New Technologies for Future learning - Providing training options in fire behaviour training

Annette Salter
Faculty of Education, University of Tasmania, Tasmania & Bushfire CRC

Contact details:

Annette Salter

Email - Annette.Salter@utas.edu.au

Phone - 03 62 26 7880
Applications of multi-media education strategies in fire behaviour training is a...  
...3 year PhD Research Project and

- provides contemporary approaches to workplace learning and training,
- aims to enhance fire behaviour training and
- work with fire sector trainers in planning their professional development.

This presentation....

- provides a synopsis of this research
- looks at current best practices and describes possible scenarios
- gives a brief introduction to the adult learning landscape
Seeking better ways of.....

- delivering training and
- connecting current research knowledge to workplace learning and practices.

Supported by the Bushfire CRC....

- fire mitigation and management
  - BCRC Program A - Jim Gould
- applying emerging theories of adult learning & developing of expertise in new models and tools
  - BCRC Program E - Christine Owen.

Contribution

- Strengths and weakness of existing training approaches

- How can delivery and development improve through educational multi-media applications?

- Effective training approaches to deliver new research material
Project phases...

- Literature review and audit of current practices
- Design of evaluation instrument
- Interviews and trainer profile
- Collaborative Design Workshops
- Trialling of new framework
- Observations and data collection
- Evaluation of model and report on evaluation instrument

Benefits

- Innovative learning products for end users
- Best practices in adult training and education
- Building learning models to meet specific industry needs
- Generic framework and learning model suitable for resources and training development in fire and land management
Adult learning landscape and best practice initiatives

How can current knowledge and expertise in adult learning inform training in fire behaviour?

We need to better understand...

- how we learn,
- how understanding transfers within organisations and
- the role of technology in learning.

Learning is about making meaning

By reflecting on experiences, the learner constructs his/her own understanding of the world.

Learning within organisations and alongside colleagues

By working effectively with colleagues to share knowledge as a community, and to strive to enhance and enable its members.

The importance technology plays in learning.

By using technology to enhance the learning experience.
Technology embedded in training

1. Technology plays a important role in our lives
   a) Integral in everyday lives and in our work
   b) enables communications
   c) Provides easy access to information
   d) Currency and relevancy

2. Plays a critical role in learning
   a) Communication, information and access
   b) Up-to-date and shaped to meet individual needs
   c) Flexible and just-in-time

Technology and learning

1. Resources - based learning
   a) Technology based learning
   b) Distance learning - online or e-learning
   c) Computer, web based or wireless

2. Information and communication Technology (ICT)
   a) Resources to enhance learning
   b) Learning tools
   c) Software to support learning
   d) Content and information sources
   e) ICTs to support professional development
Simulations

Visualization of Fire in Landscape and wildland-Urban Environments

Problem-based learning

Wildland Fire: Safety on the Fireline
Scenario-based learning

Scene Savers – Communicating for safety at a fire incident

360° VR and Google Earth

360° VR and Google Earth

总结

- 不同的成人学习和培训方式
- 如何将这些技术应用于火行为培训？
- 什么构成高质量的学习体验？
Contact details:

Annette Salter

Email - Annette.Salter@utas.edu.au

Phone - 03 62 26 7880

Thank you for your interest

References