

Seriously improving learning outcomes using Gamification and Game-based Learning in IT-related Training Courses

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ABSTRACT

This presentation demonstrates how to use Gamification and Game-based Learning as a tool in training courses and workshops – with a specific focus on supporting the effective use of IT infrastructure and data storage.

Gamification – the concept of adding game elements to a non-game situations – is an excellent fit for IT-system related training course and workshop delivery because it increases participant engagement by transforming learning into an enjoyable and engaging process. Gamification can be used to effectively facilitate mandatory learning activities (such as IT security policy, OH & S, etc.) that are often viewed as a chore by many participants.

Gamification and Game-based learning can also help foster competitiveness in the classroom or workplace to drive performance. It is also a valuable tool for enhancing cooperation and teamwork – vital skills for sustaining an organisation during a crisis. For example, exercises and drills that simulate high-pressure emergency situations can test an organisation's IT-related Disaster Recovery Plan, Business Continuity Plan and Incident Response Plan, and can help identify weaknesses and to help organizations be better prepared when real incidents occur.

Highlights of this presentation include:

1. **Gamification 101** – what it is and, more importantly, why you should be using it!
2. **How to incorporate gamification into existing training materials** - including simple techniques that highlight how the use of gamification can change how training is delivered, increase participant enjoyment and drive home learnings by creating memorable teaching moments.
3. **Techniques for making gamification sustainable** - by periodically refreshing and reinvigorating materials – vital for realizing long-term gains and in situations where training topics are delivered regularly to the same audience.
4. **Tips and tricks to prevent “out-gaming”**– where students achieve high scores whilst circumventing learning value of the exercise, and fostering inclusion to reap increased benefits for larger classes.
5. **How to apply continuous innovation** – to maintain interest and value.

Gamification and game-based learning – seriously improve learning outcomes via gamified-training.

ABOUT THE AUTHORS

Mark McPherson B.Inf, CISSP.

Mark's career has spanned more than twenty-five years in the IT industry, incorporating fourteen years as a security analyst, trainer and manager at Australian (CSIRTs) Computer Security Incident Response Teams, and the last two years as an independent Information Security trainer, course developer and security policy consultant.

Loretta Davis MBA, BA, GradDipCommComput, GradDipQuality, BSI ISO27001 Lead Auditor.

Loretta is a seasoned Solutions Specialist with over 25 years' experience in the IT industry. Loretta has held senior communications, technical and management roles across the commercial, government and higher education sectors and holds tertiary qualifications in languages, information technology, quality management and international business.

Loretta is a seasoned presenter and regularly presents to national and international audiences. For the last 5 years Loretta has focused on operationalizing commercial start-up ventures and improving the viability of existing businesses for venture capitalists and private organisations.

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