

Developments in Business Simulation and Experiential Learning, Volume 29, 2002
LEARNING MICRO-OB SKILLS WHILE MAKING TOP
MANAGEMENT DECISIONS IN A MULTINATIONAL
INDUSTRIAL FIRM

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ABSTRACT

We present a new kind of simulation that combines macro-level concept mastery and problem solving with micro-level skill-building. Such integrated learning experiences increase learning while reducing total class time. Roland Chem covers themes of organisational behaviour, communication, group dynamics, organisational design, management, strategy, business policy, marketing, accounting, and multi-national business.

Participants will play key roles for 45 minutes, after which there will be a brief discussion of typical debrief themes and dynamics, followed by a broader debate about the development of other simulations on similar principles in order to build micro-level skills while students are learning macro-level concepts and problem-solving.

PART ONE: BASIC DATA

Objectives of the session:

1. Present a new kind of large-scale classroom simulation that combines macro-level concept mastery and problem solving with micro-level skill-building.
2. Allow participants to play a subsample of key roles in the simulation just long enough to get a feel for its potential and limitations.
3. Encourage a broader debate about how we can develop other simulations on similar principles in order to build micro-level skills at the same time as students are learning macro-level concepts and problem-solving.

Target audience: Instructors of organisational behaviour, communication, group dynamics, organisational design, management, strategy, business policy, marketing, administration and control, or any other discipline or field related to multi-national business issues.

Time needed: minimum 90 minutes: presentation (20), playing (45), debrief (25).

Ideal number of participants desired: 10, to be divided into five groups of 2. Note that we can accommodate multiples of this number as long as there are sufficient cubicles.

Materials & equipment, and room setup required:

- ◆ Classroom with videobeam or overhead projector. We would like to project a PPT file, but if such facilities are unavailable we could make slides of our presentation.
- ◆ For each ten participants, we will need five cubicles, each with a desk, 2 chairs, and either a networked PC or an internal phone connected to the other cubicles.

**PART TWO: THEORETICAL
GROUNDING AND RELEVANT
CONSTRUCTS**

Concepts fundamental to the classic management functions can be taught using lectures, readings, and experiential exercises, but this is no guarantee that students develop the capacity to forge these abstract concepts into toolkits, and use those toolkits in the real world (Baldwin & Ford, 1988, Bonwell & Eisen, 1991). ABSEL and the Organizational Behavior Teaching Society have both been focused on creating opportunities for students to practice using toolkits (see many articles in *Simulation and Gaming* and *Journal of Organizational Behaviour* and its predecessor journals, as well as Vance, 1993).

These opportunities tend to come in two varieties; simulations and experiential exercises are both about building skills, but often have different structures and focus. Simulations often take the form of business games played by competing teams of students, and are focused on the "hard" content being taught (e.g., decision-making in one or more functional areas). Experiential exercises are often focused on developing "softer" or micro-level process skills (e.g., communication, negotiation, cross-cultural awareness). There have been relatively few attempts to develop intensive learning experiences that focus simultaneously on both "hard" content and "soft" skills (for exceptions, see Hogarth and Ginzler, 1993; Mundell and Pennarola, 1999). What is needed are opportunities to test "soft" skills on "hard" problems,

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whereby participant behaviour visibly affects their performance.

PART THREE: OUTCOMES AND PEDAGOGICAL IMPLICATIONS

In this interactive session we offer participants a chance to play a bit with Roland Chem Truck, Ltd, a new type of simulation designed to integrate student learning of “hard” concepts and problem-solving skills and “soft” process and relationship skills. It is our experience that such integrated learning experiences are an effective way for instructors to cope with the increasing pressure put on us to increase the amount of learning that students acquire while reducing the total time spent in class.

We will spend the first 20 minutes explaining Roland Chem in some detail, including the didactic objectives, structure, and rules of the game, and the types of programs and courses where we have used it. Participants will then be divided into five geographical divisions and given one of two functional roles to play for 45 minutes. Each pair of functional roles will then negotiate with the other four pairs, in an attempt to maximize the overall results for the firm. The final 25 minutes will be spent in a broader debate about how we can develop other simulations on similar principles in order to build micro-level skills while students are learning macro-level concepts and problem-solving.

PART FOUR: IMPLEMENTATION ISSUES

- ◆ High level of maturity and motivation of most participants
- ◆ Prerequisite basic skills (good business English communication, ability to use a simple windows-based PC spreadsheet program to enter data and receive feedback, negotiation)
- ◆ Prerequisite functional competences possessed collectively by each team, but not necessarily by every single player: basic terminology in strategy, marketing, operations management, administration and control, quantitative analysis, organisational design.
- ◆ Diversity of participants: optional concurrent use of MBTI (before and after) to effectively and dramatically show the effect of personality differences on micro-OB processes and macro-level decisions that determine team results.
- ◆ Debrief themes:
 - Strategy adopted and alternatives discarded or not considered.
 - Effectiveness of individual behaviours within the group (problem solving and decision making)

- Effectiveness and efficiency of intergroup dynamics (eg, communication, negotiation)

PART FIVE: NOTES TO THE FACILITATOR AND DISCUSSION POINTS

- ◆ The task is very challenging but the performance of the participants is directly dependent on their individual and collective organisational behaviour, both within and between groups.
- ◆ In many different learning contexts, strong emotions are often experienced, including frustration, elation, pride, anger. These emotions sometimes have a strong impact on the game dynamics.
- ◆ Effectiveness of the game in achieving participant mastery of macro-content objectives (industrial integration/globalization interfunctional conflict, cross-cultural management)
- ◆ Effectiveness of the game in demonstrating to participants the importance of micro-level skills in order for them to achieve macro-level objectives.
- ◆ Recognition of personal strengths and areas for development among the micro skills necessary to perform well (communication, negotiation, and decisionmaking within and between groups).
- ◆ Potential for combination with other learning modules (e.g., use of MBTI to enable participants to reflect on the ways that personal differences affect individual performances and group dynamics).
- ◆ Possible applications of the simulation in different learning contexts

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A brief description of the simulation and its roles (below)

ROLAND CHEM TRUCKS, LTD:
A ROLE PLAYING SIMULATION

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DESCRIPTION AND PURPOSE

Roland Chem Truck, Ltd is a two-part simulation designed to sensitise participants to issues of communication, integration, and leadership in a global setting with opportunities for collaboration and competition within functions and among production centres. The scenario is set in an industrial sector that is experiencing rapid concentration of firms in a rapidly globalising market. Financial acquisitions have resulted in strong shareholder pressures to find creative ways to cut costs through integration of the industrial activities of the separate continental-based divisions. There are also cross-pressures for process innovations and local customisation. The idea of the first author was to develop something with the flavor and richness of the Looking Glass simulation, but with a future-oriented content. The aim was to give people a chance to experience micro-level behavioral processes while dealing with the pressures of the shareholder value paradigm and complexities of industrial integration and globalization.

Based on individual role briefings, participants spend two half days playing roles in one of five divisional task forces, under strong pressure from shareholders to achieve industrial integration. It is a sort of interactive in-basket exercise conducted in five interacting groups of 4-7 participants each. Roles include Divisional General Manager, VP of Marketing, VP of Production, VP of HR, VP of Administration and Control, VP of Information Technology and Ecommerce, and VP of Finance. Face-to-face communication among the teams is tightly controlled to reflect geographical distance, while teleconferencing, groupware, or other software (e.g., Netmeeting) can be used to reflect modern communications infrastructures.

Players and teams gain instant feedback from a software support package, and continuous feedback from the instructors during the simulation and especially between the two rounds. By behaving “as if” s/he were that person with those responsibilities, participants gain insight into the way behavioural processes interact with organisational and business issues. The objective here is not “to win” so much as “to experience” a situation with some familiar and some unfamiliar elements. To mimic the real world, information about the competitive situation and the production functions are imperfect, and communication is limited to reflect geographical and budget realities. Participants are encouraged to surface and make note of their feelings during the process for collective reflection during the debrief.

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HISTORY OF USE

Roland Chem Truck, Ltd was developed in Spring, 2000 by the authors for use in an executive training and masters-level courses in Organisational Behaviour, Organisational Design, and Human Resource Management. It has proven quite flexible, having been used successfully in two international masters programs, open-enrolment catalogue executive training courses, and in-company customised executive training programs. **However, we do NOT recommend this course for use in first year undergraduate programs, as it presupposes basic knowledge in accounting, strategy, operations and production, human resource management, and information technology.** It is available in English and Italian.

PDF FILES INCLUDED IN SIMULATION FLOPPY DISKS:

- Teaching notes
- Common background briefing
- 35 individual role packets
- Airline tickets
- Spreadsheet templates for data entry
- Network software to provide real time feedback to participants
- Installation instructions and backup technical support contact information

NECESSARY ADDITIONAL RESOURCES

1. Players: 20-35 per game
2. Instructors: one
3. Teaching Assistants: one or two, depending on energy level of instructor and number of participants.
4. Copies of common background briefing distributed well in advance to all participants.
5. Copies of individual role packets distributed at the end of the day before the simulation is played (to minimise pre-game communication among friendship networks).
6. Copies of "airline tickets": depends on number of players.
7. Cubicles: five per game, each with a networked PC with a microphone and speaker, or a stand-alone PC and a speaker-phone. The networked PC option allows participants to receive real-time quantitative feedback based on what they input into the simulation's custom software. With stand-alone PCs, participants will only get quantitative feedback after submitting their input via floppy disk transfer (which must be managed by the teaching assistants). If the PCs are connected to the internet or an intranet, then there are various software available to facilitate inter-group communication (e.g., we have successfully used *Netmeeting*)
8. Spreadsheet templates installed on each PC, or else custom simulation software loaded and pre-tested on network
9. Classrooms: one, preferably with a phone and networked PC (for plenary sessions for pre-brief and debrief, and to serve as instructor HQ during the simulation). A videobeam to broadcast results from the software would be nice, but is not strictly necessary, as overhead transparencies can be made, or a table can be hand written on a whiteboard.
10. Time: two half days, preferably separated by at least one evening. It is possible to complete it all within one day if participants already know each other well.