#### Dr Stuart Reid - Biography



- Chief Technology Officer for Testing Solutions Group
- Over 30 years' experience in the IT industry, working in development, testing and education
  - application areas range from safety-critical to financial and media
- 18 years teaching Software Engineering for Cranfield University
  - undergraduate and postgraduate, civilian and military
- Convener of the ISO/IEC Software Testing Working Group, which is developing the new ISO 29119 Software Testing standards
- Chair of the BCS Specialist Group in Software Testing in the UK
- Founded ISTQB to promote software testing qualifications on a global scale

#### Involvement in Teaching Testing Engineers



- Founder of ISTQB
  - member of ISTQB Exam Working Group
  - member UKTB Accreditation Panel
- Convener ISO WG26 Software Testing Standards
  - producing an agreed testing knowledge-base
- CTO of Testing Solutions Group
  - internal and external training

# Challenges/Opportunities - Universities



- Most Universities treat testing as a second class option
- Testing is not given adequate time in the curriculum for an activity that typically takes over 30% of the life cycle
  - Testing takes up proportionately more time than:
    - analysis; OR
    - design; OR
    - programming
  - BUT testing is normally taught as an add-on to programming or an optional specialism
- Most university professors have no practical testing experience and do not perform research in practical areas
  - so struggle to convey the reality of testing
  - and communicate little or no enthusiasm

### Challenges/Opportunities - Training Providers



- ISTQB does not provide practical qualifications
  - ISTQB certificate holders:
    - Can remember theory
    - BUT may have few or no practical skills
    - HOWEVER they have made the effort to advance their careers
  - many training providers mis-sell the courses as if they are the answer to everything
    - and many employers do not understand the value of the qualification
    - originally the main purpose was to ensure the quality of testing courses rather than the quality of testers

## Challenges/Opportunities - Testers' Skills



- Techies
  - Too technically-oriented
  - Lack of business awareness
  - Testers find it difficult to represent the users
- 'Exes' (Ex-Business, Ex-Helpdesk, etc.)
  - Poorly trained and educated in IT (& testing)
    - but this is less common in Asia
  - Lack of IT knowledge
  - Testers are not respected by the developers
- Very few testers can relate business risk to technical testing choices

#### Challenges/Opportunities - Career Paths



- Most organizations promote Testing Engineers into management roles
  - skilled testers become managers and so most of their testing skills are underused (and wasted)
  - many test managers try to manage with few management skills
- There need to be (at least) two career paths
  - test management AND technical testing
    - test consultancy (improvement) would be useful, too

#### Challenges/Opportunities - Rewards



- Most organizations reward developers better than testers
  - and then act surprised when some of their best people move from testing to development
  - and use this as an excuse to reward testers less than developers
  - it's a vicious circle we must break