Online Business Simulations
PEDAGOGY | ASSESSMENT | LEARNING

BUSINESS GRADUATE CAPABILITIES FORUM

www.bizsims.edu.au

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Challenges in Business Education

- Large cohorts
- How can students develop and practice **business capabilities**?
  - Reports and essays are limited
  - Business plans and case studies not dynamic / interactive
  - WIL experiences often focused on operational skills
  - Exams and MOOCs largely content-based
- Can we provide large cohorts with a learning experience where students sharpen their managerial skills through regular feedback?

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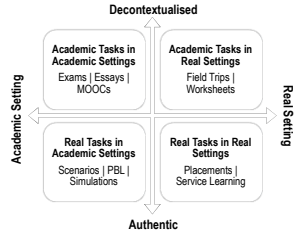
Authenticity Matrix

(Herrington, Reeves and Oliver, 2010)



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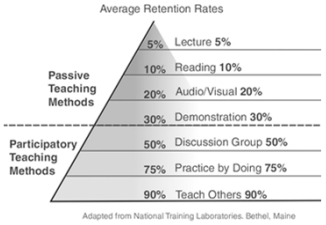
The Learning Pyramid



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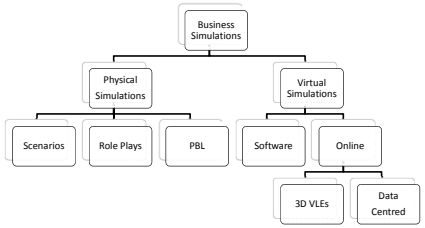
What are Online Business Simulations?



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What are Online Business Simulations?

Complex simulations designed to teach strategy, competitive analysis, finance, marketing, HRM, cross-functional alignment, and the selection of tactics to build a successful business.

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Project Aims

- Map the **features** of online business simulations.
- Evaluate the contribution of simulation-based **pedagogies** to **student learning outcomes**.
- **Identify** and **promote** innovative **pedagogies** and **resources** for using online business simulations as learning tools.
- Assess the **challenges** associated with the integration of simulations into sustainable teaching practice in business.

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Project Resources

- Simulations Audit
- Simulation Learning Barometer
- Case Studies
- Good Practice Guide
- Website www.bizsims.edu.au
- National Workshops

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Why simulation-based learning?

(Lateef, 2010)

- Applied to many different disciplines
- A technique (not a technology) to amplify real experiences
- Mostly “immersive" in nature
- Experiential learning
- Authentic learning

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Why simulation-based learning?

(Biggs, 1999; Feinstein, Mann, & Corsun, 2002; Fripp, 1997)

- Developing skills in a safe and risk-free environment
- Make errors that do not have real repercussions
- Enhance participant's enthusiasm and motivation to actively learn
- Encourage collaborative learning

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Why business simulations?

- Most business programs are among the largest fields of studies UG/PG students
- Integrate the various elements of running a business
- Experiential learning environments that replicate workplace tasks
- Opportunity for manageable large class capstone learning experience

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Why business simulations?

- Authentic and dynamic team-based learning experiences
- Mirror real world problems
- Develop employability skills
- Need to reframe/rethink teaching practices

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Why online business simulations?

(Adobor & Daneshfar, 2006; Bowness, 2004)

- Apply critical thinking and decision making in a non-linear environment
- Decisions/actions lead to complex and unexpected outcomes
- Develop graduate capabilities and strategic decision making skills
- Continuous feedback to help students understand the outcomes of decisions
- Technology enabled learning available any time, any where

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What do students say about bizsims?

- The best aspects of using simulation is that it is close to a **real life scenario**, but at the same time it allows us to **make mistakes**
- I think it's definitely better than any other course at the uni, because it's **practical** and **you really make something happen** and it's not only about theory
- Sometimes we had **arguments** but in the end we used the data to prove which decision was better

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What do students say about bizsims?

- We really had to **work closely together** because every decision made by each group member could affect our performance
- Due to the fast pace of the simulation we really develop **problem solving skills** that help us to **make decisions** quickly

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Simulations & PBL

Benefits of simulations	Benefits of problem based learning
▪ grasp the interrelationships among the various functions of business	▪ develop knowledge that can be applied in many situations
▪ problem solving	▪ skills in problem solving
▪ decision making skills	▪ evidence based decision making
▪ self awareness	▪ enhance intrinsic motivation
▪ communication skills	▪ collaboration
▪ sense of accomplishment	▪ self-directed lifelong learning
▪ active and dynamic learning experience	
▪ realism without severe risks of failure	

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Learning outcomes

Learning outcomes are considered to be multidimensional:

- Cognitive learning can be described as developing an understanding of basic facts
- Affective learning is where the simulation participants perceive that they learn, hold positive attitudes and satisfaction
- Behavioural learning can be described as simulation participants taking the facts and formulating correct decisions or actions

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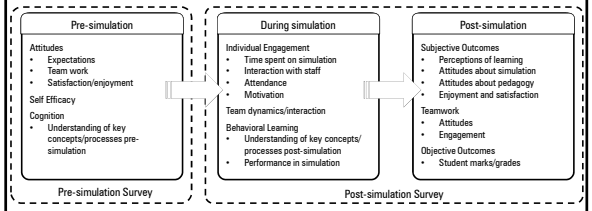
Simulation Learning Barometer



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Pre-Simulation Expectations

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Post-Simulation Learning Outcomes

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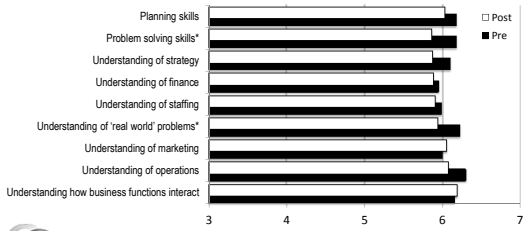
Learning Outcomes: Skills & Knowledge



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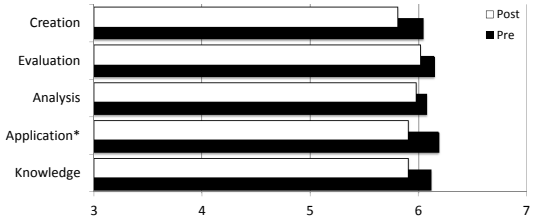
Learning Outcomes: Blooms Taxonomy



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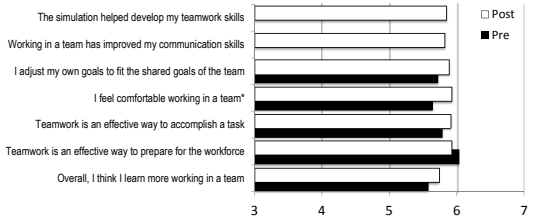
Perceptions about Teamwork



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Authentic online learning environments

(Herrington, Reeves and Oliver, 2010)

1. Authentic context
2. Authentic tasks and activities
3. Expert performances
4. Multiple roles and perspectives
5. Collaborative construction of knowledge
6. Reflection
7. Articulation and presentation
8. Coaching and scaffolding
9. Authentic assessment

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Simulation Pedagogies

- Map out expectations (time, team roles, instructor as a 'guide on the side')
- Give students time to learn from trial and error, trials or practice rounds
- Provide support (e.g. videos, demos, manuals, flow charts)
- Encourage collaboration (e.g. facebook, skype, wikis)
- Align learning outcomes
- Use complementary pedagogies (e.g. field trips, industry speakers, mentors, cases)
- Link curriculum to events in the simulation, use class time for debriefs
- Assess learning (not time or effort spent on the simulation)
- Aim for authentic learning and assessment (Herrington et al. 2010)

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Assessment

Assessment aligned with learning outcomes and simulation tasks

- Team interaction (e.g. peer evaluation, video, wikis)
- Reports and presentations
  - Proposals or plans
  - Company performance
  - Competitor analysis
- Reflective assessment
- Performance metrics
- Quizzes

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Student Reflection

The simulation provided a great challenge to push myself to deal with a complex environment, project task management, leadership, problem solving and team relationship management.

Detailed planning, quick reactions, keeping cool and encouraging team members are four major skills I learned from the operation of the simulation.

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Some challenges…

For Educators

- Commercial packages require additional funding
- Steep initial learning curve

For Students

- Time is compressed
- Some variables cannot be simulated
- Students become too engaged
- Not a solution for all team work problems

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