Immersion, creativity and teamwork: The three factors of collateral learning
About Jacob

Jacob started as a graduate of Informatics, then moved into Computer Science, Software Engineering and Information Systems. His current work involves Business Analytics and Information Visualisation.

In his free time he is involved in competitive foil fencing, fine arts and some extreme science!
Teaching in Physical Space

Immersion - The sharp end of IS

Jacob is always looking for new ways to reinvigorate his classroom teaching.

For example, he has been very successful incorporating elements of his favourite sport of fencing as a vehicle for team building in Project Management classes and for teaching Business / IT Alignment.
Teaching in Virtual Space
Immersion – Professional Skills

- Jacob employed eSimulations to assist teaching of soft skills in professions.
  - E.g. in business analysis
  - eSims characters are used to train soft skills, e.g. in interviews, meetings, negotiations and provision of advice.

- In eSims students are asked to plan, conduct and report on the sessions.
  - Interview success is tracked and assessment is linked directly to the interviewing performance, fact finding, decisions taken and actions planned.
Teaching in Virtual Space
Dissemination of Business Analysis eSims

1st Generation (Live Sim) - Deakin

2nd Generation (Avatar Sim)

3rd Generation (Templates)

Future Gens (Shared)

RMIT
Business Requirements Analysis

Workshops model - Success and fun

- All class activities are assessable
- No exams and no assignments
- Do all work in teams – learn from peers not teachers
- Work in teams even when assessed individually
- Team work is privilege not an obligation
- Encourage reliance on own knowledge, research skills and ingenuity
- Have simple rules of engagement
- Make compliance an option not law
- Learning = side-effect of enjoyable activity (collateral learning)
- Make readings and preparation optional but make them work
- Cut down lecture time – students learn more by doing than by listening
- Encourage students to explore, discover, take risks and improve
- Emphasise problem-solving rather than facts, combine structure with creativity
- Mix methods = games, simulations, cases, visual and communicative actions
- Recognise creativity and reward insight

- Make attendance optional but ensure that absence leads to lost marks
- Encourage taking on different team roles, i.e. leaders, facilitators, reviewers
- Make standard achievable and excellence a habit
- Teach as a team to give examples of team work
- Encourage independence but provide ample guidance when requested
- Provide challenges to go ahead of the pack

Above all make it fun!
More on BRA

Sample projects

- Analyse interests of various stakeholders in the hypothetical invention of turning a combination of blue gum woodchips, water and oxygen into petrol.
- Look for a possible solution to the reduction of noise pollution associated with late-night truck deliveries to large supermarkets.
- Suggest new uses for the “SAS Wall”

In students’ words

- I love this format
- Yes, gets me to class
- Interactive group learning is an excellent progression for teaching
- Working and communicating in groups helps strengthen each student’s knowledge
- I love how this unit is assessed weekly as opposed to small assignments and one big exam at the end of semester
- Love peer learning
- Low stress
- Assessment based on actual learning not exam
- Due to the casual nature of class, it’s a great working environment
- Staff are great
- You doing me proud
- Give us more chocolates [re: workshop with sweet treats]
Curriculum design (with experience) motivated by needs of staff & students. It illustrates a shift to the use of online media on-demand, reliance on personal BYO devices, workshop/studio style of learning and de-emphasised role of lectures.
Teaching Business Analytics

Creativity - Data, Sense, Action

Interactive

Intuitive

Informative & Actionable

Geolocated

Immersive & Engaging
Teaching Business Analytics - Process

Business Simulation
Visual Analytics
Business Decisions

Shop and Rate

Conduct Visual Analytics

Make Decisions
Available Infrastructure
SAS VA Collaboratory

- Motion, Gesture & Voice
- Large Displays
- Team
- Virtual Reality
- Gaming Technology
- Analytics
- Touch
Passer-By Analytics
Learning by Casual Users and Public

Fully immersive game with motion tracking for collateral learning of Business Analytics concepts by passing-by business students (with the use of a specially constructed large screen located in the building foyer)
Summary

Collateral Learning

Learning as a unintended side effect
Learning which is active
Learning which is enjoyable
Learning everywhere
Learning with friends
Learning without stress
Learning without compulsion