OFFLINE OR ONLINE? A SIMULATION EXERCISE IN A FIRST YEAR INTERNATIONAL POLITICS UNIT

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Abstract

A simulation exercise in a first-year political science unit used a mix of synchronous and asynchronous communication, and combined online discussion with face-to-face meetings. The project developed out of an earlier simulation with no online component. This preliminary report compares the two versions and adopts a symbolic interaction approach to understand how the participants understood the experience.

Key words

Simulation exercise, symbolic interaction, political science, bulletin board, asynchronous, computer-mediated communication

1. Introduction

This paper describes an experiment in which an interactive group-learning process was delivered in two different modes: first with traditional methods and again using computer-mediated-communication (CMC). The course was taught in the Department of Political Science at The University of Western Australia, and the CMC version was developed by the lecturer in collaboration with the Faculty of Arts Multimedia Centre at UWA.

This was a large project and is rich in insights in various aspects of technologically-assisted teaching and learning. The focus of this paper is to describe the project and report on the perceptions of the participants.

2. Why a simulation exercise?

Role-play and simulation exercises have long been a feature of many different disciplines, where experiential learning is favoured over a traditional lecture-tutorial approach and where learning is inductive rather than deductive (cf. Vincent & Shepherd, 1998; Freeman & Capper, 1999).

The Political Science lecturer (Yasmeen) decided to include a role-play simulation exercise in a revamped first-year course in International Politics. The exercise was

known as "Secret Diplomacy". In terms of Gredler's (1992) taxonomy of simulations, this was a "social-process simulation", since the "participants assume individual roles in a hypothesised social group and experience the complexity of establishing and implementing particular goals within the fabric established by the system".

The aims to be achieved by using the simulation technique were three:

• To help students appreciate the context in which different international actors respond to international events by experiencing international politics at a personal level;

• To develop the ability to critically and objectively evaluate international developments by writing a reflective group report on the simulation exercise; and

• To develop the ability to engage in teamwork.

We may rephrase these aims in more general terms, as experiencing the subject in a realistic setting and teamwork. These are common to simulations, with or without a technology component (Maidment & Bronstein, 1973). After the first trial of the simulation exercise in 1998, and during discussion between the lecturer and the teaching/learning consultants, a further aim was defined:

• To give students experience in the use of computer-mediated communication and the Internet, as a valuable skill for further study and employment opportunities.

3. The 1998 simulation – face-to-face

In 1998 Samina Yasmeen included a "Simulation Exercise" in a new first-year Introduction to International Politics unit. This exercise formed part of a CUTSD-funded project, awarded jointly to UWA and Murdoch University. One of the groups participating in the project investigated different ways of conducting Simulation Exercises.

The Simulation Exercise was based on an international scenario which required resolution by the members of the UN Security Council. To achieve these aims, the students were to simulate a special meeting of the UN Security Council where representatives of various states and agencies discussed a question and attempted to arrive at some conclusion.

The unit was taught to approximately 180 students, organised in tutorial groups of 12-15 persons. For this exercise, each tutorial group was treated as a discrete group. In each tutorial group, each student was assigned the role of one member of the UN Security Council and had to act for the duration of the exercise as the representative of that country. The Simulation Exercise itself spanned a period of 3 weeks. The major components of the Simulation Exercise were:

• position papers, presented to the tutorial group, by each "country"

• secret negotiations between various countries in each group

- two plenary meetings of the "Security Council", i.e. each tutorial group, leading to a vote

- a written report by each tutorial group on the whole exercise.

Evaluations of the 1998 experience revealed the general impression was very positive, but identified certain limitations, which can be described under the following headings:

- **continuity**: students found it difficult to meet outside tutorial times for the secret negotiations

- **monitoring**: tutors did not have access to the secret negotiations

- **access**: position papers had to be distributed to all other members of the tutorial group, which caused logistical problems

- **assessment**: was difficult due to problems in monitoring student activity other than in face-to-face tutorials.

4. The 1999 simulation – also online

At the end of 1998 Yasmeen met with Kinder and Fardon to plan a second version of the Simulation Exercise for 1999, in which all communications between all participants in the exercise would take place on the Web. The vehicle selected for this was The Forum, an online learning space developed within the MMC, which includes a variety of modules. For this unit, the Forum site contained a component for:

- "Unit Work", i.e. administrative details, bibliographies, etc
- "Bulletin Board" and
- "Chat Room".

The enrolment was again around 180 students, divided into 14 tutorial groups. There were four tutors, as well as the unit coordinator.

4.1   Software and hardware

The Forum is the creation of the Arts Multimedia Centre. In late 1997, the Centre undertook an evaluation of a number of commercial online learning environments, especially WebCT and TopClass. While we recognised the power of these programs, we came to the conclusion at that time that the facilities offered by these solutions were not sufficiently flexible. We therefore embarked on the development of a component-based online learning space. This development model would allow us to later adopt one of the commercial solutions mentioned above, while still maintaining some of the more flexible modules developed in-house. At present we are investigating the integration of WebCT to provide a robust login and course allocation system.

The Forum is run from a PowerMac G3 Server (128 Mb RAM, 9Gb Hard Disk). The server software used was Webstar v4.

The Forum utilises FileMaker Pro and Lasso as the means for storing and delivering data. The bulletin board and the chat room were the two components selected for use with the simulation exercise.

The bulletin board

The bulletin board is one of the major components of The Forum, and provides a range of options for methods of communication. Functionally, the bulletin board is a threaded messaging system providing threads one level deep, i.e. all replies will be contained within the originating message.

The bulletin board can be configured to include one or more topics. Each topic can be configured with the following options:

- *name*: identifies the topic

- *description*: assists the students when selected a topic

- *related urls*: on occasions topics may be created to critique a web site

- *availability*: a topic can be configured to be enabled/disabled

- *access privileges*: a topic can be configured to make messages available to all students in a unit, available to students within defined groups, or available only to the tutors

- *private messaging*: a topic can be configured to allow private messages to be sent between students in defined groups

In the case of the Simulation Exercise, the bulletin board was configured with five topics:

- General Discussion: a topic where students could post any general queries regarding the operation of the exercise. Messages were available to all students.

- Position Papers: the part of the bulletin board where students were to post their position papers. Messages were available to students in defined groups i.e. tutorial groups.

- Press Releases: the part of the bulletin board where tutors would post the occasional press release during the simulation exercise. Messages were available to all students.

- Secret Diplomacy: the part of the bulletin board where students would conduct their secret negotiations with other members of the UN Security Council. Messages were available to students in defined groups, and private messaging was possible. Tutors had access to all messages, private or public.

- Group Report: the part of the bulletin board where students could post their contribution to the group report for collation by the group leader. Messages were available to students in defined groups.

The chat rooms

DigiChat is a commercial Java-based chat environment. It allows you to establish any number of chat sites (depending on your license), and each chat site can have an unlimited number of rooms. Chat rooms may be password protected if desired.

In the case of the simulation exercise, one chat site was used. The chat site consisted of 15 rooms, a welcome room and 14 secret negotiation rooms – one for each of the tutorial groups. Each secret negotiation room had a password which was chosen by the members of the associated tutorial group.

5.   Secret diplomacy - making it happen

During the month preceding the beginning of semester, the unit coordinator (Yasmeen) worked with the webmaster (Fardon) to fine-tune the mechanics of the Bulletin Board and to decide on how much and what kinds of information to give to students at the beginning of the course and at the beginning of the simulation. Also, Fardon met with the tutors and set in motion a "trial simulation"; a Bulletin Board was set up solely for the four tutors and the webmaster. The tutors discussed a given topic among themselves and practised sending, and answering messages, in various ways.

The week before the Secret Diplomacy got under way, the webmaster went to a lecture with the unit coordinator and gave a 15 minute demonstration of The Forum site, its various components and how to logon. The webmaster returned the following week to a specially arranged, optional session, to which half the class turned up.

The simulation exercise itself was organised in the following stages:

Weeks	Activity	Description
1	Role assignment	each student negotiated a role with their tutor. (This was the third week of the semester.)
5	Position Paper	each student had to submit a "Position Paper" for their country. Papers to be in the form of a speech, 600-700 words, submitted electronically to the Bulletin Board, and in printed form to the tutor. The papers were available on the web-site by the end of the week.
6	First tutorial	each student summarised the position/stand of their assigned role in not more than five minutes. Preliminary debate.
6-7	Secret diplomacy	students embarked on secret negotiations and prepared draft resolution(s) for the next meeting of the UN Security Council. Countries could submit more than one draft resolution. All negotiations conducted via the bulletin board or chat room. Tutors and the unit coordinator had access to all negotiations.
7	Second tutorial	the draft resolution(s) were presented and discussed. The meeting was chaired by the UN Secretary-General.
7-8	Secret Diplomacy	secret diplomacy continued. Again, all negotiations were to be conducted via the bulletin board or chat room.

8	Third tutorial	the participants had to arrive at a conclusion 15 minutes before the end of the tutorial. During the last 15 minutes, the participants would revert back to being students (!) and allocate tasks for writing the group report. Subsequent communications regarding the group report were supposed to take place through the web-site set up for the course, but this proved difficult.
9	Group Report	Deadline for submission of the final group report for each tutorial group. The Group Report consisted of two parts: 800-900 words on the group's conclusions on the substantive issue being discussed; and 100-150 words per participant on their personal experience of the exercise and their views on the value of such an exercise.

The move to an Internet-based exercise involved certain pedagogical choices and offered certain learning opportunities. Most importantly, tutors could monitor *all* communications between students and could respond quickly to inquiries from students. The unit coordinator could intervene in the ongoing negotiations in various ways, e.g. by sending occasional Press Releases to the whole class. These had no guarantee of reliability. Some were important to the on-going debate but, just like in the real world, you shouldn't believe everything you read in the papers and some "Press Releases" were genuine red herrings.

Other changes did not flow automatically from the move to a computer-based exercise, but were deliberate choices made by the lecturer in collaboration with the teaching and learning consultants. One crucial change regarded the assessment loading for the Simulation Exercise. In the 1998 version the Exercise counted for 15% of the total mark for the course, but in the 1999 it counted for 35%. This was considered necessary in order to give proper recognition to the amount of time and work required of the students: students become resentful - and rightly so - when they are compelled to take part in new and exciting technology-based projects but do not gain a proportionate amount of assessment.

The assessment consisted of:

- 10% for the Position Paper, credited to each individually

- 15% for Participation, credited to each individually. This was based on the quality of their participation in both secret and open diplomacy

- 10% for the Group Report. The final mark for the group report was assigned to each student in the tutorial group

This breakdown shows how the adoption of a computer-based approach allowed for assessment to be given to parts of the exercise which remained hidden in a traditional mode. The Participation mark was explicitly based on "Secret Diplomacy", i.e. Internet-based, as well face-to-face dealings around the tutorial table.

5. Evaluating the project – symbolic interaction

The project produced a large number of communications among students and between students and tutors. The Bulletin Board alone produced the following statistics:

Category	messages	replies
General Discussion	122	196
Position Papers	203	47
Press Releases	10	10
Secret Diplomacy	1647	1409
Group Reports	329	110
Totals	**2311**	**1772**

There were no significant problems with the server software in dealing with these heavy demands.

6.1   Modes of evaluation

We agree with Alexander & McKenzie's (1998) recommendation to adopt holistic methods of evaluation of IT projects, and consider the costs and benefits to a range of participants. This project is being evaluated with a mix of evaluation strategies and methods. The underlying aim of our evaluation is to understand how the various participants experienced the project, that is, to uncover the meanings the project had for them. We are working within the theoretical framework of "symbolic interaction". According to Blumer (1969), who coined the term, this theory has three foundations:

- human beings act towards things on the basis of meanings they have for them;
- the meanings of such things is derived from, or arise out of, social interaction that one has with others
- these meanings are handled in and modified through an interpretive process used by the person in dealing with the things they encounter.

The symbolic interaction approach is very much oriented towards action and process. The remainder of this paper is our first examination of this project from the symbolic interaction perspective, and for reasons of space will only touch on some of the crucial issues that have emerged from our evaluations so far.

The lecturer, with a research assistant, wrote a report on the 1998 version of the simulation exercise. This is a benchmark for comparisons with the 1999 online version.

We used a "formative" approach during the course of the project: Mike Fardon, as Forum architect and webmaster, met with the tutors on a regular basis while the simulation exercise was in progress. Also, tutors kept regular diaries on the tasks they performed and how much time they dedicated to them.

At the end of the unit, the academic in charge of the unit administered "Student Perceptions Of Teaching" (SPOT) questionnaires to all students. These questionnaires are drawn up by the Centre for Staff Development at the University of

Western Australia and include a series of questions with Lichert-scale answers and a series of open-ended questions for comments.

In addition, the Project Manager conducted interviews with all participants in the project. The interview schedules were drawn up with the assistance of the Centre for Staff Development. Interviews lasting approximately one-hour were held with the academic, with the four tutors as a group, with the Forum architect/webmaster and with a group of ten students.

All postings to the Bulletin Board and the Chat Rooms have been retrieved and are being reviewed.

This variety of data allows to interpret the experience of the participants and to draw conclusions about the meanings they created about their experience. For this paper, we have used only the qualitative data which emerged from the interviews, in order to identify the major issues as seen by the participants in the project.

6.2   The issues

Lecturer, tutors and students all agreed that Secret Diplomacy was time-consuming and required a substantial commitment of time and energy. However this may simply reflect a readjustment of what they expected at the outset, since very few students expressed the view that the effort was not worth the marks allocated to the exercise. This is an important consideration in planning any online innovation in teaching.

The SPOT survey included open-ended questions on "what aspects [of this unit] do you feel are the best?" and "do you have any suggestions for change?" The answers to these questions can not be quantified, but approximately thirty comments were made to each question. These comments formed the basis for some of the questions posed during the group interview. It is possible, therefore, to suggest some general trends in the reactions of the students.

One view on technology, which emerged both from the survey and the group interview, was the importance of the interpersonal relations between students, belonging to the same tutorial group. This, naturally enough, is the point of reference for students in a unit with 180 students. It is interesting that some students based their opinion of the technology on how they see the technology affects the interaction between the members of their tutorial group. One student put one view very clearly:

> The secret diplomacy helped us all to make the effort and interact, and communicate with each other.

A small number of students enjoyed the use of technology in itself, either "for its own sake", or because they see this as keeping up with the times (or, compared with some of their other courses, ahead of them!). Many positive comments showed that the role-playing aspect of the simulation was enjoyed and also seen as useful.

Opposition to the technology per se seems to be based more on issues of hardware than software. Problems about interruptions to communication, unreliable access from home via modem, and so on, were strongly expressed, by a small minority of students. It is interesting to note that, although students were encouraged to contact the webmaster with any technical problems, they often addressed these problems to their tutors or solved them with the help of fellow students.

Problems of access made the synchronous chat room very difficult. Most students found it frustrating to have to organise to go in a group to a computer laboratory, sit alongside each other and talk to each other via a chat room. This is a reflection of the fact that many students do not have computers at home and do not use computers regularly during the day or evening. The fact that chat discussions were supposed to take place between the 12-15 members of a tutorial group, also narrowed the odds of finding someone online for a chat.

This is connected to a broader question of "who is in charge". This project did not include the figure of the "composer", as outlined by Vincent & Shepherd (1998), and the overall monitoring of the Bulletin Board was not clearly assigned to any one member of the project team. This will need to be revisited in future versions.

There were a number of comments from students and tutors about the "lack of training" given to students (one 15-minute demo in a lecture theatre). On further questioning, however, it became clear that this concern actually describes the state of uncertainty and nervousness that many students felt during their first attempts to use The Forum site. During discussion, most students volunteered the view that the site was in fact very easy to use and they mastered it in an hour or so.

The teamwork aspect of the exercise, mentioned earlier, was an important feature for most students and tutors, as well as the unit coordinator. For most, this made the learning enjoyable, non-threatening and deeper. However, the members of the groups depended on each other for the success of the discussions and if one or more members of a group did not do their share, that caused difficulties for the rest of the group. The fact that these were first-year students, in their first semester, may be relevant to this point.

The Group Report, at the end of the simulation, was not highly successful. In most cases, one member of each group ended up doing most of the work. This type of jointly-constructed writing requires some maturity on the part of all involved. Linked to this is the issue of assessment. Many students and some tutors expressed views along the lines that the students should assess the participation made by each other, or themselves, in order to take account of the different contributions made by the members of each group.

7.   Conclusions

Evaluation of the 1999 Exercise suggests that the difficulties in the 1998 version have been addressed, with significant benefits to students and tutors, and also new challenges have arisen for the next version. The continuity, monitoring and access issues have all been solved, and students and tutors were enthusiastic in exploiting the

range of CMC options available to them. Technical issues arose and required constant attention.

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