

論文

A New Mode of Learning: Learning by Changing Realities in a Brazilian University

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ABSTRACT

This is a case study of a University Department in Brazil, which was facing a significant threat. Struggling to improve the performance of their students in the annual national exit exam required by the Ministry of Education, the Director of the Department requested one teacher to design a low-cost strategy that did not need to depend on additional resources, which was complicated to obtain in the large and bureaucratic University. The requested teacher designed a course that triggered an explosion of student creativity, competition and cooperation. Soon, the students, unaware of their intrusion in the power structure of the University ended up creating a standoff with the Director, who started to boycott their actions. Morale went down on a steep dive, and three weeks before the exam date the situation was worse than ever before. A last minute change in the leadership of the Department was seen by the University authorities as the only chance for the Department to escape closure. Facing a seemingly impossible challenge, the new Director stimulated a massive participation of students, teachers and authorities sharing with them the ownership of the challenge. A strong investment on interpersonal dynamics produced a virtuous cycle of trust and cooperation that enabled the university to make an unexpected comeback and escape closure.

1. Introduction

The events described in this case took place at the Management Department of Universidade Brasileira, a university located in the capital city of Brazil, Brasilia. Universidade Brasileira had decided to locate itself in one of the poor cities of the region, with the clear purpose of bringing education to those less advantaged in society. Universidade Brasileira was quickly growing, and in early 1999 had about 10,000 students distributed across 18 departments. The Management Department itself had about 1,000 students and was the largest department in Universidade Brasileira. It was also considered one of the least successful Departments.

In 1996, the government of Brazil had finally succeeded in establishing a compulsory exit exam for university students. The exam classified the institutions whose students obtained the best 12% of the grades as A, the following 18% as B, the following 40% as C, the following 18% as D, and the last 12% as E. Since the inception of the exam, Universidade Brasileira had gotten a C grade in 1996, a D grade in 1997, and a D grade in 1998. According to the rules established by the Ministry of Education, courses that obtained either D or E three years in a row would be closed. The Management Department was, therefore, being threatened of closure.

2. The National Exit Exam

The establishment of the national exit exam was the outcome of a long drawn debate questioning the quality of the students graduating from the universities. Even though it was known that several universities were clearly below acceptable standards, an exit exam to evaluate the capacity of students was resisted by all universities, both good and bad.

Bad universities resisted the examination because they would certainly be proved to be bad. Surprisingly universities considered to be among the best also resisted the idea,

probably because they had already secured the image of outstanding universities, and the new examination could only confirm their current standing in the best scenario case. A dangerous possible alternative scenario was that their students, despite being the "best" students, may just have a bad day and get low grades. Then, the "image" so painstakingly constructed over several decades could be severely damaged by the whims of uncontrollable students.

Students also were against the new exam for the obvious reason that they did not want to do an extra exam that did not exist so far. Actually their resistance was even larger than that of the universities. Different groups of students mobilized for distinct reasons, but one rationale was that the students did not trust that the exams would be fair. Considering that the form, effectiveness and even the content of the curriculum delivered to the students differed widely among schools, the students reasoned that it would be impossible to have a fair exam. Also, exams were generally prepared by teachers belonging to the best universities and, therefore, the exam would exacerbate the advantages possessed by the students from the best schools.

Another line of argument, particularly strong among students from "weaker" universities was the risk of being labeled as worthless graduates by the job market on the basis of bad grades in the exit exam. They argued that they would suffer the most, when in reality the universities that gave them poor education should be held accountable. They refused to become the martyrs of this reform.

Until then, although degrees from lesser universities were not valued as highly as those from the better universities, a university degree was almost a sure opportunity to get a new and better job. Now, with the exit exam, firms were likely to use this "reliable" new signal to hire university graduates, which would surely kill any possibilities for good jobs for students from weaker universities.

3. The Situation at Universidade Brasileira

In Brazil, many management undergraduate courses are night courses, with most students working full time to pay the tuition fees. For some students, the tuition fees consumed their entire salary, and few earned more than the cost of education.

At Universidade Brasileira, students considered the tuition to be exploitative and they were not happy to see Universidade Brasileira constructing building after building in a process of fast growth, while they did not see improvements in the quality of teaching and learning. Students also complained that there were too many fees. Fees for transcripts, fees for declarations, fees for late exams, fees for every single paperwork students ever needed. Universidade Brasileira was also considered to be exceedingly bureaucratic. Students wasted an awful lot of time trying to get paper work done, being sent back and forth from one administrative section to another, missing classes, and in the end having to give up, due to conflicting rules that made some situations difficult to solve.

To make things worse, Universidade Brasileira had decided to surround the campus with a fence to increase security, and charged a dollar every time the student entered the campus. Parking prior to fencing was free, and most parking spaces were only available inside campus. Outside the fenced areas, space was significantly limited and restricted to the side of the road passing in front of the campus. Students, outraged by the decision tried to destroy parts of the fence and a standoff occurred momentarily, but Universidade Brasileira did not back down and those who wanted to park inside the campus had to pay.

While the quality of teachers and students differed across departments, the Management Department was in a particularly difficult situation. The large number of about 1000 students added to the administrative and bureaucratic work necessary to run the Department.

Another problem was that most teachers, if not all, worked full-time either in

Government or in the private sector. From their point of view, teaching was a time for relaxation from the pressures of work, or a second employment for additional income. Even those more conscientious would not actually have the right incentive to dedicate time to teaching.

Absence and delays were common among teachers as well as students. Although classes were supposed to start at 7 P.M. and end at 11 P.M., many arrived around 7:30 P.M. or thereafter. The main reason for the delay was that teachers had to give priority to their "real" jobs. Classes were being actually dismissed around 10:20 P.M., because most students left earlier, due to many reasons. An inquiry on the reasons of early dismissal found out that the students had to catch the last bus to go home, coupled with the dangers, particularly for girls, of staying in deserted bus stops late at night in a potentially dangerous neighborhood. These were persuasive reasons for teachers to dismiss classes earlier. *There is no need to say that the teachers themselves would prefer to return home early, since a full time job would be waiting for them the next day. As some would jokingly say, "teachers pretended to teach, and students pretended to learn."*

The situation involving the Management Department in the semester leading to the national exit exam of 1999 could be summarized as follows:

1. Over the course of four years, students have not learned much.
2. Teachers considered their students to be below standard, lazy, irresponsible, difficult, unwilling to learn, and only looking for a certificate.
3. Students thought the teachers were outdated, unconcerned with being good teachers, having poor didactics, having poor knowledge of current management theories, and unresponsive to student concerns.
4. The university administration and management students were in a tense state of mutual distrust.

Since the establishment of the national exit exam, Universidade Brasileira, as well as all other universities, was trying hard to prepare their students to the exit exam. Every year, all departments prepared their strategies, organized special programs for revising content for the exam. In spite of all the efforts by Universidade Brasileira, student turnout was low, and the confrontational situation between management students and university authorities was not conducive to a cooperative mood that was needed to overcome the exam.

4. The Initial Preparation Strategy

a. Report of the Preparation for the 1998 Exam.

Earlier documents are not available, but the 19 August 1998 Report issued by Professor Jose da Silva¹, the Director of the Management Department, summarized the efforts made by the Department in preparation for the third national exit exam that took place on 7 June 1998. According to the Report, 198 students were enrolled in the national exit exam and 153 students actually took the exam. The highlights of the Report are described below.

19 March 1998 – First meeting of the Director with the 198 students enrolled in the national exit exam.

In the meeting the Director discussed the "objectives, content, type of questions, the importance of the exit exam for the student and for Universidade Brasileira, and the results from previous exams. Explained the planned activities to support the students. Stressed the importance of the student participation."²

¹ A fictitious name.

² "Report: Activities to Stimulate and Support the Students from the Management Department Enrolled in the 7 June 1998 National Exit Exam," 19 August 1998.

The planned activities were constituted by five simulated exams, each dealing with a few of the fifteen disciplinary areas covered by the national exit exam. They were distributed between 7 April 1998 and 28 May 1998.

The Director also mentioned the creation of a team of four teachers who would hold office-hours to provide information and guidance to students preparing for the exam. This team was also responsible for coordinating the production of the simulated exams, apply and correct the exams, and maintain contact with the students and stimulate them to participate in the preparations.

A group of students, however, filed a complaint with the Justice Ministry accusing the Management Department of forcing students to participate in an activity that was not part of the curriculum. The complaint was originated from a note classifying the activities as "mandatory" in the text at the top of an agenda of planned activities distributed to the students.

25 March 1998 - The Department prepared a new letter and an agenda inviting students to participate in the activities, without labeling them as mandatory anymore.

According to the Report, the Department tried to attract the students to the preparation activities through the following additional measures:

1. In the faculty meetings, all teachers were asked to encourage the students to participate in the preparation activities.
2. In the days preceding the simulated exams, posters announcing the event were distributed through the building.
3. 30 minutes before the simulated exams, the coordinating team went through all the classrooms calling the students to participate in the exam.

In spite of all the effort, the number of participants in the simulated exams varied from 16 to 31. As the Report mentioned "The number is very small considering the universe of 198 students." Also, very few students consulted with the faculty members during the three-month preparation period.

The Report also discussed the results of an opinion pool carried out by the Department in which "the students seemed to believe in the relevance of a good preparation for the exit exam." The poll, further showed that the students believed that a good grade in the exit exam was to the interest of both parties, Universidade Brasileira and the students.

In the final paragraphs, the Director expressed his bewilderment with the fact that the high degree of student awareness was not translated into action, in spite of all the effort carried out by the Department.

b. The Preparations for the 1999 Exam

A few months later, the Director announced a new preparation plan, this time based on a marketing approach, which was led by two marketing faculty members. The marketing group based their strategy on the results of the student survey taken at the end of the previous preparation period. The summary result from the survey is presented in Table 1 below.³

³ The table is built from the comments from the proposed document: "Preparation of Management Graduates to the National Exit Exam - A Marketing Approach" 1999, and not from the questionnaire itself which was not available anymore.

Table 1: Survey on Student Perception of the Exit Exam

Question	Agree/ Yes	Indifferent or Disagree/No
1. Do you know what the exit exam is?	100%	
3. Do you want to help the Department to obtain a grade A?	100%	
4. Do you think the grade obtained by the Department is important, and that it will affect your future prospects?	85%	
10. Do you agree with the establishment of the exit exam?		58%
5. Do you want to be at the same level of the best Management Departments in the country?	~100%	
6. Do you think that the quality of teaching here is equal or superior to the level of other institutions?	47%	53%
8. Do you receive enough incentives from your teachers to prepare for the Exit Exam?		53%
9. Do you think that the contents of the course prepared you well for the Exit Exam?		77%

i. Actions proposed

Based on the analysis of the above mentioned survey, and on the lessons from the previous year, the following actions were proposed:

1. Carry out review sessions of all subject areas of the exit exam.
 - a. Produce brochures to study one discipline every week
 - b. Carry out a weekly test of these disciplines
 - c. Offer prizes to all students who respond correctly to all questions
2. Carry out simulated exams
 - a. Make students practice with the exit exams from past years
 - b. Give prizes for the top grades in these monthly exams
3. Carry out lectures to raise awareness of students
 - a. Organize two lectures with entrepreneurs and company executives to increase awareness of the importance of being competitive in the job market of today.

ii. Properties of the actions

The proposal defined that the action should have the following properties:

1. Reliability: Ability to convince the students that the measures to be taken by the Department will help them to actually get a grade A or B in the exam.
2. Efficiency: Ability to cover appropriately the entire thematic areas of the exam.
3. Relationship: Ability to symbolize a commitment between students, teachers and Universidade Brasileira to obtain an A or B.

iii. Benefits

The proposal listed the following benefits resulting from the actions listed above:

- 1) *To the students*
 - a. Ability to obtain a better grade in the exam.
 - b. Better future professional perspectives
 - c. Increased competitiveness in the market
 - d. Consolidation of knowledge acquired over the four-year course
 - e. Better preparation for other academic exams
 - f. Free provision of these additional services

- 2) To teachers and Universidade Brasileira
 - g. Recognition by other University Departments of the responsible behavior of the management faculty as they dedicate extra hours to carry out these actions
 - h. Recognition by other Departments of the capacity of the management faculty to overcome difficult situations
 - i. Additional payment to be received for the extra hours dedicated to these actions

5. Real Action

These planned measures, whether potentially effective or not, ended up not being implemented due to the lack of resources to pay the teachers who would perform these tasks. Most teachers were part-time and paid on the basis of number of disciplines they taught. The full-time teachers, who were a small group, were already over-worked with administrative tasks of the Department.

Unable to mobilize the teachers and the authorities of Universidade Brasileira to support the plan, the Director asked Professor Jorge, coordinator of the "Entrepreneurial Strategy Seminar," whether he could devise some kind of a zero cost strategy. Jorge knew that one important element missing in the current and past strategies was making the students the main actors of the preparation process, and his new course could be a perfect vehicle for mobilizing the students in this way.

As he faced the challenge, Jorge believed that the following elements would be essential for the success of the undertaking:

1. The students would have to take the challenge as their own, i.e., they would have to build a sense of ownership.
2. The students would have to enjoy the experience; otherwise they would not dedicate themselves to the extent and with the intensity needed for such a major challenge.
3. The students would have to feel confident in their ability to overcome the challenge.
4. The students would have to be able to work effectively and cooperatively as a team.
5. The dynamics of the activities would have to work in a crescendo leading to a climatic closing in the last few days including the ultimate exam date.
6. The process had to become positively "uncontrollable," in an epidemic process, peaking on the date of the exam.

a. Designing the Epidemic Process

Jorge shaped the syllabus in such a way that the students would be participating in a competition that, through a series of carefully designed tasks, challenged the students to find innovative ways to break the existing negative and confrontational mood among students and faculty. The performance of the students in the course would be measured against their success in making the average grade in the exit exam increase from the current D to a B. The syllabus aimed at building a system of incentives that could produce a virtuous cycle of positive changes in the entire Management Department and achieve the objective of saving it from closure.

The resulting syllabus tried to apply the following three principles:

1. Let the students be the main conductors of the plan.
The students would be the main conductors of the plan, though Jorge would have to skillfully guide them through the best strategic choices, while interfering the least in the students' own decisions.
2. Create conditions in which the diversified talents of the student body can come to life.

Create opportunities for the students to bring their strengths and talents – independent of being academic or not – so that they could make full use of their diversified strengths.

3. Let them have fun.

Create a setting that is similar to a game – where they can rely on their instincts while having fun, above all. This should also create a healthy sense of competition.

The new course posed several challenges to the students and to Jorge. To begin with, the discipline was a fifteen-week course totaling only 30 hours. In this short time, the unusual form of the discipline had to be understood by the students, who would need to become engaged in the objective of saving the Department, organize themselves in firms, distribute authority and responsibility among themselves, design a strategy, implement, evaluate, learn from mistakes, learn about the exit exam, engage all students taking the exam, find them and have them involved in the process,⁴ develop a database of students, find a way to have students quickly learn the things that they did not learn in four years, and inspire teachers to "teach" in a few hours whatever could not be taught in the past four years. All this had to be done in a situation in which the reality, the mood and the odds were all radically against them.

In addition to all the challenges mentioned above, Jorge knew by experience — and through recent theoretical developments by scholars such as Humberto Maturana and Rafael Echeverria — that the largest challenge of all was to make these students function well as a group. A relatively large group of people (each of the two "firms" had about 20 people), most of whom have never met before, had to communicate, coordinate, and cooperate effectively to achieve this common and challenging objective.

The main rules of the "game" were the following:

1. The students should set up two consulting firms. These firms would compete to improve the results of the 128 students taking the national exit exam that year.
2. Each company should have exactly half the number of students in this class (20 each). The company should establish a clear division of responsibility (President, team leaders, and staff), but no one should have any kind of authority over the others. The relationship should be based on mutual respect and mutual interest. They should be able to devise a distribution of responsibility that everyone accepted in order to achieve their ultimate goal.
3. The target population of 128 students should be divided among the two companies by any criteria they could mutually agree. Each firm had the task of ultimately maximizing the grades of the chosen "client" students.

The challenges faced by the students were the following:

1. Deal successfully with the free-riding problem between the two firms.

Free-riding is a potential problem whenever the production of public goods or services is involved. Schools are places in which most of their activities have characteristics of public goods. For instance, one firm affixing posters with messages to motivate students to prepare for the exit exam would benefit all students, irrespective of whose "clients" they were. The same applies to other activities such as awareness campaign, distribution of information about the exit exam, engaging teachers to prepare review materials or to provide review sessions, and other motivational activities. Everyone would profit if both firms can act cooperatively, but the work can unravel if they are unable to cooperate. If both firms decide to concentrate only on "selfish" actions that will only benefit their own target population, and do not make any effort on public activities, both firms will lose and the project is likely to fail.

2. Deal successfully with the free-riding problem within each firm.

For several reasons such as living far from school, having a particularly busy job, or having personal problems, some people might end up working less than the others. Such situations, regardless of being justified or not, are very hard to check and can unravel the whole process by making the harder working people feel that they are being "used" by the less hard working "sneaky guys."

3. Build an effective communication system

⁴ Many, probably around a third, of the 128 students enrolled in the exit exam in 1999 were students who had already finished all courses and were not coming to the school anymore.

As mentioned above, this firm of 20 people was comprised by people who, for the most part, did not know each other, did not work in the same place (everyone had a different job), had a full-time job, and rarely had a chance to meet each other during school hours. Building a communication system that could effectively fill all the above gaps was crucial for the success of the enterprise.

4. Be creative

One large challenge comes from the tendency of people to use activities that they have seen applied somewhere else, regardless of their effectiveness. It is possible that nothing changes even after carrying out a flurry of activities. Looking for creative, innovative, unique solutions never seen anywhere else is one important way of ensuring that they would not be trapped in the hundreds of standard ruts that imprison peoples' potential and make them follow paths only because somebody had already been there. Changing realities require new approaches that reality has not seen yet.

5. Act quickly

This huge and seemingly impossible challenge had to be done in about three months.

b. From plan to action

After the students had divided themselves in two firms of equal size (20 people) with identical proportion of men and women by design, Jorge organized one weekend 9-hour-session for each firm, to help them identify the problem, understand the main factors that affect the problem, design operations and activities in each operation, and assign responsibilities for each member of the firm to implement the plan.

The first group of students, which we will call Firm E, had their planning session on 7 March, and the second group, Firm K, had the planning session on 13 March.

Each firm came up with strategies that had different emphasis.

Firm E was organized in four teams:

1. Team Motivation – to motivate their client students to understand the importance of the exit exam.
2. Team Campaign – to create a sense of mobilization in the whole Department
3. Team Knowledge – to upgrade the knowledge level of students and prepare for the exam.
4. Team Evaluation – to continuously evaluate the performance of the firm E, particularly its president and the team leaders.

Firm K was also organized in four teams:

1. Team Motivation – to motivate their client students to do the exit exam.
2. Team Preparation – to affect the knowledge level of students with regard to the details of the exam as well as the organization of review sessions and a simulated exam.
3. Team Boycott – to focus on understanding and working to eliminate the risk of boycott by the students who were against the exam.
4. Team Evaluation – to continuously evaluate the performance of the firm K, particularly its president and team leaders.

An amazing flurry of initiatives started taking place in the weeks that followed. In a month, firm E had created their logo, created three characters called DDA who would present a short skit of about 2 minutes that was hilarious and would incite everyone to be engaged in the goal of getting a grade A in the exit exam. The firm disseminated their motto, produced a newsletter with summary information about the exam, with simple hints for the preparation and the activities planned in the Department, they invited two experts on 26 March who talked about the importance of the exam, its subject areas,

possible preparation strategies, and the statistics of previous years' exam and the performance of Universidade Brasileira in comparison to other Universities. They also produced personalized T-shirts, distributed to several teachers, and started engaging teachers to plan for future volunteer review classes one hour prior to the beginning of regular daily classes.

Firm K, in turn, also created its logo, established the statute governing the firm, the monitoring and evaluation procedure, and announced their activities through the production of posters and a questionnaire survey asking the opinion of the students with regard to the exit exam. They also prepared and mailed a one page letter informing their activities to all clients. On 25 March 1999, they built a home-page featuring all information about the firm, its objectives and the exit exam. Four days later, they inaugurated an information booth in the entrance hall of the building, permanently manned by a volunteer member throughout the class hours. The information booth profiled several fliers and informative material regarding the exit exam, they created a counting device which displayed the days remaining until the exam date, and organized a lecture, on 7 April as a sequel to the one organized by Firm E, and published a four-page newsletter distributed in the first week of April containing short and humorous stories relating good grades in the exit exam with successful careers in management. Firm K also produced their own T-shirts.

Firm E established a chain-like system of telephone communication with two overlapping routes to ensure full coverage, while firm K quickly established an e-mail network through their website.

To get a hold on their "clients" (the 128 students taking the exit exam) who were not necessarily excited with the exam, both firms created a "partnership program." The partnership program was meant to create the linkage between the students who were still in the University and others who had already left (those who graduated in previous years but had not taken the exam). About half of the students enrolled in the exit exam were past year graduates who, for several reasons, had not taken the exam. Since the Ministry of Education established that only those who took the exit exam would receive the certificate of conclusion, everyone who wanted to receive the certificate had to take the exam. These former students actually represented the most troublesome group, since they were resentful of the whole new exit exam system and they had been far from the studies for at least a year. So, finding ways to motivate these people was one of the toughest challenges, and exploring potential old linkages through the partnership program was the best hope to make them somehow become a part of this growing alliance for saving the Management Department. Each member of the firm had two or three "clients" as partners, and they would call them to establish a friendly relationship and serve as a linkage for all school activities related to the preparation for the exam. Each firm produced and mailed them different fact sheets to increase their awareness of the importance of a good performance in the exam.

All these measures helped each firm to quickly establish a distinct and clear identity within the University, and their mobilization soon became the talk in the nation's capital and their saga was featured in a local edition of the National Financial Times.

6. Unpredictable Events: Early End of the Epidemic Process and the Mounting Frustration

a. Clashing with the Director

As the students took the lead, the series of actions proposed by them clashed head down with the Director's style of management. The measures suggested by the students clashed with the rigid and inflexible structure of the University, as well as the rigid interpretation of the rules by some teachers and administrative staff. There was plenty of support when the issue was just to increase people's awareness and talk about dreams. When they actually started working on the details of the implementation, the bureaucratic structure of the university either delayed or prevented them from taking

actions at all. The Director would argue that the Department did not have the autonomy to make decisions, and the proper channels took too much time, way longer than the students could wait given the urgency and the extent of their planned activities.

For reasons that are difficult to understand, an evaluation session carried out at the end of the third week of activities with the students from Firm K already showed the frustration of the students due to the delays and difficulties they had with the Director in obtaining an authorization to install the information booth in the entrance hall of the University. Another frustrating situation arose when they could not carry out their planned broadcast through the internal radio system due to the inability of the Director to obtain clearance from the Rector's Office. The information was that the use of the internal radio system was forbidden in order to avoid disturbing classes during class hours. In any event, the students were totally dissatisfied with the explanation because, in their long experience with the University, so many things disturbed classes and the sound system had been used before for other purposes.

b. Uncooperative Teachers

Another problem seemed to be the lack of knowledge or the lack of interest by some teachers with regard to the importance of improving the grade in the exit exam.⁵ A significant number of teachers were only interested that students completed the assignments in their courses, and were overloading students only to affirm their image of "rigorous" teachers. Faced with the prospect of being failed by such teachers and then having to postpone graduation, students would obviously give priority to completing the tough requirements of the discipline and not spare time to study for the exit exam. Such an action by certain teachers was working against the objectives of the students, and the University. In order to make such teachers more sensitive to the risk of closure faced by the Department, Jorge had requested the Director to send a circular to all teachers explaining the activities being carried out by the students in preparation for the exit exam, and ask the collaboration of all teachers to this important effort by the students. For reasons that are difficult to understand, this message was never circulated to the teachers, and some of them continued to be quite demanding with the students. At the time, in one of these classes, the average grade of the class was 5 (five), well below the passing grade of 7 (seven). This would force students to study desperately only for this specific class, given that they all needed a very high grade approaching 100% to be approved in this class and then graduate.

Concerned with the situation, Jorge prepared, on 5 April, a short letter to be signed by the Director, explaining the teachers about the importance of the exam, and asking support to the activities being organized by the students.

A few days passed and no action was taken by the Director. Firm E students, already tired from what they saw as clear signs of retrogression, requested a meeting with the Director on 9 April. In the meeting, the students strongly requested the Director's support to talk with some teachers who were being uncharacteristically tough and demanding in their courses, threatening to fail the majority of students in their last year at the University. The Director responded that "I can talk with them, but I cannot ask them to make their discipline easier, lest they will feel demoralized." The Director, however, did not talk to the teachers, and the level of frustration mounted.

Jorge explained his students that this was a good example of reality, and firms in real life have to attain their objectives no matter how high the barriers are. He advised both firms to focus on what could still be done under the current situation. If bureaucratic difficulties were blocking some actions, they should just abandon them and move to an alternative action.

⁵ As already mentioned, a grade D or worse for the third time in a row would mean the closure of the Management Department.

The uncooperative teachers were a real challenge, but the only thing he could suggest was that they watched their own backs, making sure they are approved in these courses, because the situation seemed worse than first anticipated. He could try to talk to some teachers, but he had no prior relationship or acquaintance with the uncooperative ones. In any event, Jorge did not have any authority to request teachers to facilitate the lives of graduating students. The Director was the only person who had such an authority but, for some reason, he was unwilling to talk to the teachers. As it turned out, he rather encouraged these teachers to be tough, and let them know his policy that "we should fail all weak students." He declared to me that these students should be massively failed, and by making only the few good ones to take the exit exam, the average grade would naturally increase. What he failed to communicate to me was how Universidade Brasileira was going to take responsibility for the previous four years in which no decent education had been given. These mostly poor students were spending all their savings on a dream to have a university degree, and Universidade Brasileira would just turn them down and let them go empty handed?

c. The Unwanted Genie

In an effort to understand the situation, Jorge went back to the days in which he was asked by the Director to devise a zero cost strategy. Strangely, the process thus started had the potential to effectively achieve the objectives originally envisioned by the Director, but perhaps the Director did not like the byproducts that came with the process. The discipline designed by Jorge had allowed the students to launch themselves on a high and glorious flight. The students, however, did not have the formal mandate to carry out all the actions they had designed. As a result, they would go the Director to ask authorization to carry out certain actions, or request that the Department itself performed some activities that they did not have the structure or authority to do so. Even though Jorge had instructed them to be extremely careful and polite in their dealings with all divisions within Universidade Brasileira, particularly with the Directors, some of them may have been less than polite enough. Some teams, on one hand excited with the real likelihood that they may be able to change the future of the Management Department and, on the other hand, pressed by the extremely short time available, may at times have sounded too demanding or arrogant to the Director. At some point, it may not be totally implausible to speculate that the Director felt very uncomfortable with the situation in which he was being asked a million things, when in reality it should have been the other way around. I.e., he should be asking students and passing instructions to them; not the opposite. As many students mentioned later, they could not understand why a movement initially stimulated by the Director was being stalled by the Director himself.

We have to consider, however, that the Director could have just delegated authority to the students to speak on his behalf in the dealings with the administrative divisions of Universidade Brasileira. That would decentralize the actions and would relieve him from the burden of personally seeking clearance with the university bureaucracy, but had the risk of losing the control of the situation or having his name misused by the students.

The Director was known as a very polite and balanced person. Jorge had a great respect for him and could not find any particular negative aspect in his personality. One of his great virtues, however, his profound sense of loyalty to the constituted authorities, may have become a weakness in this particular context of crisis and the need for rapid changes. It was truly unfortunate that the tide of times had to put well meaning students and the well meaning and dedicated Director in opposite camps of the available strategic choices for the survival of the Department. While the Director struggled with the ineffectiveness of the more conventional command and control strategies with which he was more familiar, and had served him well in his career in the national government, his own request to Jorge had released a genie that he could not anticipate but represented a school of thought he was not yet very comfortable with.

Had not he, and the whole management department, been so much pressed by time, he would certainly have adapted to new times, and to the more decentralized ways of conducting a change process. Unfortunately, taken by surprise, he entered into a defensive mode, and with the emotions running high, he decided to fight back, trying to put the genie back into her bottle. His recent added emphasis and pressure on some teachers to grade students in their last year of studies in a rigorous and unreasonably tough manner seemed to give some support to the above speculation.

At the time, Jorge had not even speculated about any possible causal relationship between the mobilization by his students and the sudden change in the Director's behavior. Only much later, with the advantage of hindsight, he could see that this may be a plausible theory on why the Director reacted in such an unexpected way.

At that moment, however, the best recommendation Jorge could give his students was to "keep their heads down and protect their backs." It was decided that they would narrow down the activities into few review sessions, and a simulated exam scheduled for 27 April.

d. Motivation goes downhill

The situation described above did not help the process. The simulated exam had the participation of only 50 students and the results clearly showed that the Department was once more heading towards a grade D or E.

Some of the comments voiced during the evaluation session of the simulated exam on 30 April 1999 can help illustrate the feeling of those who had been riding the crest of a big wave and suddenly found themselves inside a deep hole.

1. Lu – "It is very difficult to obtain the cooperation of the Director."⁶
2. Ro – "Some teachers are not committed to our goals, either."
3. Na – "Prof. F said that the exit exam is a problem for the student, not for him. He is not waiving the absence of those who missed his class because of the simulated exam. Many in our firm said that they are not going to work on the exit exam anymore. They have to save themselves first."
4. Ma – "Prof. F is really disgusting."
5. Vi – "In the Economics Department, the Director himself is bringing treaties to students to reward them for participating in simulated exams and review sessions. Here we make the effort and the Director blocks!"
6. Vi – "When we arrived for the preparations of the simulated exam, the auditorium was locked and we had to literally hold many students who were just leaving, until we got hold of the keys to open it. The reservation of the auditorium had been made well in advance and it is unbelievable that Universidade Brasileira cannot even have the auditorium opened on time."
7. So – "In the beginning it was very exciting. To apply all things that we have learned over the course of four years of the Management Programme. Everyone was engaged and motivated. Then, after the lectures by the invited speakers we looked for new horizons but found only barriers."
8. Ta – "I think the level of motivation today can be better described by a Bell curve. We are at the right hand side of the curve: after a great surge of motivation and activity, the reality of Universidade Brasileira's bureaucracy sunk in. When we tried to work on substance we only found barriers and frustration."
9. Si – "Prof. V of Environmental Resources is very demanding because the Director is pressing him. The Director never talked to the teachers. The average grade of the first project we just completed was five, which means almost everyone in class has a failing grade at this point."⁷

⁶ L. received the function of making the interface with the Director for his well known ability to connect with people and be liked by practically everyone in school.

⁷ The passing grade is seven. The typical semester grade is taken from an average of three grades, which can come from exams or projects.

10. CA - "We don't understand the method that Prof. V uses. He is unable to convey us what the method is."
11. AI - "Prof. V always requires the use of method in the projects, but never explains what this method is. He just tell us to go to the library and find out what the method is. The really revolting fact is that those who transcribed directly from a book got higher grades, while those who spent time and consulted many sources got very low grades."
12. Lu - "In the beginning it was like a party. The Director was also giving full support. Somehow, when actions were required the Department could not deliver. The Director told us that he does not like to ask favors to his superiors. That is unbelievable! To make things worse, some teachers are becoming tougher. We already gave our contribution to the exit exam. Now, it is our turn to save ourselves."

For reasons that we will not go in detail here, some simple actions became a real challenge. For instance, the students were feeling that some teachers were not sharing the objective of achieving a successful result in the exit exam. According to them, some teachers were giving such a huge load of readings and homework that working on the pursuit for a higher grade in the exit exam was becoming impossible. When the students explained about their activity to these teachers, they simply responded that the only instruction the Director had given them was to be tough so that the level of Universidade Brasileira could be raised.

When Jorge consulted the Director, the latter confirmed the instruction and said that the Department would not allow incapable students to graduate. In a shocking statement at a Courtyard in front of the Bank serving the university community, Jorge could not believe his ears when the Director explained to him that the school needed to be tough and "eliminate" 70 or 80 percent of the weakest students who, actually, should not have been accepted by Universidade Brasileira in the first place. After the purge, the grade in the exit exam would then rise naturally. This was not a new policy of the Director, and Jorge also shared the opinion that the grades should not be too lax. But eliminating 70 to 80 percent was an outrageous and unreasonable strategy Jorge could not agree.

Jorge and the students knew that the position of the Director reduced to nearly zero any possibility of helping students to get a better grade in the exam. Faced with the choice of either getting a better grade in the exit exam or concentrating their studies on the courses required for graduation, the students obviously chose the latter. Failing a discipline would not only delay their graduation but would be an additional financial burden they could not afford to pay.

Feeling an unreasonable pressure being exerted against them, who were wholeheartedly trying to work for Universidade Brasileira, the students' initial drive quickly changed into resentment. It was well too clear for the students that a bad showing in the exit exam did not have unfavorable consequences ONLY to the students, but to Universidade Brasileira as well. Feeling betrayed by Universidade Brasileira "who" once again asked their collaboration but would block their sincere efforts to help and even penalize them, a very negative feeling that they would fall but would bring Universidade Brasileira down with them started to spread among the students.

Activities in the "Entrepreneurial Strategy Seminar" stalled and distrust between authorities, teachers and students became very high. A group of students started a counter movement to bring the Department down by purposefully getting bad grades in the exit exam, as a retaliatory measure for the unreasonable policies of Universidade Brasileira. The situation became worst than ever. From apathy, which seemed to have been the predominant feeling described in the Director's Report in the previous year, the mood quickly transformed into anger.

7. Rising from the ashes

About three weeks before the exam, on 24 May 1999, the Vice-Rector for Academic Affairs requested Jorge to become the new Director of the Department, mentioning that he was hearing all sorts of bad blood between students and teachers in the Management Department, and a boycott against the exam was on the way. To have a Department closed by the Ministry of Education due to underperformance would permanently taint the good name of the Universidade Brasileira, and the authorities of Universidade Brasileira knew that they could not afford to let that happen. The only problem was that time had practically ran out, morale was rock bottom and resentment among students and teachers was deeply ingrained.

Without much room to maneuver, Jorge, as the new Director, designed an emergency plan for the three weeks he had before the exam date. He knew that whatever slim chances of success he had, it hinged largely on his ability to restore the students' trust on the University's authorities. He also knew that many teachers were loyal to the previous Director and obtaining their support would be a key factor to overcome the situation. All the same, however, most teachers were aware that their own standing depended on a good showing by the students and the resulting survival of the Management Department. No teacher wanted to be referred as having being part of the failed faculty whose students performed so badly that the Department had to be closed.

a. Team building

i. *The core group of Management Department deputies*

The first major action taken by the new Director was to immediately confirm the whole team of three area deputies working for the previous Director.

ii. *Unconditional support to teachers*

The new Director emphasized that, no matter what kinds of complaints students may have against some teachers, the Director stressed that he would fully support all decisions by the teachers. Any conflicts between students and teachers, he took as his fundamental principle to support the teachers publicly in front of students, even when the attitude of a particular teacher was less than reasonable, according to his judgment. But, immediately afterwards he would call the teachers for a private evaluation, where a open but tough conversation addressing the situation would be carried out. Then, immediately, Jorge would seek actions that would respond to the true causes of the conflict, and would work with the teachers until changes clearly perceptible by the students in the quality of teaching were brought about. The large majority of teachers perceived the great consideration given by the Jorge by never allowing students to question the teacher's authority, and allowed them to improve whatever was needed, without making them lose face.

iii. *Clear commitment to the students' right to quality teaching*

Jorge would also meet immediately thereafter with the students, listen to their demands, and promise quick action whenever these demands came accompanied with suggested solutions and clear commitment by the students to cooperate with the teacher to achieve the necessary improvements in the quality of teaching. He would further emphasize that mutual respect was fundamental, and disrespectful words, no matter how justified anyone may feel, were unacceptable. But he listened to all demands, discussed their pros and cons, strongly defended the students' right to good quality teaching, and guaranteed that Universidade Brasileira would quickly move towards clear improvements.

He closely followed up with the teacher and student representatives immediately thereafter, for what he viewed as one of the most crucial elements for the success in tackling the challenge. He put all his stakes on the belief that the positive "epidemic" could only be built on a strong foundation of good teaching, and teachers had to overcome their limitations and conquer the respect of the students. He also believed,

however, that the process would first be led by the teachers, and any confusion about who should be leading the process, by placing students before the teachers,⁸ could only bring conflict, ill feelings and a self-defeating dynamics.

b. Building a New Vision

i. Clarifying teachers that the Exit Exam was priority number one.

In the day he took office, Jorge reminded all teachers that if there was any directive from the previous Director to be tough and fail a large fraction of the class, that directive should be changed. His new directive was that, considering the critical situation faced by the Department, teachers should make every effort to help create the conditions for the students to perform well in the exit exam. Furthermore, for the two weeks preceding the exam, the students enrolled in the exit exam would be out of their regular classes, immersed in especially tailored lectures and activities. Teachers should not penalize these students for absence from their regular classes, and should maintain a separate control of absence for these students.⁹

ii. Signaling students that new Director meant REAL changes.

Jorge quickly organized a few informal focus group meetings with groups of students and asked them whether there were things that they wanted changed. A flurry of complaints against the school, teachers and the bureaucratic ways of Universidade Brasileira were presented. He, jointly with his deputies, defined that all pending student issues would be given some destination or solution within two days from its receipt and, whenever possible, his deputies should interpret the Department's autonomy in the broadest terms and try to solve the problem within the Department. He also informed his deputies that he would take full responsibility for any problem arising from interpreting university rules in the most flexible manner or in stretching to the limit the autonomy of the Department to solve the petitions in the shortest time possible.

iii. Sharing the challenge with all stakeholders

The new Director told his team of three deputies that the huge and seemingly impossible challenge before them would not be easily overcome. He knew that the commitment and desire of the new Director would not be enough, and told them that the challenge would be overcome only if they could produce an "epidemic" of collaboration and voluntary dedication based on co-ownership by all stakeholders. He also emphasized that the deputies were the key people in triggering such kind of an effort. These words were based on the new Director's profound belief that major changes can only happen with the participation of ALL people driven by a common sense of mission. He was profoundly skeptical of command and control principles of traditional management practices. Instead, he believed that only the common ownership of a mission could bring needed major changes.

iv. Empowering all actors to the maximum extent possible

Sharing the challenge was not obviously enough. People had to feel empowered to take actions based on their own judgment. So, the new Director not only decentralized decision-making and empowered everyone to act on their best judgment, but also encouraged them to adopt unconventional thinking, and breaking rules whenever they did not make sense against their careful judgment. He knew that the Management Department would never overcome this seemingly impossible challenge by just doing

* This was actually the expectation of the majority of students resentful with uncooperative or less than dedicated teachers, but the Director felt that a winning "epidemic" process motivating the entire department could never be built on a foundation of inverted values.

⁹ Due to a less than ideal design of the curriculum and the prerequisites, the students taking the exit exam were distributed in 29 different classes!

the conventional. In this area, the new Director's contribution would be to argue with the superior authorities and other administrative divisions of Universidade Brasileira in order to defend the actions taken by teachers and students.

One clear example of empowerment was the case of the Department's administrative assistant. The assistant had the traditional secretarial functions of making appointments and providing information to students and the public. Sensing her large untapped potential, the new Director asked her to make decisions on his behalf on any matter that she judged having enough information to do so. This obviously helped immensely to upgrade an important and scarce human capital, but also gave her an incentive to become more knowledgeable about the issues and effectively solve concrete problems without the Director's direct involvement.

v. Setting up an insurance that allowed risk-taking by his staff

The new Director, however, knew that she or even his deputies would make their own share of mistakes, particularly considering the much higher load of problems at the moment. He sensed that letting them be burdened by such natural mistakes that occur in crisis situations would reduce their willingness to take risks and innovate. Since he, as the new Director, enjoyed an extra capital of credibility, he decided that he would take full responsibility for the mistakes, so that his staff could dedicate themselves to fully tackling the huge challenge.

8. Re-producing the "epidemic" transformation process

a. Dealing with free-riding

Although the above conditions can be a powerful incentive for people to dedicate and excel, everyone has the natural limitations of human beings. We, human beings, are obviously not perfect and our being altruistic or selfish are affected by our internal values and external incentives to which we are subject to.

Keeping everyone focused to the maximum extent on the objective of improving the grade was probably the largest challenge of all. Optimistic as the students naturally are, any stretch of positive results could make them feel that the objective was already within reach and lose their concentration. Many of the participants could also feel that they did not need to do much, since everyone else was doing so much work. After all, they could reason, they have so many commitments outside the university and they have to attend to them. Others who have more spare time can do the work. Obviously, the majority of people had reason to think that way, and they all would be tempted to free-ride on others' efforts. If such a negative dynamics took hold, the whole process could easily unravel.

The new Director, therefore, concentrated on two points of the collective dynamics. The first was to maintain their focus on the crisis situation, on the reality that they did not have enough time for a decent preparation, and on the likelihood of getting a D or E, which was still large. The second was to maintain in check any risk of free-riding.

Naturally, keeping the spirits high and the level of dedication at the maximum point, even for only three weeks, was not an easy task. As people got tired, the temptation to free-ride on other peoples' effort increased. Generally, as developed in economic theory, particularly by the brilliant writings of Mancur Olson, when one person free-rides on the delivery of a collective good, the rest of the group has the option of continuing to support the provision of the public good at a slightly higher cost or risk stopping the contribution and therefore losing ALL the benefits. The dynamics, however, is such that when one person is not contributing, a second person is tempted to do the same, since he/she can still enjoy the benefits without contributing to it, if the remaining members of the group do not give up on the collective effort. Obviously, if such a dynamic continues, the group will unravel and the public good will not be provided.

In the free-riding theory, the group becomes hostage of the individual who does not

contribute, particularly because the theory does not consider that people have moral values. In real life, however, moral commitment is a very persuasive argument depending on how it is played. Placing the free-rider against the option of getting back to work or facing the collective disapproval of the entire group is an effective technique to be used. This concept is very close to the concept of participation, empowerment, ownership and the like. The key sentence the Director used to use was to tell them that if not every single person was committed to the objective they would not succeed. So, he discussed with teachers and students separately, seeking from each group a commitment of 100% of participants against the other option of giving up. These were long discussions of one or two hours, in which the group of teachers or students had to make the decision of continuing or giving up, and since the majority was committed to the objective, the real question was to obtain a public declaration of those who were not yet fully committed. These were only used in extreme situations when the Director perceived a dangerous level of relaxation and some level of discontent by those dedicating the most.

b. Harnessing the Change Dynamics by Delivering Key Products

There was one chronic situation of the long waiting period for petitions submitted by the students. Students submitted petitions to review exams, waive absences due to medical or other reasons, request recognition of equivalency for disciplines taken elsewhere in the past, etc. Traditionally, many such requests would stay in process for several months, and the exact location in the University's administrative division or its current status was a difficult information for the student to receive. The typical answer was that "the Director or his deputies were examining it," or that it had been "already" sent to the such and such administrative division, and students had to come back several times until a response was received.

In the 48 hours that followed his nomination as new Director, all student petitions were given proper destination or solved outright by the dedicated work of the deputies who slept very little to achieve this objective. This simple but bold measure, as the new Director's intuition had suggested, had a major effect on student morale, and word quickly spread out that a level of efficiency unheard of so far in Universidade Brasileira was taking place with the new Directorship.

A second type of a long-standing issue in the Department was the slow moving process of creating the so called Junior Firm. The Junior Firm can be understood as an independent firm established by the students within Management Departments. These firms are supposed to become training grounds for future managers, who would practice the trade by working on real life problems while still in the Universidade Brasileira group of students had been trying to set up such a firm for about two years in a seemingly endless process.

The new Director immediately called the two students heading the movement for the Junior Firm and jointly examined the factors that were hampering it from becoming a reality. Then, the Director invited them to prepare a public announcement of the opening ceremony of the Junior Firm in a week's time. To achieve this objective, he advised the students on how to overcome or bypass difficulties that depended on procedures outside Universidade Brasileira, and took as his responsibility the clearing of all administrative procedures within it. Two hours before the inauguration ceremony, the Director was still negotiating the provision of two computers by Universidade Brasileira as a critical infrastructure for the Junior Firm. As invitees and students gathered for the ceremony, the computers were finally being set up, just on time for the ceremony one week after the first discussion with the students took place.

This record setting opening of the Junior Firm also had a major impact on the students, as the details of the story quickly spread among the students on how fast all barriers were overcome, and the morale of students went through the roof.

c. Organizing the Two-Week Intensive Program

The new Director decided to invest all his political capital to organize an especially tailored two-week program for the period preceding the exam date of 13 June 1999. The program was carefully built in consultation with all stakeholders, but without the new Director forsaking his responsibility to design it in such a way that the activities built up on top of each other bringing a synergistic and contagious process of study and motivation. The Director tried to bring a blend of activities that would stand the best chance of bringing back trust from the students in Universidade Brasileira, raise their level of motivation, improve their capacity to answer questions, and let them feel confident to overcome the challenge.

i. Recovering Trust in the University Authorities

Aiming at making students to look a bit more positive towards University authorities, the new Director convinced two Vice-Rectors to participate in the two-week intensive program as lecturers and motivators. Such a participation showed the students that, in spite of all the past history of conflicts between students and the University authorities, the latter was seriously supporting and recognizing the efforts they were voluntarily making to "save" Universidade Brasileira.

The new Director also obtained a pledge from the Rector to give two master course scholarships for students taking the exit exam. This was a suggestion that the students had presented many times in the past, and this pledge showed the students a very strong signal that the Rector was serious about supporting the efforts of the Management Department.

ii. Designing the prize to provide incentives to all exam takers

The new Director pondered that he should not simply give the scholarships to the two best grades in the exit exam. He reasoned that if such a criterion were chosen it would motivate only the few students who had real possibilities of getting the best grades. The large majority of the 128 students would not be affected by the prize. As a result, he announced that one scholarship would indeed be given to the student getting the best grade in the exam. The second scholarship, however, would be given by lottery to any student who obtained an individual grade of C or better. He reasoned that this would make the prize reachable by the majority of students who would make a real effort to reach at least a C, and would contribute to improve the average grade of their Department.¹⁰

iii. Making the students recover their confidence in themselves

The second and third days were reserved for group activities focused on re-encountering a sense of unity between teachers and students, as well as among the students themselves. With this purpose the, new Director convinced the Rector to hire the best communicator and moderator of group processes in the region. Having been himself trained in group processes, the new Director saw these two days as the watershed event that would define the line between success and failure of the undertaking. The two-day event concluded as an astounding success that forged a strong emotional bond among all students and teachers setting the stage for a very productive final stage of content review.

iv. Working on subject areas that can be learned in the available time

With the emotional landscape well prepared for the content review, the next challenge

¹⁰ The average grade D received by the Management Department students from the Catholic University in the two previous exams meant that more than fifty percent of the students had gotten a grade of D or lower. So, getting an individual C was actually a challenge in itself, but it was a challenge that needed to be overcome if the Department was to raise its grade to C or higher.

was to choose the appropriate content for the eight days (including a Saturday and a holiday, when a significant number of students attended) at three hours a day available until the exam date. Based on a series of analyses previously done by the students of the "Entrepreneurial Strategy Seminar," who have mapped a pattern of concentration of exit exam question in certain themes, and on a complementary analysis by his advisers who had gathered "intelligence" about "fashionable" issues for this year, the review sessions were organized in fourteen 90-minute sessions targeting fourteen subject areas. The new Director also requested all volunteering teachers to focus their review sessions on the easier concepts and issues, not the more complex ones for which there was not enough time. Also, complex themes would confuse the students, and possibly reduce their confidence in their ability to perform.

v. Stimulating advantageous learning behavior.

In the beginning of each review session, two or three volunteer students distributed an evaluation form to be collected at the end of the session. The form¹¹ asked three types of questions as shown in Figure 1 below.

At the end of the session, volunteer students would take back as many forms as they could, and bring to the teacher for immediate feedback. The evaluation sheet was not created as a command and control instrument for the Director. The strategy was that the student, as they received and read the evaluation form at the beginning of the session, would have an incentive to engage in advantageous behavior among those listed in the form. The evaluation was also expected to have the same effect for the teachers. As the teachers were also given the evaluation forms they were likely to make an effort to reduce the number of those engaging in disadvantageous behavior and increase the number of those acting otherwise.

vi. Re-activating partnership program

The "Entrepreneurial Strategies Seminar" students, who had again become the main mobilizing force, reactivated the partnership program and re-started calling their partners and motivating them to get prepared for the exam.¹² Three days before the exam, the new Director made the last adjustment. In a quick evaluation session with the students, he asked whether there were dissatisfied students willing to purposefully get a low grade, or unmotivated students who were indifferent as to taking or not taking the exam this year. He requested two of the most gentle and skillful students to spend the last two days of calling time focused on these individuals and helping them to evaluate the best choices for them and for the Universidade Brasileira as a whole.

vii. Crescendo

The last few days were structured in such a way that the students felt like riding the crest of a wave filled with self-confidence and the feeling that a great job was accomplished. The two-week schedule had been defined in such a way that the relatively more complex subject areas were dealt earlier in the period, and the last two or three days were reserved for areas in which the majority felt relatively more comfortable. Also, for the last few days, while still focusing on reviewing content, the new Director added short 15 minute sessions of simple tips for exam taking, such as teaching how to look for clues to the answer in the body of the question itself or in other questions of the exam, starting the exam with the five essay questions that were worth 50% of the exam rather than the forty multiple choice questions, or focusing last moment reviews on issues that were not too complex, etc.

¹¹ The form shows a selected sample of 16 respondents from an earlier review session carried out on 18 May 1999. For the actual two-week period of intensive review, the Director requested the distribution and collection by volunteer students, but did not burden them with the compilation work which would have taken precious time from their preparation. Unfortunately, these records could not be recovered anymore.

¹² These were students who would submit to the exam but had either already graduated, or were taking only a few classes and had, as a result, less interest or less information about the exam.

Q1: Rate each feature of the review session checking one of the five grades

Features	1(needs improvement) → (excellent) 5					
	1	2	3	4	5	NA*
My level of understanding of today's session	0%	0%	31%	44%	25%	0%
My level of concentration in today's session	0%	6%	13%	44%	38%	0%
I felt at easy (or the teachers made me feel at easy) to ask questions	0%	6%	13%	25%	44%	13%
I raised my hand and asked questions whenever I was in doubt	6%	25%	13%	13%	0%	44%
I asked again if I could not understand the teacher's explanation	13%	13%	0%	25%	0%	50%
Somebody laughed when I asked the question, but I did not give up and insisted in the question	19%	6%	0%	0%	31%	44%
Other points (specify):						

* NA means "Not applicable."

Q2: What do you think could have been better in today's review session?

The majority of suggestions requested longer sessions!

Q3: Give a grade from 0 to 100 of the effectiveness of today's review session: 58.75

Figure 1 – Sample Evaluation Form with Compiled Results

viii. Resting and relaxing on the last day

The last day before the exam, which was a Saturday, was reserved for relaxation and inspiration. The new Director recommended all students to focus on the positive things that they had accomplished in the last two weeks of full immersion in the review process. Everything that could possibly be done had been done, and the result was a truly amazing job charging every soul in the Management Department. Now, it was time to let the natural powers inside them to do the work, and let them naturally come out during the exam.

ix. Welcoming students at the examination site.

The Director requested all teachers who could volunteer some time on 13 June 1999, the Sunday of the exam, to go to the exam site in order to welcome the students at the gate, provide moral support, and wish good luck in the exam. The students were all surprised and excited to meet a large number of their teachers at the entrance of the examination

site. About 20 teachers from Universidade Brasileira showed up to cheer for their students; it was by far the largest contingent of teachers from any university of the region.

9. Concluding remarks

To make a long story short, the students successfully raised the grade to C, which saved the Department, and in the wake of the movement, they transformed one of the worst Departments in Universidade Brasileira into an example of teacher/student cooperation, drive, innovativeness and entrepreneurship.

After the students have conquered what they once have thought it to be impossible, the new Director confided that he felt incompetent to do a few things. One was to explain in words all the richness of the whole process, where the students showed the Universidade Brasileira community that their ability to perform, create, deliver, and surprise bloomed at every turn beyond everyone's expectations. The other was to convey the moving transformation of the teachers as they were stimulated by the incredible power of the students' actions. In a few weeks, these students and teachers discovered that under the right set of conditions, they could all excel and surprise, and – with proper luck — make the impossible become a reality.