JOHN ORMAND'S GROUP PROJECT (A)

John Ormand was seething. The bell had rung, ending a long and frustrating debriefing of his class's group project. John and the other members of his group had each invested at least 100 hours analyzing the case and preparing a formal written proposal without, it seemed, deriving benefits from the process.

John was not alone in his frustration. Other students agreed that the group project had been a waste of time, but John felt more deeply disappointed than they did. He was not concerned with the immediate outcome of the project; rather, he feared that group projects were an ineffective, inefficient teaching method. As a doctoral student in business, he would be a university professor in two years' time, and he was frustrated by the problem of finding a teaching method that was both an effective and an efficient learning experience, was engaging for his future students, and was a realistic representation of group dynamics in the business world. He could see a need for group activities, but this experience had been a disaster.

The Project

The group project had been a case analysis of a real business situation: students were to determine how a multinational firm should meet its worldwide product-distribution needs. The case decisions were when and where to build new facilities, how large the new facilities should be, how much should be produced at the new and current facilities, and the international sourcing and shipping plan for the worldwide markets. Although it was a difficult case, it lent itself well to the course topic, mathematical programming and optimization.

The Groups

Groups of four or five were formed from John's systems-engineering class and a class from the university's M.B.A. program. Undergraduate seniors and masters-level students made up the systems-engineering class. Like many engineering students, they were oriented
to quantitative analysis and problem solving, and they were not accustomed to verbal communication. The M.B.A. program was considered one of the best in the country; it was selective and required students to have had prior work experience. The M.B.A. program used the case method exclusively, which required students to conscientiously prepare the next day's cases and participate in class. This particular M.B.A. course was a second-year elective, and a majority of the M.B.A. students who chose to take this class had science or engineering backgrounds. These students were more verbal, were older, and were more competitive than the systems-engineering students, but were equally comfortable with quantitative analysis.

The Project Assignment

To ensure a mix of engineering and M.B.A. students, the professor assigned students to groups. The project was to analyze the case, determine the work required, and produce a formal "consultant's proposal" outlining recommended action items. Papers were limited to ten pages. The best three proposals would be selected by the instructor, and the groups that wrote them would make oral presentations in front of the class and a panel of faculty, which would "buy" the best proposal.

Grades for the engineering students would be based on the quality of the proposal (i.e., accuracy in identifying the problem, feasibility of the solution, and clarity of exposition). The engineering students were also told that, based on information identified as critical in the proposal, data would be provided for a second project, in which the engineering students alone would develop a computer-based solution to the sourcing problem.

The M.B.A. students were given instructions different from those given to the engineering students. Grading in the M.B.A. school was competitive. Unlike the engineering students, the M.B.A. class were told that only the winning proposal would get an A. The two runners-up would get B+s, and the remaining groups could do no better than a B. Furthermore, the M.B.A. students would not follow up the case by programming a computer-based solution, so their involvement would end with the proposal competition.

The Professor

This teaching position was Professor Donna Lewis's first. She had finished her Ph.D. in systems engineering two years earlier. In her late 20s, she was not much older than her students and was younger than some. Students liked her because she was accessible and helpful to them during her office hours. Nevertheless, this semester's mathematical-programming class was going poorly. Her lectures were organized but dry and unengaging. She lectured from her notes and faced the chalkboard most of the time. She had not established her credibility in the classroom. She often gave vague answers to students'
questions and made frequent mistakes in notation, when correct notation was critical if students were to keep track of the long and complex formulas on the chalkboard. Furthermore, she spent the first few weeks of the semester deriving mathematical proofs, which were important to the topic of mathematical programming but were hated by most students.

Students’ frustration over the slow-moving semester was compounded by an extremely difficult textbook. Many students simply ignored the textbook, which had cost them fifty dollars.

**John Ormand**

John was a 30-year-old doctoral student of business. He had engineering and M.B.A. degrees from another university and had spent six years in industry as a consultant and a systems analyst. He was taking the mathematical-programming course to acquire the necessary skills to do academic research in his field, operations management. The techniques discussed in the course were widely used in his field and John was an enthusiastic student, despite the slow pace. He attended every lecture and, based on homework assignments and exams, was ranked among the top students.

When John heard about the group assignment, he winced. His undergraduate and M.B.A. experiences with group projects were that, in most instances, he could have produced a better product on his own. John was a reluctant leader, but in the past, he had felt the need to assert himself in many groups in order to ensure his usual A.

He also had doubts about the premise of the group project. The assignment was presented as an opportunity to analyze a real business problem, simulate a real-world decision-making process, and provide a cooperative learning experience between engineering and M.B.A. students. His M.B.A. program had included a semester-long field project that had claimed to provide a lifelike experience, but the students' group dynamics had not mimicked the behavior he had seen in a consultancy or private industry.

Although he had helped to prepare several proposals during his tenure with the consulting firm, he hesitated to take charge of his current group and "educate" them in the way he had been trained. He had tried that approach before. During his previous M.B.A. field project, John had prepared some diagrams using the style of his old consulting firm. When one group member became upset because she could not understand the format, she had scolded, "You're not working for them anymore!" Even though she had been looking at the charts upside down, John had retreated. Still sensitive over this incident, John was determined to let his current group discover its own style and direction.
Ormand's Group

Ironically, although he already had an M.B.A. and an engineering degree, John was assigned to a group with three M.B.A. students. At first, he was optimistic about the quality of the proposal they could produce. That optimism was soon replaced by frustration. John consciously avoided dominating his group or volunteering as the leader. Because John was a future teacher, he felt he should give others the opportunity to steer the learning process while he acted as a facilitator. But no leader emerged. John could sense that the group needed direction; nevertheless, he held back.

The disparity between the objectives of the M.B.A. and the engineering students was obvious. John had to lobby to include requests for data that might be needed for his next group project, even though he did not believe a "real-world" proposal would include such specific requests. The M.B.A. students' first topic of discussion was whether to try for an A. This decision was a real consideration for the M.B.A.'s because the group project was only worth a small part of the grade and the M.B.A.'s needed to allocate their time wisely. The group did not commit to trying for an A until after they realized they had an interesting and viable solution, but even then the decision was not unanimous.

John's group muddled through the three-week duration of the project, meeting sporadically and in partial groups. Rick emerged as the leader because he volunteered to type the final proposal, but he was hesitant to assert himself. He was a hard worker, bright, creative, and a good communicator. Aaron absorbed himself in developing a detailed computer program, laying out all the necessary files and programs on a systems flowchart. It was impressive, but John questioned whether such a detailed plan was appropriate at the proposal stage. Tim was the weakest member of the group, taking the discussion on tangents or in unrealistic directions. He championed slacking off and going for a B. John and Rick thought that a B was acceptable to Tim and that he might have quickly recognized that the group was strong enough to get a B without his help.

One of the group's first accomplishments was to develop a table of contents and to delegate tasks. Rick was assigned to write a detailed explanation of the case issues, the assumptions upon which the proposed solution was based, and a sales pitch for the solution. John prepared an overview of the solution methodology, an introduction, the costs and benefits, and an implementation schedule. Tim prepared a list of open issues not resolved by the case that would need to be considered during the implementation phase. Aaron focused on the detailed schematic diagram of the programmed solution.

The case's details were complex, requiring the group to analyze it for many hours. For example, John would pass the computer room in the morning and see Aaron editing the schematic diagram. Aaron would often be in the same seat when John passed the computer room on his way home late at night.
The group entered the final week still acting cautiously, careful not to offend each other’s egos. Tim submitted his final draft of issues to be resolved during the course of the proposed project. John and Rick read it, and both were disappointed. Tim’s final draft was nearly identical to the rough draft that he had presented days before. John was particularly disappointed because he had planned to draw information for his next project from this list. Much of the final proposal was produced in the last week. Aaron’s schematic diagram was large enough to fill four pages taped together. John spent two hours correcting Aaron’s typos and reducing the final version to fit on an 11” H 14” page, handing in the proposal just ten minutes before it was due. But it was over, and John was relieved to be done with it.

The final report was a hodgepodge of writing styles and was disorganized, but its analysis was conceptually sound, and its solution was cost effective. Rick even thought they had a good chance at being one of the three finalists.

John felt frustrated and exhausted by the entire process. The group had spent many hours pursuing ideas that went nowhere. He had invested 100 hours in the project without learning or practicing any new concepts. The group had not performed like task forces he had served on in the "real" world. In his experience as a consultant and in private industry, he had never encountered a situation where a short-term task force was not assigned a leader or where an individual did not have authority by virtue of position. Nor was a group ever given such conflicting instructions and evaluation parameters. John recognized that goal conflicts were common in cross-functional committees, but in the business world, departmental managers knew each other and dealt with each other over long periods of time. This group had been thrown together on short notice without introduction, and had been expected to perform a rigorous analysis of a difficult problem.

The Competition

In the week between the submission of the final proposal and the announcement of the winners, the results of the group process began to emerge. Some groups had experienced major conflicts because M.B.A.’s had dictated to the group. For example, one group had handed its final draft over to two M.B.A.’s, only to have a complete rewrite returned the following day, too late for changes to be made before submission.

Almost everyone was relieved to have the project behind them. The consensus was that no one wanted to win, because the winners would need to sink even more time into the project. The three finalists were announced at 10 a.m., one day before the competition. The business students were informed by a note distributed to their personal mailboxes at the business school. As John read that his group was not a finalist, he overheard an M.B.A. student whine, "Oh no, we won!"
The three finalist groups, dressed in suits and ties, made their presentations before the faculty "board of directors" as the other groups looked on quietly. A single winner was chosen and awarded the A.

The consensus of the observers was that the finalists’ solutions were awful. One group did not propose a solution at all, but rather tried to sell the "expertise" of its nonexistent firm. Another group offered a choice of solutions. The winner suggested installing a real-time computer network linking terminals all around the world. John thought this approach was like using a stick of dynamite when a small hammer would do.

The Project Debriefing

John's frustration mounted as he suffered through the competition. Losing did not sweeten his mood, but his grade was not the issue. He knew that his other exam and homework scores would easily earn him an A for the course. John simply could not see how this process met any of the original project objectives. He believed that it was an exercise in frustration.

The day following the final competition, Professor Lewis spent the class time evaluating the project. Most students had already discussed their frustrations with each other, and their mood was tense. The students wanted to know why they had been subjected to this experience. Professor Lewis reviewed the objectives of the exercise and asked for students' reactions. Several engineering students commented that they had been surprised by the strength of the quantitative skills of the M.B.A.'s. After these few polite comments, out came the stories of domineering M.B.A.'s and group apathy.

John was tense and agitated. He did not seek a confrontation, but he did ask pointed questions. He was searching for justification not only for his own feelings, but also for the notion of group work. If group work could be justified, what would need to be done to make the process worthwhile?

The students brought up their problems with conflicting assignments, motives, and grading policies. John suggested that the class would have benefited from a discussion on what constitutes a good proposal before beginning the project. Professor Lewis led the class in a 15-minute discussion on project proposals, filling a chalkboard with a variety of suggestions.

John then challenged the notion that the project had been an accurate representation of real-life situations. His objection was seconded by Ben, a student who had returned to school after working as a staff engineer, an engineering manager, and a consultant over the past 25 years. John was glad that someone else corroborated his perceptions, but he still felt angry at
his teacher for wasting his time, angry at a process that was ineffective, and angry at himself for not taking charge of his group. The disappointment welled up until, finally, he raised his hand and, with frustration apparent in his voice, said,

I understand what we were trying to accomplish. But I didn't see it happen with this group project. I'm looking at this from the perspective of being a doctoral student now and teaching in two years. From this experience I would have to conclude that group projects do not achieve realistic representations of the real world, and right now I plan on not using them in my classroom.