

USE OF A SIMULATION IN A LARGE CLASS ENVIRONMENT FOR A MARKETING PRINCIPLES CLASS: A QUALITATIVE ANALYSIS OF WHETHER LEARNING OBJECTIVES WERE MET

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ABSTRACT

The purpose of this paper is to examine the use of a simulation in a large class environment for a Marketing Principles class. Specifically the goal is to analyze if the simulation meets the learning objective of the course, based on student groups' reflective papers. The results of this study indicate that the Simulation in this class supports the application level of thinking from Bloom's Taxonomy and is adding to the learning outcomes and objectives for the class.

INTRODUCTION

This paper provides the narrative of a story common in ABSEL's history, that of a first-time simulation game user in a Principles of Marketing class. The "new" here is provided by the assessment of learning in the class, as a systematic analysis of the students' reflection papers provided insight as to whether the game experience accomplished its mission.

In the Principles of Marketing course, we are continually faced with the growing class size and diminishing outside teaching assistance. Since the mid 2000s class sizes have grown from 45 students to 200 students with less and less teaching assistance being provided. The course objectives have evolved as the class size has continued to grow. Today, the objective for the class is to be able to apply the concepts and definitions of marketing. Under Bloom's taxonomy, the basic learning objective is application of the terms and concepts introduced in the course.

In January 2009, we were faced with a situation where the marketing department was going to teaching 2 classes averaging 150 students each and one of the two research assistants was reassigned, approximately three weeks before class was to start. In that case, some immediate changes had to be made to the class and one of the changes implemented was the use of a simulation.

At that time, there was no opportunity to test an intuitive sense that the simulation would support a key learning

objective of helping students learn to apply and use the terms and concepts in marketing and other situations. We decided to test the intuitive sense in a formal way by doing a research initiative focused on exploratory research into the learning outcomes for the marketing simulation.

CLASS OVERVIEW

The Principles of Marketing class is a required class for all business majors, as well as for advertising students, some hospitality students, professional golf students, and some construction management and engineering students. The class also has majors from music, agriculture, and several liberal arts fields.

The class is an overview of the field of marketing with an expectation that the students will become familiar with the basic concepts and terms of marketing and be able to use the concepts of marketing in their chosen field. It has been taught in a large class format, with lecture and recitations in the fall and lecture only format in spring. Class size is approximately 200 students for day time classes and 100 students for night time classes that only meet once a week. The goals and objectives for this class have evolved over time as the class size has increased. The learning objectives today are for the students to get to application level of the concepts and terms in marketing. There is also have an unstated objective of the students understanding how they can use marketing in their fields of study and convincing some students that marketing is a good choice for a major.

The Marketing department is moving in the direction of this class becoming a lecture only class without recitation sections. For purposes of the research, we focused on a large lecture section with 100 students that met once a week in the evening. The class had a typical cross section of majors.

Assessment in the class was made up of four components:

Grading		
Tests (100 points each)	400 points	63%
Group Marketing Plan	100 points	16%
Simulation	75 points	12%
Chapter Quizzes	60 points	9%
Total	635 points	

The tests are multiple choice with a strong emphasis on application oriented questions. The Group marketing plan is a project in which the group makes up a product or service and develops a plan to market the product or service. The learning goal for this project is to be able to apply the concepts and tools introduced in the course to a plan for a new and different product or service. As in the case of the simulation game, this experience is designed to have the successful students demonstrate their ability to apply or demonstrate their understanding and use of the terms and concepts covered in the course. As noted earlier, the learning goal is to get the students to the application level thinking in Bloom's Taxonomy.

The quizzes are open book online quizzes with an objective to get the students to understand the material in the book before it is covered in class. This assessment would fall under the knowledge or remembering level of Bloom's Taxonomy or the revised taxonomy.

BLOOM'S TAXONOMY

Bloom's Taxonomy has been used as a learning framework in ABSEL for over 30 years. Our cursory search found that the Gentry, McCain, and Burns (1979) paper was the first to discuss the framework at ABSEL, and that more than 100 ABSEL papers since that time have referenced the taxonomy. The taxonomy is a six-level hierarchy to classify thinking from the basic level of knowledge to the most abstract level of evaluation. The classifications build on each other, as you cannot have application thinking without knowledge and comprehension. For an instructor the key is to look at the level of thinking we want to achieve through an assignment (Forehand, 2005).

Listed below is below is a brief review of the Bloom's Taxonomy, taken from Daniel Royse's book, *Teaching Tips for College and University Instructors: A Practical Guide*.

Bloom's Cognitive Taxonomy (Arranged from concrete to abstract and simple to complex)

- Knowledge: (Remembering factual materials)
 - Students must remember, memorize, recognize and recall.
- Comprehension: (Grasping the meaning of materials)
 - Students must interpret, describe and explain knowledge.

- Application: (Problem Solving)
 - Students must apply facts, rules, and principles to produce some results.
- Analysis: (An understanding of the structure and components of knowledge)
 - Students must be able to break down knowledge and show relationships among the parts.
- Synthesis: (Creating a unique, original product; combining ideas to form a new whole)
 - Students must bring together parts and components of knowledge to form a whole and build relationships for new situations.
- Evaluation: (Making value decisions about issues and resolving controversies)
 - Students must make judgments about the value of materials for given purposes

(Royse, 2001, pp. 42-43)

OBJECTIVES OF THE STUDY

The objective of this study is to understand what level of learning under Bloom's Taxonomy the simulation assessed and is it consistent with the learning objectives of the class.

SIMULATION OVERVIEW

The simulation used is Mars Marketing Management Simulation by Robert Cook, James Cook, and Kathryn Cook. This simulation is typically for marketing management courses, and is much more challenging than simulations for most introductory marketing courses. The basic overview of the simulation is that the students have to make decisions involving up to four video game products over several business periods. The groups compete with three other groups over 6 periods and the "winner" has the highest cumulative profit over the six periods.

The decision matrix for the students includes product variables such as the number of products, the attributes of the products, the product dimensions or market segments targeted, the violence level of the product and the cost of the products. The decision matrix includes price variable such as wholesale and retail cost and gross margin. The matrix also includes promotion or Integrated Marketing variables such as expenditures for advertising, sales promotion and publicity. The matrix also includes distribution or place variables such as where to sell the products and sales force allocation. The decisions impact brand awareness, target marketing and perceived product positioning, which need to be factored into the decisions. Finally the matrix has a seasonality factor in it with each decision covering a quarter of the year with some quarter such as the 2nd and 4th quarter having higher sales than the other two quarters.

The decision matrix tries to duplicate the decisions marketing managers have to make in a real world environment. The students have the opportunity to buy additional research reports to help them make decisions. The students are told that there are no right or wrong answers, and the results will be based on decisions made by their firms and their competitors. The students are dealing with a moving target and they have to make decisions every week with incomplete or partial data. I also provide the students with a competitive analysis worksheet (Appendix B: Simulation Competitive Analysis Worksheet) to help analyze what their competitors are doing.

The simulation was a group project with each team having 5 students in it. The groups were self-selected. I then assigned the teams to a league of 4 teams which they competed against. The class had 5 leagues of 4 teams each and each team only competed against the teams in its league.

The simulation was assessed based on cumulative profits. Each segment had 4 teams competing with the team with the highest cumulative profit receiving 60 points (100 %); the second highest team earned 57 points (95%); the third place team earned 53 points (89%) and the last place team earned 50 points (84%). I agreed with the game's authors that it did not make sense to grade the lowest team below a B, because some of the factors are beyond the team's control, just like in business and there is a steep learning curve to the simulation (Cook, Cook, & Cook, 2006). Further, the percentage of the class grade allocated to the simulation experience was relatively low compared to the levels used typically according to past discussions at ABSEL, but I was being cautious as this was my first experience with a simulation game. Teams also had the option of keeping decision logs for each set of decisions (Appendix B: Simulation Decision Logs). The logs were reviewed and points were awarded to teams that may have started off poorly but made good strategic decisions, but were never able to catch up to other teams. Teams usually got two additional points for well thought out decisions that were logged in. This practice will be evaluated more closely in future game plays. One possible issue for future research is that the grading on the simulation should put more emphasis on finishing first and the spread of the grades should be wider. Also, after the game play, I found out about former ABSEL president Dick Teach's strategy of having the last place teams chip in money for end-of-the-game liquid refreshments, and I see the opportunity to vary performance rewards (punishments) in order to investigate their influence on learning.

The teams earned up to 15 points based on a simulation reflection paper that was done after the simulation was finished. This paper was intended as a means of the team discussing what they took away from the simulation. It was a method to assess the learning that went on in the simulations and also an evaluation of the use of the simulation in the class. The standard simulation experience evaluation has been based on post-play surveys, and it is

our premise that the systematic analysis of the reflection papers will provide greater insight into the nature of the learning taking place.

METHODOLOGY

As discussed above each team completed a simulation reflection paper. The instructions were as follows:

The final assignment for the simulation is for the group to write a brief reflective paper on what you learned from the simulation and how it integrates with the material in the course. This paper is a group assessment of the concepts and skills you learned from the simulation. Start the reflective paper with the place your team came in on the simulation competition.

Think about the effort your group made in the simulation, including understanding the instructions and documentation. You should include what data and tools you used to make your decisions, what was the overall strategy for the simulation and what you would have changed after reflecting on that. Looking back what could your group have done to have improved its decision making for the simulation?

What were the most difficult parts of the simulation for your group, and what were the easiest parts? What were the most interesting and most surprising results from the simulation?

The most important part of your group reflection is what did you learn from the simulation? Did the simulation help you understand marketing and marketing strategy? Did the simulation add to your understanding of the material in the course? Did it integrate well with the concepts and material in the course? Be specific in what you learned and how it integrated into the course.

This is a reflective or group assessment paper. I don't expect or want outside research. I am interested in the group's consensus on the learning and understanding that your group took away from the simulation. Be honest in your assessment. I want you to clearly explain what you as a group took away from the assessment.

The reflections were turned into the teaching assistant. The students were told that the teaching assistant would grade them and the instructor would not see them until after final grades were posted. This procedure was followed for analyzing the papers. The teaching assistant graded them on the basis of whether the team addressed what they learned. He also graded them on effort, grammar, spelling, etc.

The reflective papers were the data for an exploratory study of what the students learned from the simulation. The papers were initially organized by place. The first place teams' papers together were analyzed together, the second place teams' papers together, etc. The papers were coded, using a qualitative approach to coding and classifying the data into themes (Creswell, 2007). The analysis focused on frequency of general themes (i.e. giving more

weight to themes that were found in multiple papers). The themes were then analyzed as indications of learning and thinking that related to Bloom's Taxonomy (Forehand, 2005).

The initial analysis included comparing the results from the first place teams' to the reflections from the teams in the other places on the competition. The initial assumption that team placement was important was rejected and all the themes were categorized all the themes together. No consideration was given for placement, other than for some learning outcomes from the last place teams that differed from the other teams. Several of the last place teams gave up fairly quickly and did not put the effort in that teams in the other three places did. Two out of the five last place teams attributed their results to chance or considered the simulation a guessing game. Further research to confirm this is needed, but for the purpose of this analysis, place of finish on the competition is not considered as a relevant factor in terms of what kind of learning and thinking outcomes the students took from the simulation.

Looking at the themes, they were classified them into four categories, Marketing Strategy and Tactics, Business Strategy and Tactics, Operations and Learning Outcomes.

A majority of themes fell under the category of marketing strategy and tactics. It indicates that the successful groups were using the concepts in the class to develop strategies and solutions for the simulation. The categories and themes are listed below.

MARKETING STRATEGY AND TACTICS

- Use research and analytics to make decisions. As one group noted "fly by instruments," letting the data direct your decision-making. This includes purchasing and using all available research reports.
- Use lifestyle segmentation and niche marketing strategy. The products must line up with the needs and wants of the target market. The successful groups realized it made sense to narrow the number of products offered.
- Develop an integrated marketing communication plan with balanced efforts in advertising, publicity and sales promotion.
- Balance the benefits of advertising, sales promotions, publicity and product development against the costs of these elements.
- Understand the pricing issues involved, especially the relationship between wholesale and retail pricing.
- Focus on data on consumer behavior and consumer perceptions.
- Balance all elements of the marketing mix (Price, Promotion, Product and Place). Place or distribution plays an important role and you need to keep your retailers satisfied.
- Be first to market.

BUSINESS STRATEGY AND TACTICS

- Focus on the Competition and be flexible.
- Strategy is like a chess match. Opening moves are key to success.

OPERATIONAL ISSUES

- Develop group cohesiveness and focus on group dynamics
- Read, study and understand the manual for the simulation. To be successful need to continually reference the manual.
- Buy all the research reports and understand what they tell you.

LEARNING OUTCOMES

- Reinforced and helped students retain concepts from the course. Correlated directly to class material such as segmentation, target marketing, marketing mix and the four P's of marketing (product, place, price and promotion). The simulation made the course material easier to understand and more entertaining.
- Focus on how to implement the concepts from the course.
- Illustrate the complexity of marketing decisions and the interplay of multiple variables when making decisions. This leads to the groups making decisions with incomplete information.
- Realistically reflected how interdependent all decisions are that impact the marketing mix.
- Shows how marketing strategy fits together.
- Not beneficial, did not learn anything from the simulation (this was from a last place team).
- Do just as well guessing, not a good use of time (these comments were from two last place teams)

ASSESSMENT OF THE RESULTS

Initially the interest in the study was in determining if the simulation was a worthwhile exercise and successfully encouraged students to reach the application level in Bloom's Taxonomy. This section will discuss what was learned from the analysis of the reflection papers and what the reflections suggest about the level of learning that goes with the simulation.

To begin this discussion we will briefly discuss the simulation author's thoughts on the learning and level of thinking that the simulation generates for students. We will also review the elements of the Revised Bloom's Taxonomy that are relevant to this analysis and what the analysis of the reflection papers indicates for the learning objectives.

Robert Cook, the primary developer of the simulation, notes several primary learning benefits of the simulation

method in the Instructors Manual for the simulation. Many of these are directly related to the results from the student reflection papers. Cook's learning benefits are listed below:

- Development of group management skills.
- Exposure to simulated real business type environment.
- Dynamic environment that changes with each decision by all the competing groups.
- Interaction of multiple variables simultaneously.
- Active learning of the concepts in the class.
- Competitive environment that is typical of the business environment.
- Fun and engaging learning experience.
- Development of problem-solving, decision-making, and analytical skills.

(Cook, Cook, & Cook, 2006)

The important learning contents/processes noted in the students reflective statements are the group management skills; dynamic environment; interaction of multiple variables; competitive environment; fun and engaging learning experience; and development of problem-solving, decision-making and analytical skills. The simulation met many of the learning benefits the author's proposed for the simulation. Most importantly for this analysis, it appears that the simulation facilitated the development of problem-solving, decision-making and analytical skills for students. Problem-solving relates with the application level of thinking in Bloom's Taxonomy.

Does the data support the idea that the simulation indicates the learning objective of the Application level of thinking from Bloom's Taxonomy for the Introduction to Marketing Class? Themes from the reflective statements will be analyzed to understand if the simulation experience leads to an application level of thought for the marketing concepts.

Point #1 is using research and analytics to make decisions. This includes purchasing and using all available research reports. The first theme is a tool to help with problem solving and decision-making. As one group noted, "we take a very scientific approach to 'flying the company by instruments' with the marketing report being our instruments to guide our decisions... this was very helpful in tracking trends." The students are definitely applying facts and data to problem solving, which indicates application thinking.

Point #2 is using lifestyle segmentation and niche marketing strategy. The products must line up with the needs and wants of the target market. The successful groups realized it made sense to narrow the number of products offered, which is what in marketing is called a niche marketing strategy. This is a concept covered over and over again in the lecture and many of the groups used this concept in their strategy and noted it in the reflection statement. The groups applied concepts developed in the class to the tool-

box they used in making decisions in the simulation. In this case again an application level of thinking is evident.

Point #3 is developing an integrated marketing communication plan with balanced efforts in advertising, publicity and sales promotion. These were concepts stressed in the classroom lectures, but are more subtle to understand than other concepts in the class. The successful groups picked up the importance of this element. Most students think advertising is the key to communication, but to be successful in the simulation the groups needed to focus on all the elements of the communication mix. Most of the groups came to realize they needed more than advertising to be competitive. Here the students used principles that came from the lectures, indicating an application level of thinking.

Point #4 relates to the balance between the benefits of advertising, sales promotions, publicity and product development and the cost of these elements. The better groups realized they needed to do a cost-benefit analysis prior to each decision period. As one group stated, "a large part of our success came from our two conflicting strategies. As a strong push for increasing advertising, increasing sales and modifying the products came from one side, while a constant pressure to cut costs came from the other side. Together a balance was found, resulting in high profits." This is not something that came directly from class, but is more an understanding of what is happening in a competitive marketplace. This theme indicates there is higher level thinking taking place at the analysis level of the taxonomy.

Point #5 is understanding the pricing issues involved, especially the relationship between wholesale and retail pricing. This is something that is taught in the class, but can be difficult for students to understand. It is really about understanding how a business makes money. Many of the groups came to the realization that this is a key factor in the simulation. This also indicates application thinking. This ties very closely with point #6 below about understanding how all elements of the marketing mix work together.

One of the most successful groups commented on how they used pricing as a competitive element in the simulation., "By applying a little game theory and trying to anticipate what our completion was going to do, we moved ahead of them. The main application for guessing what our competition was doing came in the form of prices. Our wholesale price changed every decision period. The goal was to keep the retailers away from our competitors' products, and give them a higher incentive to push our products. This lowered our sales dollars, but consequently increased our sales. Retailers seem to be more receptive to lower prices. The reports showed this through a one in the retailer satisfaction survey. We moved the prices in abnormal numbers using a price of 13, rather than a 10, 15, or 20. In anticipation of competitors copying out prices, we would lower them in advance."

Point #6 is the need to balance all elements of the marketing mix (Price, Promotion, Product and Place). This is something that is covered continuously in the class both in

lectures and the texts, but it is a difficult concept for many of the students to understand. It is especially difficult for the students to understand place or distribution as an important part of the marketing mix. One group said, "Our focus up until the last period was on advertising to final consumers..., but we should have taken into account the importance of getting our product into stores. Without the ability to place our products in more retailers, we fell behind in profit, even though we felt the ratings and advertising of our video games were at good levels... We have come to realize that building relationships with other businesses is just as important as creating positive relationships with customers." The simulation helped the students realize the importance of a marketing mix that works together. This is another example of applying the principles in real world type situation, which also indicates an application level of thinking.

Point #7 is focusing on data on consumer behavior and consumer perceptions. This is an ability to understand and use perceptual maps, based on how the product is perceived by the target segment (Cook et al., 2006 p. 15). It also includes being able to understand the results of market research reports and using them in decision-making. While this is discussed in class, the students have to learn on their own what the maps and research reports are indicating. In this case the students need take principles discussed in class and the book and apply them in a particular situation. Again this indicated application level of thinking.

Point #8 being the first to market is a principle that has become a statement of faith in business today. It is emphasized in the popular and business press and is somewhat over used. There is a case for it to be important in some instances, but is not always a good strategy. We do not focus on it in class, so I am assuming the students are learning this from the popular press and other classes. Many of the groups mentioned it in their reflection papers, so it is no doubt a concept from outside the class they applied, so a case can be made that it does indicate application thinking.

The other category that is relevant for this study are the Learning Outcomes. It is evident that most of the themes support the concept of application as a learning objective. A number of groups commented on how the simulation reinforced the concepts from the class and related directly to many of the basic concepts of the course. The simulation also focused on implementation of the course concepts. One group stated that "The marketing simulation was a very beneficial learning tool. All of us agree that it was excellent to have hands on experience and we will retain the information due to the fact that we actually used it in real life (sic). Because we were able to implement the things we were learning in class, it allowed us to better understand the concepts being taught." This illustrates that the simulation helped the students to understand better the concepts of the course by applying them in this particular situation. The simulation made applying the concepts of the course a practical experience and achieved a level of

application thinking for those who made a successful effort on the simulation.

It was rewarding to see from the feedback that the simulation made the course material easier to understand. One group said, "We thought that overall the simulation made the course material easier to understand... The mix of the class material and the simulation seemed fairly effective to us as far as understanding what goes where and what happens when you mess around with this or that such as price or product changes. Overall it helped our understanding of the course and was a nice way to pull different concepts together." This indicates that the simulation helps facilitate understanding of the concepts through application.

The simulation also showed the complexity of marketing decisions and the interplay of multiple variables. This complexity also reflects the interdependency of the marketing mix elements. These are all characteristic of business decision-making and are an important learning outcome for the students. These outcomes are application oriented, but also indicate that some analysis thinking taking place as well. This was not planned or expected, but it is another factor that indicates that the use of the challenging simulation was successful in the class.

Finally, some groups who finished last believed that the simulation was all due to chance and they did not get anything out of the simulation. This sentiment should not be ignored and indicates better training and monitoring is needed for groups doing poorly. In this case it was only 2 out of 20 groups who felt this way, but it does suggest more needs to be done to engage these students.

FUTURE RESEARCH

For future research, adding a section in the reflective paper on how the simulation can be made more realistic would be interesting and add to the use of the simulation in future classes. Another consideration is to expand the research using Bloom's Taxonomy, developing a measure of objective learning that can capture different levels in the taxonomy. We realize that this last statement is much easier to make than actually do, given the general lack of success in this endeavor witnessed by past efforts at ABSEL. For example, the 1996 ABSEL had a special session on the measurement of learning (Gentry et al., 1996), which unfortunately did not generate great progress in terms of how we measure learning.

It would be interesting to do a quantitative study using the total population of the class to measure the level of cognitive skills that the students are learning from the simulation. We would continue to use Bloom's Taxonomy as the model, but include a survey, as well as a pre and post-test analysis. It would also be interesting to research overall success in the class with success in the simulation. Another avenue would be to compare student group results based on GPAs and/or majors.

As suggested earlier, the assessment grading should be analyzed. One method may be to look at the results as we make the grade a much larger portion of the students overall grade. What is the impact on changes in incentives on the learning outcomes for the simulation? More specifically, we think it would be interesting to investigate the influence on learning if the reward structure places undue incentive to win versus a system which encourages actions aimed at the avoidance of losing.

CONCLUSIONS

We have shown that the simulation supports the key learning objective of the class to get the students to understand how to apply the ideas and concepts introduced in the course in a business setting. The simulation helped the students reach the application level of thinking about marketing concepts and the simulation ties in well with other assignments used in the course.

There are some interesting takeaways from this study that maybe implemented in future classes. There is a need to integrate the simulation more closely with the course material, especially early on in the class, so the students can see how the simulation works with the course material. Unfortunately it does not become evident to most of the students how the course material integrates with the simulation until they have been through several decision periods with the simulation, which can be almost two thirds of the way through the class.

More interest in the marketing material can be generated, by tying the lectures more closely to what is happening in the simulation. Even though these are large classes, a debriefing session early on in each class can stimulate the students to start thinking more holistically about how the decisions they are making on the simulation relate to the course material in the book or the lecture.

There is a need to do a better job of training the students for the simulation. Currently it has been: read the manual and go, with a brief overview from the instructors. From the comments on the reflections, there are some areas needing to be emphasized and tested on in the overview and training. The successful teams all commented on the amount and time and effort they put in studying the student manual and that needs to be reinforced in the classes. The students will get more out of the course and the simulations will be more competitive.

More emphasis needs to be put on the competitive nature of the simulation to generate more interest. League leaders should be announced in each class leading up to the end of the simulation. Some internal reward system should be created that is separate from grades, such as gift certificates or recognition to encourage the competition. Business students learn better if they are in competition and the class and use of the simulation should encourage that.

Overall this study was insightful for the instructor, and hopefully for the reader as well. The use of reflective pa-

pers is instructive for the instructor and the students, and it should be incorporated into introductory marketing classes when using a simulation game.

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APPENDIX A

Competitive Analysis Worksheet

Benchmarking Analysis for Marketing Simulation

One way to compare marketing activities and decisions is to benchmark it to the competition. The following are a few analyses you might want to use when analyzing the completion and your results. You might want to do the first table for overall and by product. The second table is by product.

	Cumulative Profits	Communication Mix (\$ Invested in each element)	Communication mix (% of total in each element)	
Cumulative market share leader				
Your team				
Difference				
Cumulative Profit leader				
Your team				
Difference				

	Gross Mar- gin for Product _____	Brand Awareness for Product ____	Communication Mix for product _____	Positioning scores in comparison to the ideal points	Retailer Satisfac- tion for Product _____
Cumulative mar- ket share leader					
Your team					
Difference					
Cumulative Profit leader					
Your team					
Difference					

APPENDIX B
Simulation Decision Log

SIMULATION GAME - DECISION LOG
TEAM # _____ DECISION PERIOD: _____

What major issues and problems were discussed during your meeting(s) for this period's decision?

For each major change in your decision variables, provide a brief justification and rationale to support the planned change.

Group members present at the meeting(s) for this decision period. (Please sign your names)

