also suggested – such as the formation of virtual network, or champions –to share knowledge and skills for e-learning best practice, to provide advice and guidance, and to address potential uses of emerging technologies such as mobile devices and smart phones.
- Identification of the most appropriate technologies for e-learning needs to be considered, to enable customisation by individual organisations within their existing systems – particularly if a learning objects repository is developed.
- Documentation of clear models of e-learning to guide decision-makers in determining e-learning needs and applications is also critical. This could take the form of information booklets, tools, case studies, models and benchmarks which can then be adapted to suit individual organisations, and to provide an avenue for setting common standards that will assist sharing information.
- Along with resources to assist in developing e-learning, there needs to be specific emphasis on identifying appropriate methods of evaluation of e-learning, and identification or development of

shared resources to enable a rigorous approach to evaluation to measuring the benefits gained from e-learning such as cost savings, improved ease of statutory training and reporting, and development of skills across the workforce.

Finally, it should be noted that a number of the opportunities for e-learning mentioned in this report have potential links to other CRC projects. For example, the development of an e-learning repository may provide other projects with a place to situate training objects or other resources for skills development.