

# Introduction to SGI and business support systems



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Serious Games Institute  
[www.seriousgamesinstitute.co.uk](http://www.seriousgamesinstitute.co.uk)



“An international centre of excellence for the application of video game, virtual world, mobile application and associated technology to serious social and economic issues”



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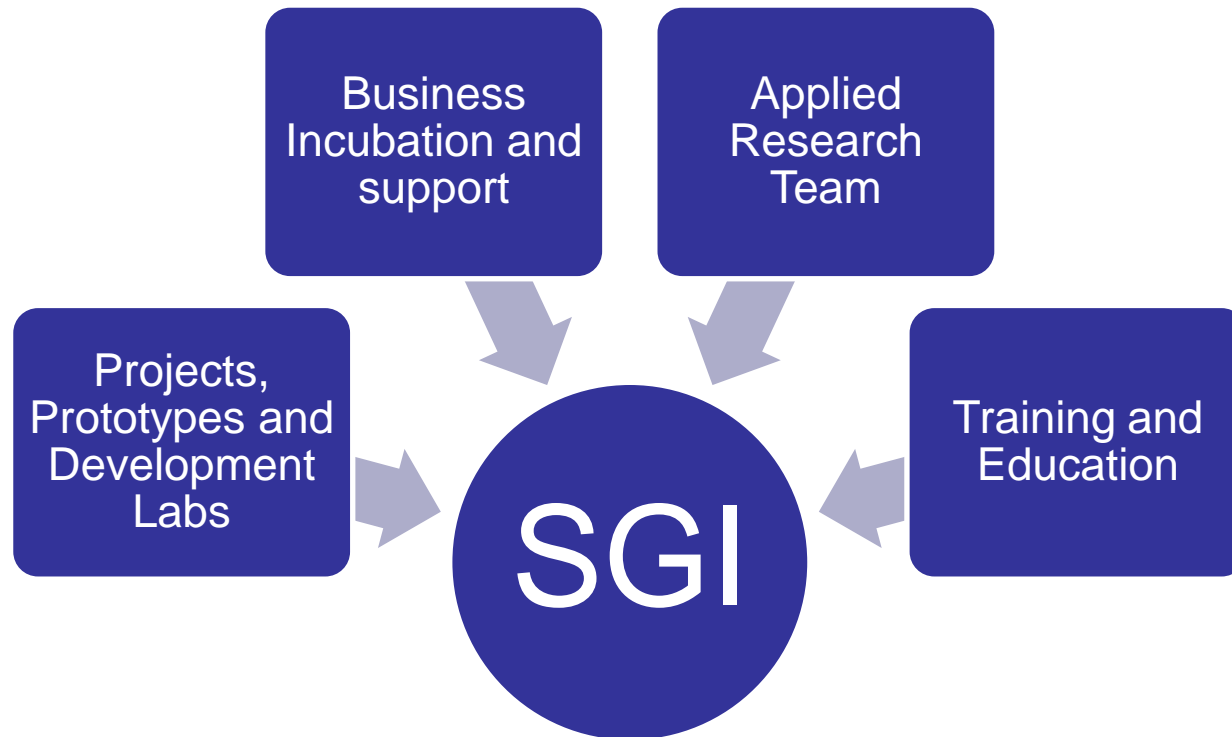
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# Background SGI

- The world's biggest-selling franchises were born in Britain including Lara Croft: Tomb Raider and Grand Theft Auto
- By 2000 the UK was at the forefront of games development and independent studios were growing rapidly to keep up with a world demand for the content they were creating.
- After USA, Japan and Canada the UK is the fourth largest producer of video games in the world.
- The UK's interactive media industry employs approx 40,000 people, representing 10% of the creative workforce
- 160 Digital media companies in the midlands

# SGI Model



# Variety of Projects

- Herbert Gallery
  - V-trade Demonstrator
  - Virtual Far Gosford Street
  - Serious Games Studio
  - Sexual Health for Parents
  - Maternal Health
  - Gloucester Language Centre
  - Smarter Working
  - Virtual Stratford
  - BAE Systems
- Shakespeare Byte Size  
FIRE  
Daphne – CAVA  
I spectrum  
Me, Myself & I  
Irish Tourist Board  
EFFMIS  
Cluster 2020  
Study Tour  
Strategy Game

# Training and PG Courses

Mobile applications

Collaborative technologies

Virtual worlds for business

Masters in Serious games

PhD opportunities



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# Singapore SGI



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# SGI South Africa



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# What are Serious Games?



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# What is a serious game?



- A **serious game** is a game designed for a primary purpose other than pure entertainment



# In the beginning...

- Americas Army
- 1st released 2002 as recruitment game
- 8 million registrations by 2007
- 26 more versions
- Now available as xbox and mobile game
- Cost \$33 million





# Serious Games and Virtual Worlds



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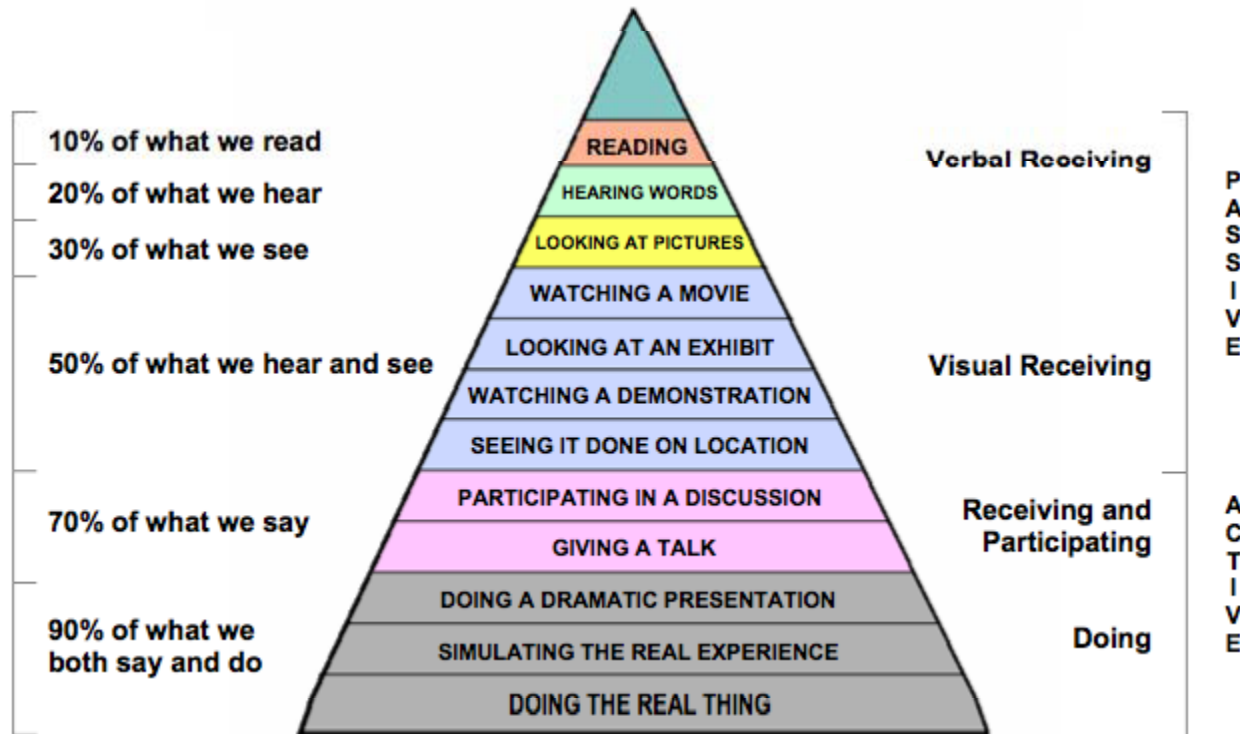


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# CONE OF LEARNING

## WE TEND TO REMEMBER OUR LEVEL OF INVOLVEMENT

(developed and revised by Bruce Hyland from material by Edgar Dale)



Edgar Dale, *Audio-Visual Methods in Teaching* (3<sup>rd</sup> Edition). Holt, Rinehart, and Winston (1969).

# Triage Trainer

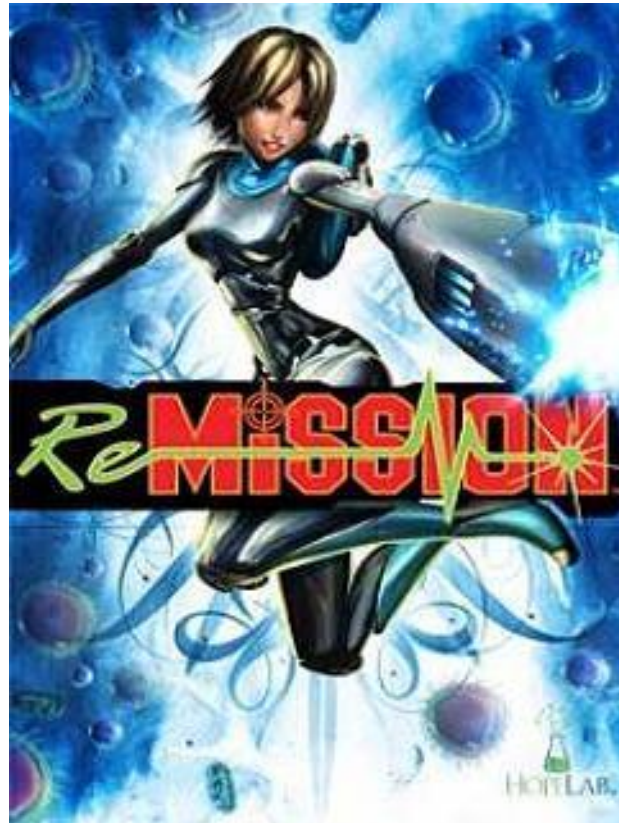


- <http://www.youtube.com/watch?v=rDwYomkKwos>
- TrueSim is a division of Blitz Games



# Triage Trainer

- Triage trainer trial summary: 5 trials: September 2007 – January 2008
- Independently conducted by the University of Birmingham
- Trial participants: 91 UK NHS doctors, nurses & paramedics
- trial results game trainees versus non-game trainees: **significantly higher accuracy (28%)** than the non-game group
- **no significant difference** on time taken ( $p > 0.05$ )



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# Gamers make better surgeons

- Studies by Iowa State University psychologist Douglas Gentile and Dr. James Rosser, head of minimally invasive surgery at Beth Israel Deaconess Medical Center in Boston, compared surgeons who play video games to those who don't.
- They found, even after taking into account differences in age, years of medical training and the number of laparoscopic surgeries performed.
- One study of 33 laparoscopic surgeons found that those who played video games were 27 percent faster at advanced surgical procedures and made 37 percent fewer errors than those who didn't.



# Games in the White House



Constance Steinkuehler is on an 18-month assignment at the White House, studying the civic potential of video games



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# How we work with businesses

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# How do we work with businesses?

- In partnership
  - As subcontractors
  - As commissioners
  - Consultants
- Providing research
- Business support
- Leading Innovation
- Showcasing and dissemination

# Partnership

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- Aims to improve the work based social interaction skills of people on the Autistic spectrum through a virtual work environment



# New Connections:

the BT e-Archive Project



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*HM Queen Elizabeth II opening the public Subscriber Trunk Dialling (STD) system by making an automatic telephone call to the Provost of Edinburgh from Bristol Telephone Exchange*

A FORTH TRUSTED NAME



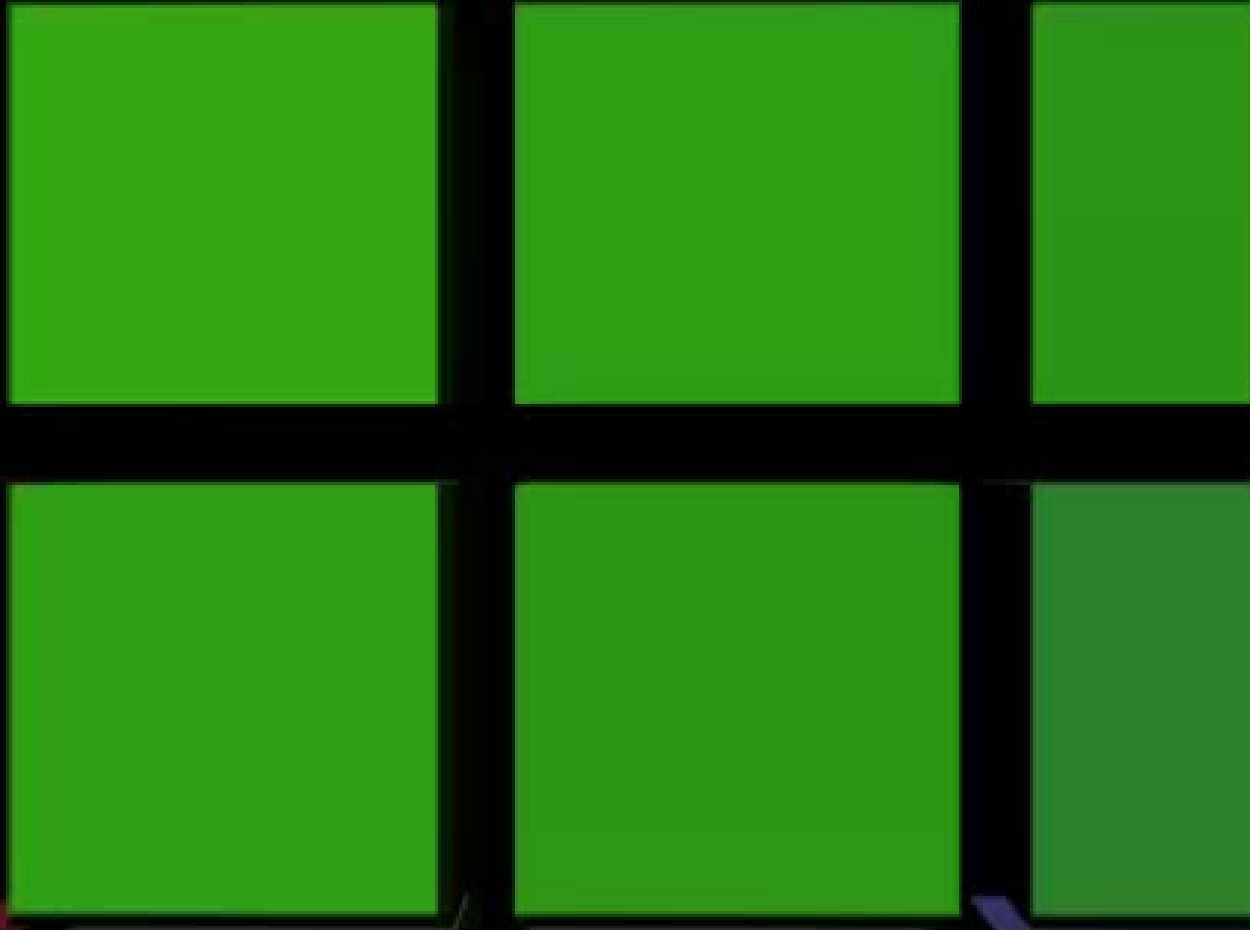
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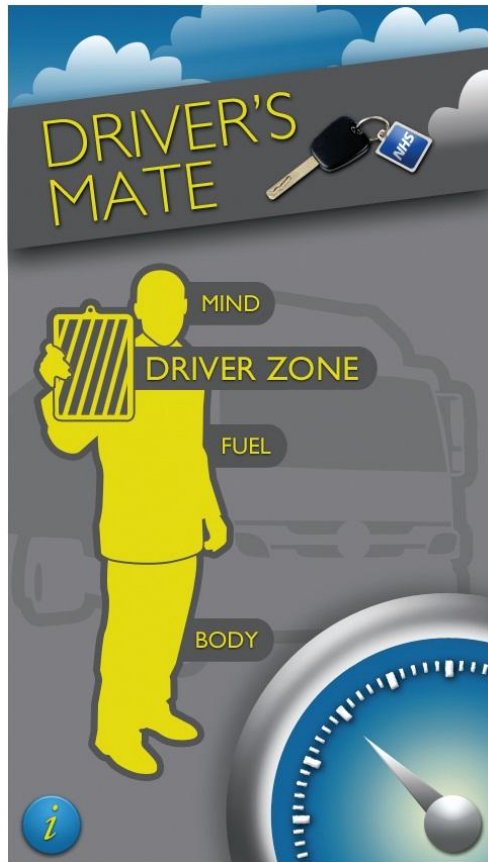
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# Immersive Language Learning Game





# Drivers Mate



Mobile wellbeing for  
mobile workers

Cost saving

Increased  
productivity

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# Research Assistance

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# Serious Games and Pedagogy: Experiential

- **experience-based learning** is well-suited to games. **Situated learning** has been incorporated, that is, information used in context through a creation of a setting close to reality can easily be transferred to the real world.
  - Simulations such as that
  - used by the military
  - often use this model.





# Triage Trainer



- <http://www.youtube.com/watch?v=rDwYomkKwos>
- TrueSim is a division of Blitz Games

# CAVA

## Changing Attitudes to dating Violence in Adolescents



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# Current Research Projects



- Aspis
- Inspire – Jisc
- Masetlov
- Simaula



CUSTOMER



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# Business Support

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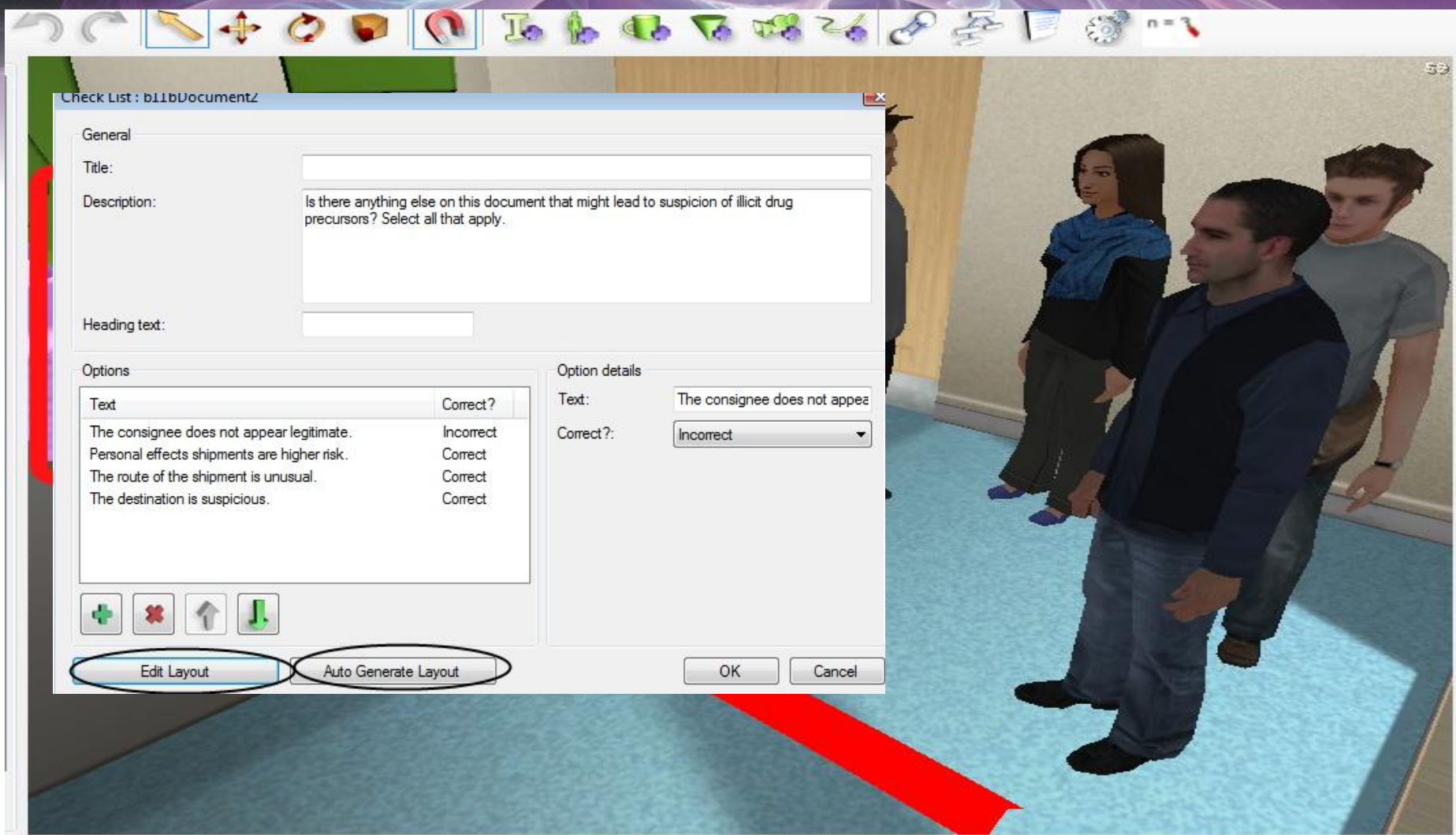
# Serious Games Business Support

- 9,500 SMES working with us annually
- 300 Projects running simultaneously
- 3 Institutes: SGI  
ICE  
HDTI
- Voted most Entrepreneurial University 2011
- Assistance with funding, bid writing

# Serious Games Business Support networks

- Working with networks EEN, EBN, UKTI
- ENoLL – Living Labs
- Games for Health UK
- Prototype Labs
  - Games
  - Mobile
  - Act UK
  - Rapid Prototyping





# Thinking Worlds – no programming required

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# Leading Innovation

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# Maternity Game Based Learning



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# Games for Safety



# Shakespeare Byte Size



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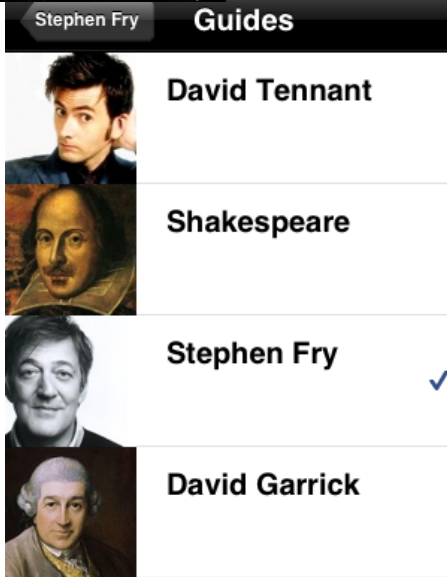
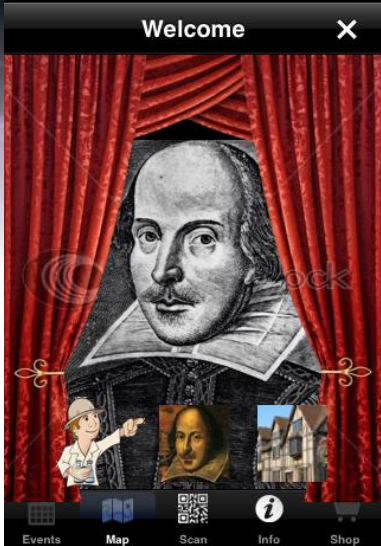


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# Augmented Reality



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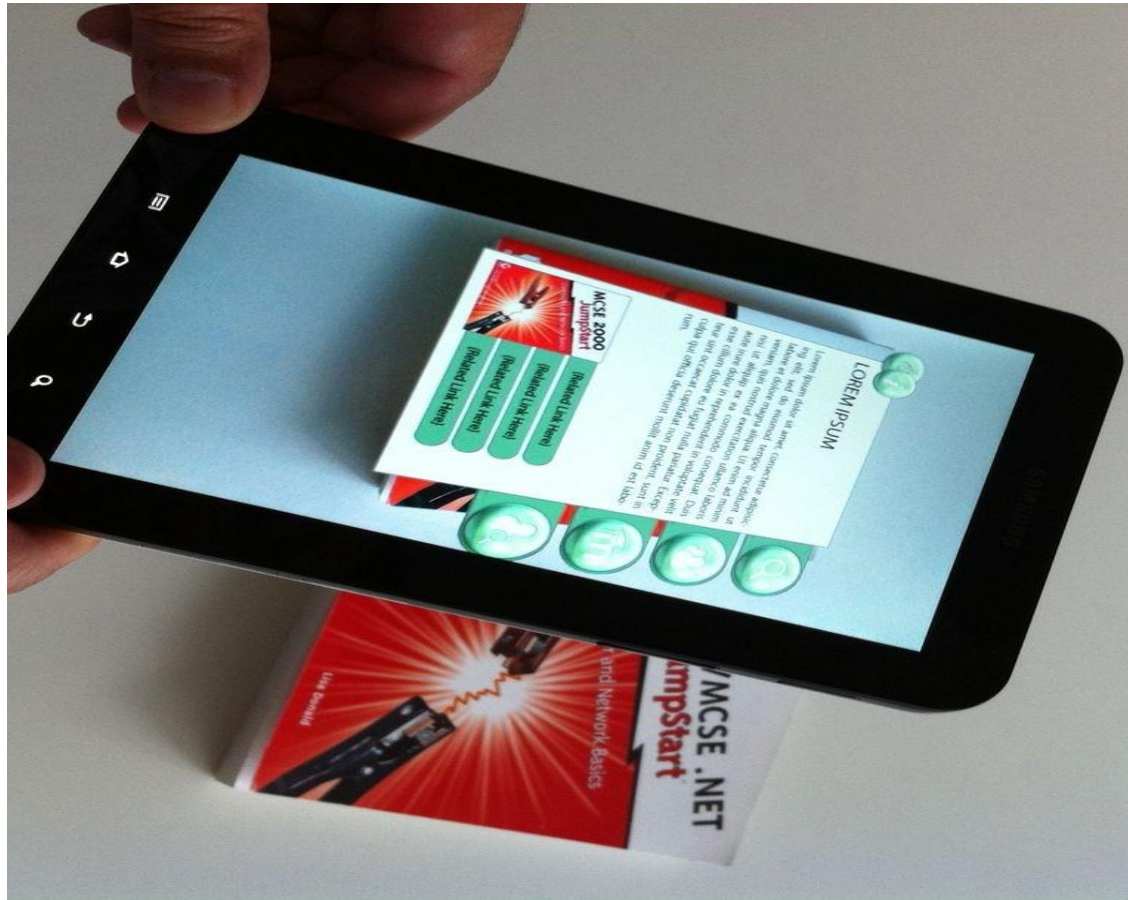


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# Object Recognition



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# Brain computer innovation



SGI introduced Neurosky to UK games developers

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# Lighting Simulation



# Showcasing and Dissemination

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# SGI Global Partners





# What we do

- Innovation
- Collaboration
- Knowledge transfer



We make learning fun

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Thank you for listening

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