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Theme assessment and feedback: Can a business simulation game (BSG) provide support and address learning and assessment criteria?

ABS ‘Innovation and the student experience’
Nottingham 23-24th April 2013

Dr D Sloan, Dr A Robson, Dr I Charity, Dr T Nguyen, Dr A Purdie
Issues addressing

• The role of business simulation game (BSG) as an educational tool, selection
• Challenges – staff and students (Clarke, 2009)
• How to address programme learning goals
• Effectiveness as an assessment tool
• Effectiveness as a pedagogical tool
• Contribution of BSG to student learning

Provides an overview of current research investigating the impact of the implementation of a BSG with both UK and overseas postgraduate students from a range of business and management disciplines in a post 1992 university.
Role of business simulation tools

Underlying theory:

• Theoretical perspectives
  – motivation (Aldrich, 2003)
  – analytical skills (Chakravorty, 2005)
  – decision making and adaptable learning (Aldrich, 2005)
  – behavioural (Sherpereel, 2005)
Methodology

Voluntary survey - 300 Masters students targeted using BSG as summative assessment, 190 initial responses

- Scale questions to assess:
  - teaching environment anxiety, cohesiveness, enjoyment,
  - group cooperation and technology adequacy
  - perception of usefulness with respect to investigation, interpretation, analysis and application

- Consideration of final assessment performance
- Assessment of overall experience and satisfaction
- Indicate levels of previous experience relating to:
  - the key business functions
  - aspects of decision making data,
  - provide indication working in teams
  - use of the BSG as a learning tool

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Initial Considerations I.

Selection of BSG
- Widely used simulation software, based on the European Car Industry.
- Permits decisions on the four key business functions of finance, HR, marketing and operations in the execution of organisational strategy.
- Encompasses a level of uncertainty and associated complexity.
- Work volume requires team engagement.

Challenges
- Team membership is imposed, rather than voluntary, accounts for gender and nationality mix.
- Equity of input/participation in teams, assessed by classroom monitoring and anonymous questionnaire, potential for staff to join group meetings.
- Biggest single challenges – business theory (45%), the simulation itself (36%), relatively less problematic fellow team members (19%).
Initial Considerations II.

Link to programme learning goals
- Central to the assessment of specific PG goals and objectives, for all Masters students.
- Group presentations (given by participants on a rolling basis) used to assess leading discussion and communicating complex issues.
- Demonstration of decision making and problem solving, alongside knowledge of the key business functions.
- Demonstration of working in diverse teams and making a personal contribution to team effectiveness.

Effectiveness as assessment tool
- Allows the demonstration of the linkage between theory and practice.
- Playing over a number of game rounds, permits the development of trends in KPIs, with consideration of breadth of organisational assessment.
- Critical evaluation of strategy realisation, decision making and team working.
Findings I.

Effectiveness as a pedagogical tool

Contribution to student learning

I had a positive experience working as part of a team

I consider a business simulation a positive way to learn
Findings II.

• Limited significant differences in potential for voluntary take-up of a business simulation, except males being more positive (1% level).

• Limited significant differences in seeing the positive value in working in a team, except the older the age-band, the more positive (1% level).

• No significant differences in viewing simulations as a positive way to learn.

• All three areas above are independent of previous subject (functional knowledge and decision making approaches) experience.
Challenges

• Preserving positive outcomes relating to team working, but look at its perception amongst the younger students.

• Reinforce greater understanding of the mechanics of the simulation, its assumptions and interpretation of its output.

• Make more explicit the link between the business functions and associated theory with the practice of strategy and decision making.
Further Research and the Future

- Further roll out of the survey instrument.

- Assessment of the linkage between the learning environment, student attitudes towards the BSG and performance in summative assessment.

- Qualitative considerations by means of student interviews around the key challenges of the game – experiences, linkage of theory to practice, the simulation and team working.

- Any questions?
References