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## BUSINESS POLICY SIMULATION AND THE INTENSE COURSE STRUCTURE

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### ABSTRACT

A business policy simulation/course was investigated under a normal term and under an intensive term schedule. Students enrolled in the same course under the two scheduling formats were surveyed regarding their perceptions of the academic content, instructor contact, likes and dislikes concerning the course. (Normal N=150; Intensive N27)

Students in the normal term course more positively related to the integrative and practical aspects of the course, and a high proportion indicated no dislikes. Students in the test group or intensive term course strongly liked the course duration and Instructor. These students had more dislikes, especially that of working in groups.

### INTRODUCTION

One of the cited benefits of simulations is that they provide a dynamic environment for decision making. The impact of the dynamics may, however, be diminished by the constraints of a standard academic term such as the 10 week quarter. In other words, decision-making activities are spread over approximately two months with several days to a week separating decision inputs to the simulation. It is hypothesized that a more concentrated, intensive effort in the simulation will accomplish the same educational purposes, and, at the same time, bring about a greater sense of educational value for the students.

### BACKGROUND

Since the first business simulation was publicized in 1957 [1], the primary focus of most research has been in the area of justifying the simulation as a good learning tool [2]. Student learning, measured through the use of accepted techniques, was used as the criterion to compare simulation to traditional teaching/ learning methods. However despite the plethora of research in this area, a number of experts believe that no conclusive results have been obtained indicating that simulation is a superior teaching method to traditional teaching methods, or an even adequate teaching method [2]. There is no question that the majority of writers have a favorable opinion toward simulation as a teaching device [3]. In addition many of these writers mentioned that student interest and motivation toward simulation courses contributed to learning [4,5]. Prior to 1975 no writer had asked the students directly to comment on their perceived learning and/or motivation in a simulation course versus traditional courses [3]. However 1975 marked the appearance of articles that looked at simulations from the point of view of either the student [3,6] or the simulation administrator [2]. These research studies were initiated either because these authors believed that the traditional studies tried to measure something that is non-measurable or because they felt that students' opinions were very valuable. This article compares students perceptions regarding a simulation offered under two scheduling formats; a normal term

and an intensive term. To date, no research has been published addressing this topic.

### METHODOLOGY

The following method was used to test the hypothesis. Student evaluations and demographic data were compared for two distinctive time-duration offerings of the same business policy course using a single simulation [7]. The control group was composed of students who participated in the simulation during a normal academic quarter of 10 weeks. The test group participated in the simulation during a concentrated term of 2 1/2 weeks. Perceptions of the control group were compared with those of the test group. The only change in the test case was duration of the course. Prerequisites, course requirements and the simulation were the same between the two cases; however the overall duration of the test case is 25 percent as long as for the control group.

The questionnaire used was brief and primarily open-ended to achieve unbiased responses. Students were surveyed regarding their likes and dislikes of the course. They were asked to rank the academic content and an instructor Contact factor on a Likert-like scale. Demographic data included educational level, and a course/hour load for the term at hand. All students involved participated in the same simulation under the same faculty member.

### COURSE ENVIRONMENT

The specific environment of the policy course under consideration is a unique one and must be noted. The course is a required capstone for all business undergraduates and first year MBA candidates. All core courses are prerequisites to the policy course. Due to the fact that the course is based entirely on a computer based simulation, it carries two quarter hours of pass/fail credit. This further leads to using the term "course" to imply the use of the simulation.

Exams in this environment are limited to testing for knowledge of the simulation rules and statements. These exams are completed before the end of the first year's decisions are completed (Total duration is 4 years). All required reports (initial, updated and post-simulation statements of objectives, policies and plans) are graded on a pass/fail basis by group. Groups or firms are composed of three to four self-selected student members. No attempt is made to test the students following the simulation. A debriefing technique is used to arrive at closure.

An eight-hour Saturday session is used at the end of the term. During this session students complete a year and a half of decision making (6 decisions) in rapid succession.

The stated purpose of the course focuses on the integrative aspect of a capstone course. It is intended

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to acquaint the students, in a dynamic environment, with the interrelationships between decisions made by the managers of a company.

The Chi-Square test indicates statistical significance at the 99 percent level. Empty cells and the relatively sample size in the test case indicate a need for more data. Striking differences do, however, appear as follows:

## FINDINGS

### Demographic Data

All students were either seniors or graduate students, as the course prerequisites should indicate. The proportion of graduate students in the intensive course, however, was significantly higher with 44% of the intensive class make up being graduates as opposed to 8% of the normal class make up being graduates.

Data on course/hour load effectively related to University regulations. During the intensive term, a student is limited to 6 credit hours. The maximum for a normal term is 20 credit hours. These restrictions obviously provide a significant difference between student course loads per term category.

### Evaluations Related to Other Courses

Using a 5 point Likert-scale (1 = one of the best; 5 = one of the worst), student evaluations show no important difference between the groups in the intensive versus the normal term. (Figure 1) Regardless of the course duration students rated both academic content and instructor contact highly. In both cases, more than 57% of the students rated these factors above the average category, and at least less than 17 percent rated the factors below average.

FIGURE 1  
EVALUATIONS ON ACADEMIC CONTENT  
AND INSTRUCTOR CONTACT

RELATIVE PERCENT

ACADEMIC CONTENT	Test Group (Intensive Term) N=27	Control Group (Normal Term) N=150	Total
One of the best	18.5	16.0	16.4
One of the better	48.1	44.0	44.6
About average	25.9	30.7	29.9
Below average	7.4	8.0	7.9
One of the worst	0	1.3	1.1

  

INSTRUCTOR CONTACT	Test Group (Intensive Term) N=27	Control Group (Normal Term) N=150	Total
One of the best	20.8	19.3	19.2
One of the better	41.7	38.7	38.4
About average	20.8	31.3	29.4
Below average	12.5	8.7	9.0
One of the worst	4.2	2.0	2.3
No response			1.7

### Likes and Dislikes

In the areas of likes and dislikes student responses were categorized under common headings suggested by the responses. In no case did a student provide three responses. The first listed response was most important. Owing to limited responses (42 for likes, 13 for dislikes), the second listed factors were not evaluated.

Likes. Figure 2 summarizes the findings of the factors which students indicated they liked about the course and its environment.

FIGURE 2  
FACTORS LIKED

	Test Group (Intensive Term) N=27 Count Column Pct.	Control Group (Normal Term) N=150 Count Column Pct.	Total N=177 Count Pct.
Fun	4 14.8%	20 13.3%	24 13.6%
Educational	0 0%	2 1.3%	2 1.1%
Independence	2 7.4%	12 8%	14 7.9%
Integrative	2 7.4%	29 19.3%	31 17.5%
Short	14 51%	0 0%	14 7.9%
Competition	0 0%	26 17.3%	26 14.7%
Group Effort	0 0%	6 4%	6 3.4%
Practical	0 0%	22 14.7%	22 12.4%
Professor	4 14.8%	5 3.3%	9 5.1%
Everything	0 0%	4 2.7%	4 2.3%
Nothing	0 0%	2 1.3%	2 1.1%
No Response	0 0%	19 12.7%	19 10.7%
Other	1 3.7%	3 2%	4 2.3%

$\chi^2 = 100.49$  with 12 degrees of freedom  
Contingency coefficient = 0.60178

- 1) Students enrolled in the intensive term
  - a. overwhelmingly liked the short duration of the course as 52 percent of them identified that factor first.
  - b. felt a greater affinity for the instructor.
- 2) Students enrolled in the normal term more positively identified with:
  - a. the integrative nature of the course
  - b. competitive aspects fostered during the course
  - c. practical aspects of the course.

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Dislikes. Aspects which students disliked about the course are shown in Figure 3. Again empty cells and the test group sample size lead to incompleteness. A strong difference between the opinions of those in the intensive term versus those in the normal term may be questionable. The following areas may be important:

- 1) Students enrolled in the intensive term appear to have disliked group work more
- 2) Students enrolled in the normal term apparently:
  - a. disliked the Saturday session more
  - b. felt they spent too much time on the course.

FIGURE 3

FACTORS DISLIKED

	Test Group (Intensive Term) N=27		Control Group (Normal Term) N=150		Total N=177
	Count	Pct.	Count	Pct.	
Tests	0	0%	7	4.7%	7 4.0%
Group Effort	3	11.1%	4	2.7%	7 4%
Computer	4	14.8%	17	11.3%	21 11.9%
Professor	0	0%	3	2.0%	3 1.7%
Game	1	3.7%	0	0%	1 .6%
Short	2	7.4%	2	1.3%	4 2.3%
Instruction/ Guidance	1	3.7%	15	8.5%	16 9%
Contact	1	3.7%	1	0.7%	2 1.1%
Saturday	1	3.7%	18	12.0%	19 10.7%
Unrealistic	1	3.7%	5	3.3%	6 3.4%
Time Spent	0	0%	15	10%	15 8.5%
Nothing/No Response	9	5.1%	43	28.7%	52 29.4%
Other	4	14.8%	20	13.3%	24 13.6%

$\chi^2 = 23.11$  with 12 degrees of freedom  
Contingency Coefficient = 0.33985

A major portion (almost 30%) of the students in the normal term indicated no dislikes whatsoever. Several factors have too limited a response to be of value.

### CONCLUSIONS AND RECOMMENDATIONS

A comparison and contrast of student opinions relating to the business policy/course simulation under the intensive or normal term structure, the following factors are noteworthy:

- 1) Regardless of the term duration students rate the academic content and instructor contact highly.
- 2) Intensive term students
  - a like the course duration
  - b. felt greater affinity with the instructor
  - c. disliked group work more than those enrolled during a normal term.
- 3) Students enrolled in the normal term identified
  - a. the integrative nature and practical nature of the course and competition as positive features
  - b. the Saturday session and time spent on the course as undesirable (although many indicated no undesirable aspects).

It was anticipated that the intensive term offering of the course would have a more positive benefit to the student both from the standpoint of liking/enjoying the course more and of benefiting from the integrative nature of the course. It would appear that students enrolled in the normal term benefited more from the integrative aspects of the course; furthermore, they related to the practical implications. A high proportion of these students also related no dislikes relating to the course. These factors seem to speak more in favor of the normal term scheduling than do the student identified factors relating to the intensive term schedule.

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