Developing Communication Skills
Using INSPIRE Negotiations

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Abstract. INSPIRE is a web-based negotiation support system that has been used for the last three years for negotiation training and research. It has also been used in teaching written communication skills. In this paper we discuss implications of using the system in teaching English as a Second Language and English for Academic Purposes in multilingual classes and points out the benefits that this new technology offers. We also show how extending classroom boundaries to remote regions of the world add to increased students' involvement and enhance language acquisition.

1. Introduction

Web provides people in different locations and time zones with a communication medium that is rich in functionality and content and which offers them the ability to use previously inaccessible computational resources. While the Web is currently used as a powerful source for the dissemination of information, it is increasingly being used as a means for active communication, and remote execution and control of complete software systems, thus adding another dimensions to the value it delivers. In education, its ability to access and run remote programs and databases allows users to extend classroom and laboratory boundaries across geographical and time zones.

The InterNeg Web site and its Web-based system INSPIRE have been constructed to exploit these technologies and their use in teaching [1-3]. They aim at providing people around the world with analytical knowledge and decision support techniques within the domain of negotiations. The INSPIRE system allows participants to analyze and solve real-like decision problems and conduct negotiations with people from different cultures.

The INSPIRE system is the first Web-based negotiation support system. It is based on analytical models rooted in decision and negotiation analysis [4-6]. Developed in the context of a cross-cultural

study of decision-making and negotiation, the system has been primarily used to conduct and study negotiation via the World Wide Web as well as in teaching information systems, management science, international management and English as a Second Language (ESL) [7].

In this paper we discuss the use of the INSPIRE system in the context of ESL teaching, and the teacher's and students' experiences. In Section 2 the system, the available resources and the negotiation case are outlined. Section 3 discusses the context and the teaching methodology used to adapt the system for ESL purposes. The implications for teaching communication skills, and the students' and teachers' experiences are discussed in Section 4. Comments about INSPIRE's usefulness for ESL/EAP teaching and the ongoing work on new Web-based resources conclude the paper.

2. InterNeg site and the INSPIRE system

The InterNeg project began in 1996 with the development of a simple Web-based negotiation support system called INSPIRE (InterNeg Support Program for Intercultural Research; http://interneg.org/interneg), [3]. During the last three years over 2,500 students used the system. The host InterNeg site offers services (see http://interneg.org/), including beginners' handouts and information on how INSPIRE can be used in different university courses. Research papers, summaries, examples of students' assignments, a glossary, an extensive bibliography and information about programs and organizations involved in negotiation are also available.

INSPIRE views a negotiation as a process occurring in a particular context. The system does not act autonomously like a third party arbitrator; rather each 'copy' acts solely to support a single negotiator. It supports asynchronous negotiations, thus ameliorating the time zone problem. To facilitate this type of negotiation the system saves the current state resulting from each user's actions in a form that can be retrieved when the counterpart logs in some time later.

2.1 INSPIRE negotiation phases

INSPIRE negotiations follow three phases: an antecedent phase, a concurrent phase, and a consequent phase [3]. The pre-negotiation phase involves an analysis of the situation, problem and opponent, specification of preferences, reservation levels, and strategy. In this phase users read the case, formulate their preferences using simple tables to distribute scores between issues and their values, verify the utility (ratings) of selected offers that are generated by the system and fill in a pre-negotiation questionnaire. The questionnaire contains, among others, questions about the expected compromise and the worst offer that the user is willing to accept.

The negotiation phase involves exchanges of messages and offers, evaluation of offers and the assessment of the progress of the negotiation. Offers comprise the negotiated issues and their values; each offer is formulated by selecting one value for each issue. The offer rating is automatically displayed beneath the table which contains the offer. An offer may be accompanied by a message. Users may also send messages without offers; this feature is often used to prompt their counter-parts by making an additional argument. On a number of occasions users sent messages to communicate with their counter-parts about topics outside of the negotiations; in fact a number of users maintained e-mail communication with their counter-parts after the negotiations were completed.

Users have two mechanisms to assess the progress of the negotiation. They may review the complete history of their negotiations, including offers exchanged, their ratings and the messages. They can also access a graph that displays the negotiation dynamics in their utility space. The negotiation is parallel on all issues. Participants may submit the same offer many times, or keep the option of an issue unchanged, but each submitted offer contains a value for each issue.

The negotiation ends when either a compromise has been achieved, or one of the parties terminates the process, or the time runs out (at a predetermined deadline). The post-settlement phase involves the evaluation of the negotiation outcomes generated by, and after, the negotiation activity. These outcomes include the information about the compromise. If the negotiators can improve their compromise, the INSPIRE provides them with up to five Pareto-optimal offers. In this situation the users may choose to continue their negotiations. The post-settlement phase ends with filling in the post-negotiation questionnaire, which however, is not mandatory.

2.2 Itex-Cypress Negotiations

The negotiation problem involves two companies: Itex Manufacturing, a producer of bicycle parts and Cypress Cycles that builds bicycles. Cypress Cycles, an established manufacturer of high quality mountain bikes, is launching a new line of bikes and requires a type of component that its current suppliers cannot provide. Their first serious discussions for the supply of these components are being held with Itex Manufacturing. Itex is seeking to increase its share of the component market and would like to have the prestige that would come with supplying Cypress, should a profitable contract be signed.

There are four issues that both sides have to discuss. The issues are: the price of the components, delivery times, payment arrangements, and terms for the return of defective parts. INSPIRE users are asked to negotiate on behalf of the company rather than for themselves and told

that their companies are interested in achieving a compromise. They are also informed that there are other suppliers and buyers so a breakdown in negotiations is possible, if a good deal cannot be reached. There is no further indication as to what constitutes a good deal. Each side, however, is given a clear indication as to the desirability of the options (issue values) but only in terms of the direction and not specific trade-off values. By avoiding the specification of preference values, negotiators are able to establish their own priorities within each issue.

In writing the case an effort had been made to make it as much as possible 'culture neutral'. The negotiation situation is of the type that can be encountered anywhere in the world. Also the negotiators' names (which can usually indicate their cultural background) are substituted by pseudonyms. The case is fairly simple and well structured. It describes a negotiation problem that is familiar to users from almost any country, therefore no additional explanations are necessary. Language proficiency of the users was taken into consideration too. The comprehension of the case was tested on a group of students taking Intermediate English as a Second Language for Academic Purposes course at Carleton University.

The description of the case fits one and a half pages. Generally, users find the system very easy to use, and their evaluation of the overall system is favourable. Over 75% of INSPIRE users stated that they would use a system like INSPIRE in real-life negotiations and over 85% would use such a system to prepare themselves to conduct actual negotiations. While the feedback on the INSPIRE system confirmed our expectations, the absolute levels of user acceptance of the system are surprisingly high.

3. EAP/ESP context

3.1 The students

INSPIRE has been used at Carleton University to teach foreign language learners communication skills. The School of Linguistics and Applied Language Studies offers two English as a Second Language Programs. In the Intensive ESL Program the majority of the student population are international students. Some are either planning to enter a regular study program at an English speaking university in North America others learn English to gain a competitive advantage at the job market in their countries. The Credit ESL Program on the other hand, is a language support program for those students who have already been accepted to Carleton on the condition that within a year they receive a B- exit grade in the advanced course of English.

There are three language proficiency levels in the Credit Program: Introductory English as a Second Language for Academic Purposes, Intermediate English as a Second Language for Academic Purposes and Advanced English for Academic Purposes. The Advanced course has two options, i.e. general EAP and English for Special Purposes (ESP), namely Advanced English for Academic Purposes for Engineering Students. The highest level of the Intensive Program and the introductory course of the Credit Program are in fact the same course in terms of the level of language proficiency. The difference is the students' status—visa students (Intensive) versus permanent residents (Credit).

Students enrolled in both programs come from all over the world and have a variety of educational backgrounds ranging from new high school graduates to professionals. The majority of the students however, are in their twenties and have a couple of years of college or university training (particularly those in the Intensive Program).

Over the last three years, the INSPIRE system has been used with the students enrolled in the following courses: the writing workshop at the highest level of the Intensive Program; and in the Credit Program: Intermediate English for Academic Purposes and Advanced English for Academic Purposes (both the general EAP and EAP/EAP for engineering students).

3.2 Communicative language teaching and negotiation

The EAP program at Carleton University uses the communicative approach to language teaching which is based on the following assumptions: language is best acquired when students engage in authentic tasks, when the locus of control is with the student, allowing him/her to take initiative, when the teacher acts mostly as a facilitator, and when activities and tasks mimic real life situations. It is believed that these objectives are best achieved when a thematic approach is used, which allows the students to develop their communication skills and language competency by focusing on a specific topic for a given period of time.

Negotiations require extensive use of communication skills. Although negotiations on the Web do not allow for the use of non-verbal clues (at least not yet), they stimulate the precision of expression in the written form allowing the students to work on developing their writing. The written messages can be carefully thought over and revised many times until the student feels that what he/she has written represents adequately his/her point of view. While writing these messages the students learn how to persuade, argue, show empathy, etc. They also learn to read, understand and follow instructions which are an integral part of the INSPIRE system.

The INSPIRE negotiations lend themselves to the thematic approach to language teaching which is rooted in the theory of language acquisition rather than language learning. The negotiations take about two weeks during which time the students are constantly exposed to the language of business negotiations used in a specific context for a specific purpose. The role-playing situation and the fact that there is a real person on the other side of the negotiation "table" keeps the students committed to the task. They focus on both the process and the product.

The level of difficulty of tasks and language activities grows gradually, and roughly corresponds to the three phases of the negotiation: pre-negotiation, negotiations and post-negotiation. In the pre-negotiation phase the students write and share their past personal experiences with negotiations, read the INSPIRE case and acquaint themselves with their role, read and discuss the example (this is when the vocabulary is introduced in a context), listen to a lecture on the INSPIRE system and take notes (they will need the notes later to write the introduction to their report or essay), rank the negotiation issues and options and fill in the pre-negotiation questionnaire.

During the negotiation the students are required to keep a Negotiation Journal where they record all negotiation related activities, analyze the situation, strategies, techniques and the dynamics, predict their opponent's behaviour, etc. They also share their experiences with their classmates on a regular basis, and engage in language activities such as discussing the language of e-mails, sentence combining, punctuation exercises, and play word games. This is also when the students start writing the introduction and the methodology sections of their report.

In the post-negotiation phase they fill in the post-negotiation questionnaire, evaluate their negotiations, their opponents, and themselves. Finally, they write a report or an essay in which they evaluate their negotiation experience using the information that was made available to them via the INSPIRE negotiation support system and through in-class discussions.

3.3 Organization

Before the negotiation begins, a brief presentation about INSPIRE is made. It is made clear at the beginning of the course that INSPIRE is an important module of the course. However, it is also stated that the final result of their negotiation (compromise or not) and its utility score are not used for grading purposes. This is important because the participants should be able to negotiate in as realistic a situation as possible and be in control of the process. Students may decide to break their negotiations with one company and initiate new negotiations with another.

A demonstration session follows the presentation and it is intended to familiarize the students with the Web, and INSPIRE. They are shown how to log on to INSPIRE, how to construct and send offers using the system, and how to incorporate changes in any of the offers or issues in subsequent visits. The session usually lasts an hour. The instructor uses hard copies of the forms used in the INSPIRE negotiation so that the participants can actually see what kinds of forms they will fill in.

During this session students log in and read the INSPIRE case. At this time they may conduct initial analytical activities: specify the relative importance of each issue and the options for the issues. This information is used to determine their subjective utilities for all possible offers. In many cases the session ends with the student making a first offer to his /her counterpart. Before the session ends, the participants are reminded that they will be notified by INSPIRE via e-mail whenever a message or offer from the counterpart is received by the system. When they receive notification the participants log into INSPIRE to read and evaluate the offer and submit a counter-offer.

4. Experiences

4.1 Students' experience

Students were requested to record every activity they undertook related to their negotiation via INSPIRE. These logs were used for personal assessment of each exchange of offers/counteroffers and messages as well as for discussions. They also helped the instructor to catch and address any problems that may have occurred.

A few participants stated that INSPIRE helped them to see an intercultural point of view. A significant majority said INSPIRE did help them to refine their communication skills. They pointed out they were more concerned with language accuracy and the appropriate level of formality than they normally are while communicating with their classmates. Those who had none or very limited experience with computer technology, were particularly appreciative of the fact that they were not only learning the language but also learning a new medium of communication. Despite the participants' limited experience with the Internet, their ability to achieve expected compromises suggests that the INSPIRE system and Web-based negotiations do not introduce a significant burden or add complexity to the already complex negotiation process.

4.2 Teacher's experience

INSPIRE required different preparation, handling and conduct of the negotiations than face-to-face methods. In contrast to in-class instruction, teaching negotiation through INSPIRE required first as-

certaining the level of Internet expertise of the users. Appropriate training sessions on the Internet may need to be planned before the INSPIRE session starts.

For a teacher whose class conducts a Web-based negotiation the process involves preparation and handling of three major stages:

- introduction to the system,
- the first exchange of offers and messages, and
- discussion following the negotiations, and/or preparation of report or essay guidelines.

The first hands-on class has always been conducted at the computer laboratory. In this session, participants were guided through such steps as logging in, reading the case, submission of rating of issues and packages, and finally the first offer. Deft handling of varying levels of experience and expertise among the participants is of crucial importance here. We found it useful to place one skilled and a less skilled participant next to each other. The role of faculty here is one of a facilitator and his presence after the submission of the first offer, was generally not necessary.

Typical problems that may arise in running an Internet based negotiation are:

- system problems,
- team problems, and
- administrative problems.

System problems include both hardware and software compatibility issues (INSPIRE requires Netscape 3, Explorer 4, or later browsers) and systemic problems (including power shutdowns, and network problems), which may occur in any given time. To ensure successful completion of a negotiation through INSPIRE instructors need to plan and develop effective administrative mechanisms. These may include identifying a module coordinator from a group of participants, who could help the group stay focused and productive during the negotiation. Another possibility is pairing less computer literate students with those who feel very comfortable with the new communication technologies. Once the students have begun their negotiation on INSPIRE there is very little intervention required from the instructors.

After the completion of the negotiations, participants usually want to compare their results. The analysis of experiences can be done in many ways, i.e. informal group discussions, formal presentations followed by questions, formal reports, etc. Individual introspection proved to be most useful for

the executive development programs, while post-graduate students and ESL students preferred class-room discussions.

4.3 Implications for teaching communication skills

Preparation of tasks that keep students' interest for an extended period of time and motivate them to give the best performance they can has always been one of the challenges faced by language teachers. The INSPIRE negotiations have the elements of a game and a role play and provide the students with a "real counterpart" with whom they are going to exercise their skills of persuasion and argumentation. The combination of these factors contributes to raising students' commitment to the task and to increased awareness of the need to use appropriate and accurate language. The communication that occurs comes as close as possible to the "authentic" communication. The students themselves are responsible for initiating responses and for the outcome of the negotiations. They control their moves and actions.

The fact that their identity is concealed reduces the intimidation factor. And although the negotiation may miss on spontaneity, it certainly allows for the analysis of the situations, for the preparation of strategies and tactics and for revisions of messages. Finally, some students exchange e-mail addresses with their counterparts and keep corresponding like the traditional "pen" friends.

The submission of offers and counteroffers which are accompanied by written messages, the Negotiation Journal, class discussions and the use of the resources available on the Web such as questionnaires, graphs and the possibility to check the history of the negotiations creates an environment in which the language is acquired. The words whose meaning may have appeared vague at the beginning become part of the users' active vocabulary. The language of argumentation and persuasion develops because it is needed to gain concessions.

5. Conclusions

Systems such as INSPIRE offer an opportunity for direct participation in a negotiation and thus create a platform for experiential learning which is deeply rooted in the theory and practice of negotiation training. For many participants the level of involvement is considerably higher than in the traditional classroom role-playing. This is largely due to the fact that each participant is fully responsible for making all decisions and for communicating them to their counterparts. Hence, the locus of control lies with each participant.

The flexibility of Web based systems facilitates customization of the case material to reflect regional specifics. It is also easier to bring about a discipline-based orientation in teaching and training sessions. The systems can be tailored to reflect, say, a behavioral, decision theoretic or any other focus to suit local teaching and training needs. This is very useful for management teaching and training where different modules are often combined to reflect the particular focus of a course. Web pages are very good at representing context, and independent Web pages may be assembled by a dispatching system that determines which page to present, based on a given situation.

The successful use of INSPIRE in teaching communication skills in ESL courses prompted us to develop a dedicated Web site for this purpose (http://interneg.carleton.ca/interneg/training/esl/). The site contains a 16 hours class-time module and a detailed timeline of language activities. Over 200 students from Canada and Germany used the module. The materials available include students' handouts, examples, a glossary of terms, detailed instructor notes, description of students' activities (e.g., examples of the negotiation journal, sentence combining, collaborative dictation and essay guidelines), and writing models. The suggested timeline of student's activities is presented in the table below. More information about the module, the timeline and specific activities can be found at the Web site.

References

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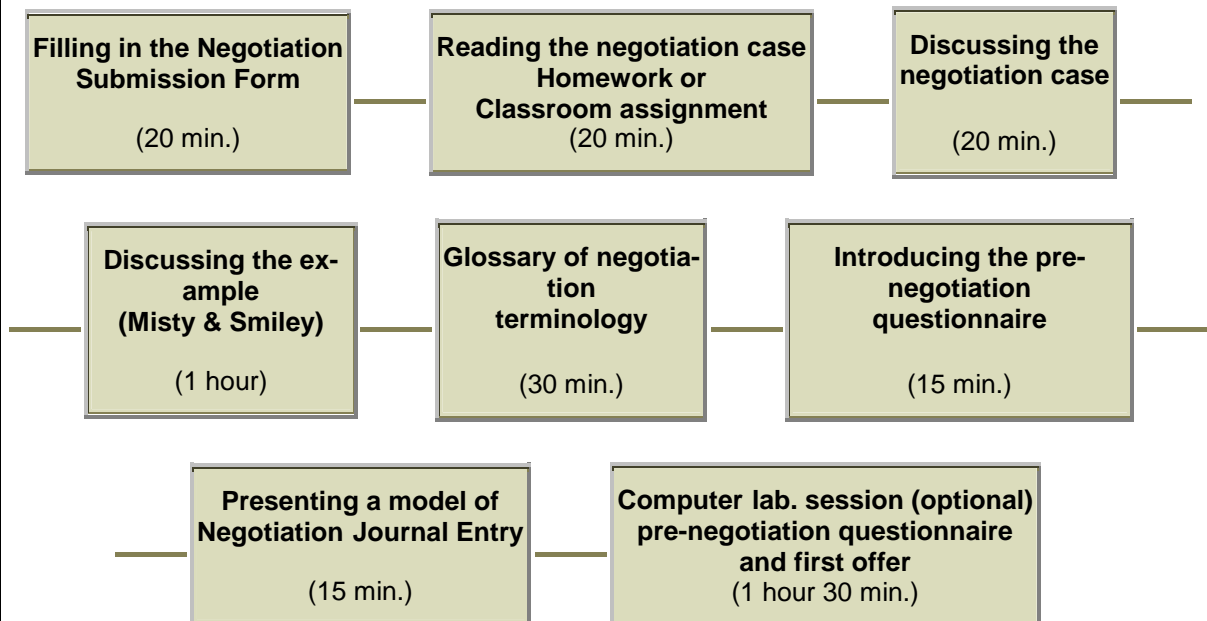
INSPIRE

esl

ESL Module Timeline

The ESL materials prepared for this Negotiation Module, take about 16 hours of classroom time. The actual negotiation occurs outside of the class as part of homework assignments and takes about 1 hour and 30 minutes.

Below is a map of activities that gives a general sense of how much time each activity may take. Please note that at the beginning of each class in Part B & C the students should read their negotiation journal in small groups. The objective of this activity is twofold:

1. practice of oral communication skills,

2. sharing of negotiation experiences and bringing to the teacher's attention any problems that may occur.

Part A. Preparation for negotiations
Total time: About 4 hrs.

Filling in the Negotiation Submission Form (20 min.)	**Reading the negotiation case Homework or Classroom assignment** (20 min.)	**Discussing the negotiation case** (20 min.)
Discussing the example (Misty & Smiley) (1 hour)	**Glossary of negotiation terminology** (30 min.)	**Introducing the pre-negotiation questionnaire** (15 min.)
Presenting a model of Negotiation Journal Entry (15 min.)	**Computer lab. session (optional) pre-negotiation questionnaire and first offer** (1 hour 30 min.)	

Part B. First lesson after the negotiations began
Total time: About 1 hour 40 min.

Reading **Negotiation Journal Entries** (if students have placed offers) (20 min.)	**Thinking about the topic** (30 min.)	**Vocabulary awareness** (20 min)	**Language of emails** (30 min)
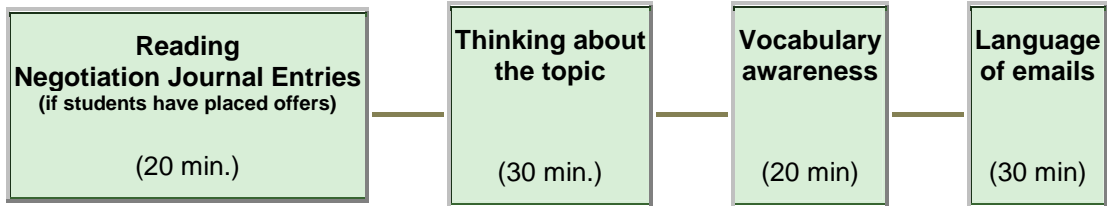
Part C. Classroom activities during negotiations
Total time: About 4 hour 45 min.

Sentence combining (1 hour 30 min.)	**Word game: Perfect Partners** (30 min.)	**Collaborative Dictation** (45 min.)	**Punctuation** (30 min.)
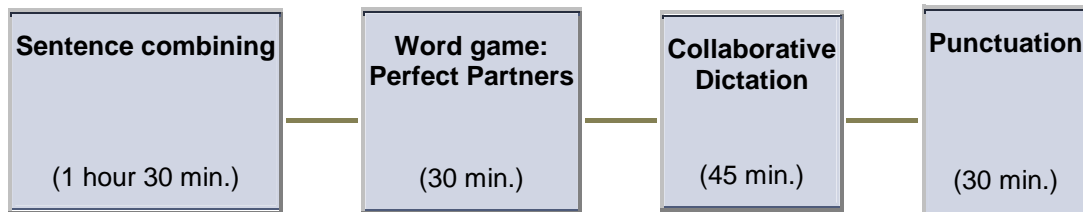
End of negotiations

Part D. Classroom activities after negotiations
Total time: About 5 hours 30 min.

NB. Even, if not all the students have finished their negotiations, they have already had enough experience to be able to evaluate their partners and the negotiation process.

Evaluating negotiations (1 hour 30 min.)	**Presentations (time depends on the no. of students)** (15 students: 2 hrs.)	**Writing a report** (2 hrs 30 min.)