

# On-line/Off-line: Joint Negotiation Teaching in Montreal and Vienna

Sabine Köszegi, School of Business, Economics, and Computer Science, University of Vienna, Bruennerstrasse 72, A-1210 Vienna, Austria (Sabine.Koeszegi@UniVie.ac.at).

Gregory E. Kersten, School of Management, University of Ottawa, 136 Jean-Jacques Lussier, Ottawa, Ontario, K1N 6N5, Canada (Kersten@management.uottawa.ca).

#### Abstract

E-business systems, the most recent generation of information systems, can be effectively used in teaching. One such system was developed and used in a collaborative project that involved teaching of negotiation theory and practice to students from Austria and Canada. The system provides customized course materials and a platform to conduct various e-negotiation activities. The design allows combining e-learning technologies designed to support students in their independent and individual learning with conventional face-to-face training. Our experience indicates that professional negotiation training accompanied by e-learning, and tools to support decision-making and negotiation can foster students' appreciation of the technology as well as demonstrate its limitations. The combination of technology-intensive and conventional resources contributed to students' awareness of social influences on negotiations, importance of communication, and focussed their attention on the problem and its solution. Deeper customization of the course content and delivery may further contribute to effective learning and acquiring both communication and analytical skills.

**Key words:** e-learning, negotiation, e-negotiation, simulation, experiential learning

#### 1. Introduction

Internet, e-business systems, and systems such as artificial software agents, and e-negotiation systems (ENSs) offer new opportunities for social interactions, including, decision-making and negotiations. At the same time, these technologies pose some challenges to remote negotiators, who have to get used to new support tools and interact in a virtual environment. This calls for a comprehensive negotiation training, which takes both factors into account, the training of conventional negotiation skills, as well as the training of specific skills associated with the use of sophisticated information and communication technologies.

In the past decade, technology-based teaching and learning has increased considerably (Chai 2003). Several learning technologies, such as computer-supported learning systems, collaborative systems, and immersive presence systems have been developed (Lucca et al. 2003). Computer supported learning systems focus either on the support of individual learning processes on a local computer or enable students to access course contents in distance learning systems. Systems, ranging from e-mail and Internet chat-rooms to sophisticated group and negotiation support systems, provide collaborative learning environments. Immersive presence systems provide virtual reality implementations. Lucca et al. (2003) argue that high-order learning objectives, which in the past required co-location of learners, can now be achieved in a distributed mode. This suggests that the use of e-learning technology is appropriate for both the training of conventional negotiation skills as well as new technology-related skills.

Many of the untrained and often inexperienced students come into the classroom with the assumption that negotiation is a matter of "winning and losing" and that "tough negotiators get the bigger part of the pie." These prevalent theories-in-use need to be challenged and new alternatives for behaviour need to be offered. Hence, negotiation simulations, role-plays and case studies are some of the most often used methods to teach conventional negotiations skills (Byrnes 2000; Susskind and Corburn 2000).

Research in pedagogy has demonstrated that experiential learning is the key method to challenge the learner's existing theories-in-use in order to integrate new ideas, concepts and principles into cognitive patterns and thus change thought patterns and actions (Susskind and Corburn 2000). Experiential learning includes a structured experience followed by a reflection leading, through abstraction, to generalization. To allow for integration of new insights into subsequent behaviour, another structured experience should follow. A carefully structured debriefing with a strong focus on analysis of the negotiation simulations is crucial for experiential learning: "Debriefing is everything. I can't imagine

people getting much value from simply doing a series of negotiations" (Wheeler, cited by Susskind and Corburn 2000; p. 302). To reflect these requirements, a course design needs to integrate a balanced set of the following elements: (1) readings and discussion of theoretical concepts and case studies; (2) negotiation simulations; (3) structured debriefing of experiences, and (4) individual reflection to foster experiential learning. Therefore, the challenge in the design of a technology-intensive negotiation course is to combine traditional and successful elements of conventional negotiation training with new forms of computer-supported learning.

In the fall of 2002 we jointly offered a comprehensive course on negotiation to students from both sides of the Atlantic. Gregory Kersten taught "Negotiation management, analysis, and support" at Concordia University, to 13 MBA students and Sabine Köszegi taught a graduate course "International Negotiation" at the University of Vienna in which 27 students participated. Although the courses were offered and credited at each university individually, the course activities were coordinated and a series of inter-university e-negotiation simulations were conducted. The same system provided course materials, questionnaires and exercises, and the platform to conduct various e-negotiations. Description of this system and its architecture is given in Section 2. In this section we also discuss the course design and its delivery. In Section 3, our experiences with this collaborative teaching experiment are presented. Section 4 contains conclusions and future work.

# 2. Negotiation course in mixed-mode delivery

For pedagogical reasons, we decided to deliver the course in a mixed-mode setting, involving a balanced mix of on-line and in-class activities. On-line activities included individual learning of theoretical concepts, individual exercises, and collaborative negotiation simulations supported by ENS systems. In-class activities were focused on debriefing of on-line experiences, discussion of challenging theoretical concepts and face-to-face negotiation simulations.

### 2.1 The course architecture

The negotiation course web site is at http://mis.concordia.ca/negotiations. The course is IT-intensive in the sense that a large part of the course is implemented as an e-business system (Buffam 2000). All course materials, negotiation cases (except for the cases used in face-to-face simulations), questionnaires, exercises, and readings are outputs of the system. This system has 4-tier client-server architecture of e-business system (Fournier 1998): a client, a web server, an application server and a database (see Figure 1). Microsoft IIS is the web server used to receive and process users' requests, and to dispatch web pages. The application server is Macromedia ColdFusion. It is used to process users' re-

quests passed from the web server, communicate with the database server, build dynamic web pages, and run simple programs used for the management of students' records, customization of the course delivery, and course management. The database server (MySQL) is used to store all course materials and information about students, universities and instructors. Macromedia ColdFusion and MySQL are also used to provide students with self-directed questionnaires and processing of the results.

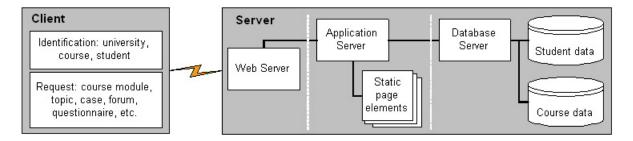


Figure 1. 4-tier course IS architecture

The delivery of the course materials to students from different universities requires tailoring of the content to the particular course requirements. In our case the complication was that students in Montreal begin their Fall courses in September while in Vienna they start in October. Because of different starting dates, the course modules had to be configured for each course separately. This was done through the identification of students' log-ins. The modules were released on a weekly basis and displayed in the sequence selected for the particular course. Despite the difference in course starting dates, some modules and collaborative assignments were shared between students from Montreal and Vienna.

### 2.2 The course structure and views

The course covers most important concepts from the economics and game theory paradigm as well as social psychology with the focus on interpersonal aspects of negotiations. It has 12 modules with each module being structured into 8-12 topics. Each topic is considered as a separate learning object that can be broken into smaller text and graphic components stored in the database.

There are two main views of the course materials: the module view and the topic view. The module view is illustrated in Figure 2; in this view all modules are presented on the left-hand side of the page and a list of topics for the selected module is displayed in the main part. Each module begins with objectives and is followed by several topics. Every module has a link to additional readings, a link to a discussion forum, where students and instructors can post messages and questions to engage in discussions on course topics, and a link to a glossary containing key definitions.

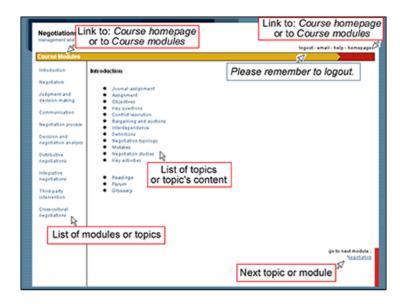


Figure 2. Structure of course the course: modules and topics

The second view is the topic view presented in Figure 3. The selection of a topic within a module leads to the replacement of the list of modules with the topic list. The main part of the page contains the learning object, which is a self contained topic description with examples and illustrations. Additionally, with the selection of a topic, a link to the student's individual workspace becomes available.

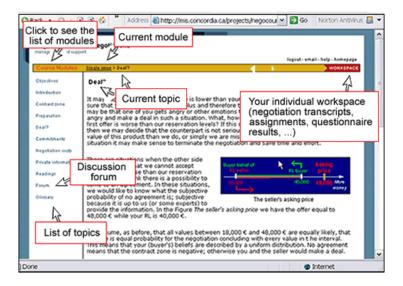


Figure 3. Structure and content of of topics

The theory presented in the modules is complemented by examples that demonstrate basic concepts and mini case studies. In addition, students have access to on-line questionnaires (such as the Thomas-Kilman questionnaire) and on-line activities (for example, students are asked to describe a personal conflict and comment on a conflict situation of another student).

## 2.3 On-line negotiation simulations

One major innovation of this course is that students are engaged in bilateral web-based negotiation simulations. In the Fall term, students conducted four different e-negotiations. The cases ranged from relatively simple single issue negotiations at the beginning of the course to rather complex multi-issue negotiations at the end; each lasted between 2 days and 3 weeks.

For the joint e-negotiation simulations, two ENSs were used. One relatively simple support tool consists of several ColdFusion programs to provide a communication platform to exchange messages and offers, which are stored in the negotiation database. The second system, the Inspire ENS provides, in addition to the communication platform, analytical and graphical tools support (Kersten and Noronha 1999).

The use of ENSs for training purposes has several advantages. First, the simulations are not restricted to one or two hours which is the case for conventional teaching. The negotiations can be extended to several weeks or even months giving students more time to prepare and to actually negotiate. Second, more complex cases can be constructed not only because of extended preparation time but also because of the support tools allowing students to deal with complex problems that involve many issues and trade-offs. Third, web-based technology provides the possibility to simulate negotiations in an international setting. Conventional cross-cultural negotiation teaching requires the use of role-plays which, as Susskind and Corburn (2000) point out, have both advantages and disadvantages.

# 2.4 In-class meetings and assignments

The course is designed to facilitate individual "anytime and anyplace" learning. Nonetheless, in-class meetings are deemed essential to provide students with physical contact and face-to-face discussion. They are used for face-to-face negotiation simulations, discussion of differences in verbal and non-verbal communication, recognition of differences of face-to-face and computer-mediated negotiations, inter- and intra-cultural communication, and other issues of theory and practice of negotiations. To-gether with the instructor, students draw conclusions from individual experiences and discuss how to apply them in alternative contexts. In the Fall term, six three hour in-class meetings were scheduled every second week and provided sufficient time for conventional training of negotiations skills, debriefing, and coordination of on-line activities.

Additionally, students were required to write reports about on-line negotiations and keep a journal with weekly entries about activities during the course to encourage reflection. The students were also asked to specify their expectations for the course and their personal goals in the first journal entry

and to evaluate goal attainment in their last journal entry. This allowed for evaluation of the effectiveness of the course and the specific training tools.

#### 3 Lessons learnt

The discussion presented here is based on students' assignments and journals, and our own experience as instructors. Perhaps not surprisingly, the students' evaluation of the course was very positive; experiential learning often leads to a positive feedback of learners because of their active involvement. Almost all students reported instances, where they successfully integrated insights gained in the course into their private life.

The experience of both instructors in teaching decision analysis courses demonstrated that the practical relevance of certain topics, e.g., subjective utility theory, is often difficult to appreciate. Students often feel that "this mathematical stuff" is too theoretical and the exercises in which modelling is used may appear artificial. The initial reaction of many students in this course to the modules on decision analysis and utility theory was very similar. They could see the importance of the psychological and sociological aspects of negotiations but not the analytical and formal perspectives. Students' perception was that while it might be possible to "calculate almost everything" such an approach is not useful in real-life problems and interactions. The significance of the simulations of difficult and complex negotiations that were realistic, as well as the use of analytical tools proved the importance of clarification and structuring of preferences, specification of feasible alternatives, and formulation of trade-offs. A rigorous and analytical approach to the negotiation problem and one's own interests proved to be relevant and helpful to the students who did not have prior negotiation practice and to the students who previously participated in various negotiations.

Another advantage of the course design is that experiences could be achieved in various negotiation settings (on-line vs. face-to-face, national vs. international) and with negotiation problems ranging from very simple to highly complex. During the in-class meetings, we discussed and evaluated differences between face-to-face and web-based negotiations, and supported and unsupported processes. Although students found it difficult to "read" the intentions of their negotiation partners in enegotiations they got used to this new setting and started to develop skills to "read between the lines" and use the asynchronous mode of the negotiation to their advantage. Predictably, they found that enegotiation allows for more time for preparation, the assessment of offers and counter-offers, the possibility to integrate time in tactics (e.g. exert time pressure on the opponent by staying inactive until the deadline is close), and making use of the analytic support tools.

The anonymity of e-negotiations gave some of the students the possibility to experiment with different approaches and improve their negotiations styles. Students used self-assessment tools and were able to use different approaches to the negotiation. With some success they experimented with different negotiations styles and reflected on their new experiences. Also, missing cues about gender, status or race in e-negotiations as opposed to face-to-face negotiations gave students an opportunity to reflect on how these issues impact negotiation processes and outcomes. Some female students have chosen gender-neutral negotiation names for their e-negotiation activities and reported that communication was easier in the anonymous e-negotiation setting.

Students also reported that trust and relationship building were important in both settings, but they found it more difficult to establish a good relationship and build trust in computer-mediated negotiations. This aspect became especially relevant when students were involved in misunderstandings and conflicts in e-negotiations. As mentioned before, most of the students found it more difficult to interpret the behaviour of their counterparts in the e-negotiation setting. As long as they were in a positive circle of reciprocity in terms of concession making and problem solving, the lack of face-to-face contact did not seem to have a negative impact on the negotiation process. However, some students reported about conflicts they were involved in during e-negotiations. The lack of cues such as facial expressions and body language leaves a lot of room for speculation and misinterpretation and makes the on-line handling of conflicts difficult.

With respect to inter-cultural negotiations, the students' experiences were in line with some of the findings of our recent research on the impact of culture on e-negotiations (Kersten et al. 2002). Compared to the in-class inter-cultural role-play, students perceived the effect of culture on negotiation processes to be less severe in inter-cultural e-negotiations. This might be partly explained by the fact that reduced contextual information about negotiations partners as well as less rich communication channels in e-negotiations leave less room for culture specific rituals and behaviour (such as greeting rituals, etc.). Computer-supported negotiations may be more task-oriented than face-to-face negotiations and hence culturally driven social motives may become less relevant.

Irrespective of technological improvements, collaborative teaching poses some challenges to instructors, support staff and students. First of all, joint teaching projects at two or more universities with different institutional backgrounds calls for some flexibility. As semester schedules and teaching systems are different in Europe and in Northern America, there is a need for adjustment of the course design to restrictions of all university systems involved. For example, due to the different beginning of the Fall terms, the timeframe for joint negotiations was restricted to seven weeks, which meant a fairly heavy workload for students, support staff, and instructors during this period. Secondly, instructors

have to be aware that the organization of e-negotiations is time consuming and requires permanent coordination with collaborators and students. Hence, teaching this course was an on-going process where on-line activities and face-to-face meetings were just altering and where there was no "between the lectures" time.

# 4 Discussion and implications

Much of the criticism against using computer simulation for negotiation training stems from the scepticism, that social skills cannot be effectively acquired through human-computer interaction (Shell 1995). Saunders and Lewicki (2000) value the advantages of using technology support for negotiation training, but they also claim that computer simulations cannot model the complexity of real-life negotiations. This course design is situated in the middle-ground between traditional negotiation courses using technology exclusively to support face-to-face simulations and e-learning courses, designed to support students in their independent and individual learning process. The design combines advantages of both concepts: exposure to new e-learning technologies and to conventional face-to-face negotiation training.

The reality is that some negotiations are already conducted remotely and asynchronously. The lack of face-to-face contact poses additional challenges to negotiators as it introduces situations in which reading the cues is not possible or not advisable. E-negotiations allow for the development of skills that are otherwise difficult to obtain and not well appreciated. The ability to express own feelings, to manage conflict, and to build trust in a virtual environment can also be advantageous for face-to-face situations. Our limited experience indicates that a professional training in communication and support tools can foster negotiators' awareness of social aspects of negotiation, and their communication and analytical skills. The application of the utility theory and negotiation analysis through the implementation of analytic support tools helps students understand the relationship between the theory and practice of negotiations.

E-negotiations lessen the time pressure and invite students to experiment more with their negotiation and communication styles. The anonymity of this setting removes social pressure, which is present in classroom meetings. This clearly indicates a pedagogical value of computer-supported learning concepts.

Based on our experiences and students' comments we plan to redesign and enrich the course. Students involved in difficult e-negotiation situations suggested that they would like to reflect on negotiation processes with their actual counterparts to understand their motives and behaviour. We plan to implement such an option and also to add voice and video communication channels. Other techno-

logical changes include automatic e-mail notification and moving the customization level to the student and sub-topic levels. At present the customization of the course materials is at the module level: modules can be easily sequenced and each module delivered at the required time. Thus tailoring of the module content and sequencing its topics to deliver short courses and seminars is not possible. Also, at present, students may be required to respond to questions posted on the course page but the content of the pages does not depend on their responses. Therefore, it is not possible to provide students, who did not correctly solve a problem, with additional exercises, explanations or readings. This type of customization to individual experience and performance should contribute to the enhancement of students' learning experience.

## **Acknowledgements**

We wish to thank Emilie Fournier for her graphical design and programming and Ka Pong Law for his support in all issues concerning the course delivery and rapid redesign of programs. We also thank Gordon Lo for the coordination of the Inspire negotiations. This work was partially supported with the Initiative for New Economy of the Social Sciences and Humanities Research Council Canada, and the EU-Canada TrainIT Project.

# **Bibliography**

- Buffam, W. J. (2000). *E-Business and IS Solutions. An Architectural Approach to Business Problems and Opportunities*. Boston, Addison-Wesley.
- Byrnes, J. F. (2000). Negotiating with Your Professor: An In-Class Simulation. *Teaching Negotiation: Ideas and Innovations*. M. Wheeler, Ed., Cambridge, PON Books: 369-378.
- Chai, L. (2003). "To Have or to Have Not: An Examination of Feedback, Learner Control and Knowledge Type in Online Learning". *HICSS*, R. H. Sprague, Ed., Hawaii, IEEE Computer Society: CD-Rom. 10 Pages
- Fournier, R. (1998). A Methodology for Client/Server and Web Application Development. Upper Saddle River, Prentice Hall.
- Kersten, G., S. Köszegi and R. Vetschera (2002). "The Effects of Culture in Computer-mediated Negotiations." University of Vienna.
- Kersten, G. E. and S. J. Noronha (1999). "WWW-based Negotiation Support: Design, Implementation, and Use." *Decision Support Systems* **25**: 135-154.
- Lucca, J., N. C. Romano and R. Sharda (2003). "An Overview of Systems Enabling Computer Supported Collaborative Learning requiring Immersive Presence (CLCLIP)". *HICSS*, R. H. Sprague, Ed., Hawaii, IEEE Computer Society: CD-Rom; 9 Pages.
- Saunders, D. M. and R. J. Lewicki (2000). Teaching Negotiation with Computer Simulations: Pedagogical and Practical Considerations. *Teaching Negotiation: Ideas and Innovations*. M. Wheeler, Ed., Cambridge, PON Books: 357-368.
- Shell, G. R. (1995). "computer-Assisted Negotiation and Mediation: Where We Are and Where We Are Going." *Negotiation Journal* **11**(2): 117-121.
- Susskind, L. E. and J. Corburn (2000). Using Simulations to Teach Negotiation: Pedagogical Theory and Practice. *Teaching Negotiation: Ideas and Innovations*. M. Wheeler, Ed., Cambridge, PON Books: 285-310.