IDEAS FOR CHANGE IN THE SLOAN MASTER'S PROGRAM

by

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Submitted to the Sloan School of Management
in Partial Fulfillment of
the Requirements of the Degree of
Master of Science in Management

at the

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ABSTRACT

This thesis examines several external and internal challenges that face the MIT School of Management and the Sloan Master's Program, several aspects of the organizational context which may mediate these forces for change, and a collection of operational suggestions.

We describe several forces for change emanating from the field of management education generally, from the new mission efforts within the School, and from feedback from potential students and business school observers. We analyze three years of data from the Graduate Admissions Reply Forms, which provide information on the graduate education decisions of each applicant admitted to Sloan. We also analyze published ranking data on graduate management programs.

We then review the recommendations made by current students for changes in the core curriculum. We describe the methodology and results of the Student Working Group on Core Reassessment, a focus group that we conducted to develop student input for the Master's Program Committee Subcommittee on Core Reassessment.

Given these pressures for change, we describe several salient aspects of the organizational context of the Sloan School which will mediate change efforts.

Finally, we present a collection of ideas for change that have emanated from the research we have done on the School. These are not comprehensive recommendations, but rather they capture a number of innovative suggestions made to us by the various parties we interviewed during our thesis research.

Thesis Supervisor: Ernst R. Berndt

Title: Professor of Applied Economics
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We would also like to thank everyone in the Master's program office and other administrative areas for their willingness to share data, information and opinion with us. Their spirit of cooperation gives us hope that the school will respond in an effective way to the challenges it faces. Thank you to the students, faculty, recruiters and alumni/ae with whom we have spoken. This document would lack in richness were it not for your candor. Thank you to our formal thesis reader, and all others who will read this in the future.

Finally, we would like to emphasize that the opinions expressed in this thesis are solely those of the authors, and in no way should be attributed to the MIT School of Management, its faculty and administration, or our thesis advisor.
The Spirit of this Endeavor

"You don't hide your faults. So we'll be talking a bit ... probably more about things that are wrong with the Sloan School than things that are right with it. But everybody should keep in mind that we all think that there are more things right with it than there are wrong with it. But the only way to get better in some sense is to talk about the things that ought to be done differently."

-- Lester C. Thurow
Dean, MIT School of Management
Dean's Open House with Alumni/ae
February 8, 1988

"[World class organizations] continually push at the margins of their expertise, trying on every front to be a bit better than before. Standards, to them, are ephemeral -- milestones on the road to perfection. They strive to be dynamic, learning companies. This emphasis on continual improvement is the ultimate test of a world-class organization."

-- Robert H. Hayes,
Steven C. Wheelwright, and
Kim B. Clark,
Dynamic Manufacturing, 1988, p. 25.
Personal Statement of Motivation - Phil Adams

My interests and motivations for writing on this thesis topic stem from the experiences I brought with me to Sloan and the experience I have had while here. Two sets of prior experience seem most relevant to this discussion.

The first set includes a large part of what makes me the way I am -- how I was raised. My mother's side of the family came over from Albania in the late 1910's, and my father's side in the late 1930's. Both sides had strong entrepreneurial tendencies, with virtually all my grandparents, parents, aunts and uncles owning family businesses. I was working behind the counter of my family's restaurant beginning at the age of 6. As a result, I was brought up to view work as an extension of living, rather than something that ended at 5 PM. I was raised as an owner not a worker, and I have viewed most every job, group, and team of which I have been a part from an owner's perspective -- from the perspective of caring deeply about its progress and success.

The second set of relevant experiences has shaped my view of education. I am a graduate of Phillips Academy and Williams College. I know of no other academic institutions (in their respective peer groups) that foster a greater degree of student respect and alumni loyalty than these. I am very fortunate to have had exposure to such high educational standards.
It is with these perspectives that I entered Sloan.

My impression of the two year Master's Program is mixed. I am quite excited about the quality of the peer group of which I am a part, and many of the experiences I have had both inside and outside of the classroom. I am thankful for the opportunities I have had for self-exploration and learning. The exposure to foreign students and cultures (via the Japan trip) leave me more well-rounded, mindful of differences and tolerant.

I also feel some frustration. At times here I have felt unsupported. I get the impression that what I have gotten out of the program is largely a product of being here, rather than a dedicated effort by the faculty and administration to create a program or framework for my studies. I am left with the impression that the program and the school could be better managed. Given my past exposure to educational institutions and my expectations of a management school, I would have expected that a management school and specifically a two year Master's Program would strive to be a model from which the students could learn.

So, why am I a part of this thesis? First of all, in the Sloan community, there is a climate for change. Sloan's new mission statement and the dialogue between students and faculty on the core curriculum and the thesis requirement are all
tangible signs that Sloan may be moving. If there ever was a time when a thesis like this might be another catalyst for change, then this is it.

Second, I feel invested in Sloan, and by my nature, want to help motivate change. I have already been an active participant in the Student Working Group during the Independent Activities Period and in the student-faculty focus groups that were convened for two courses (15.062 and 15.760). In the role of a Sloan Ambassador, I have participated in a panel at the open house for prospective students, and in a panel for wealthy alumni visiting the school. I also represented Sloan at the Graduate Business Conference -- a gathering of students from the top 40 business schools.

Third, I am personally motivated to give back to the program after taking for these past 21 months.
Personal Statement of Motivation - Dorothy Holmes

My interest in this thesis is to some extent an outgrowth of my work over the last two years as student representative to the Master's Program Committee. My position with the Master's Program Committee has provided me with an excellent opportunity to be involved with projects aimed at improving the school. I chose this thesis topic for the same reason I have worked for two years with the Master's Program Committee -- because I see an opportunity to make a good set of courses and experiences into a great program.

This thesis project with Phil has given us both the opportunity to explore the school and the student experience from a variety of perspectives. Analysis of the Graduate Admissions Reply Forms and design and analysis of a survey of potential students, as well as discussions with faculty, administrators, recruiters, students, alumni, and potential students, have allowed us to expand on the understanding we had of the school as students.
I. Introduction

Thesis Objective

Our objective in this thesis is to provide information to the various decision makers at the MIT School of Management which may help them improve the Sloan Master's Program.

We are two Master's students, and clearly many of the subjective viewpoints in this thesis will reflect a student's perspective. Although bias is therefore inherent, we believe understanding student opinion should be an important input to policy decisions at the school, just as customer feedback is key in the strategic management of a business.

While some of the thesis content is subjective, we have also conducted primary research to explore the decisions of potential students, as well as to understand the perspectives of current students, alumni/ae, faculty, administrators, and recruiters.

We intend this thesis to alert Sloan decision makers to trends, problems, and successes, or to provide data to reinforce existing understanding. Hopefully, the thesis will serve as a catalyst for introspection, further investigation, and change.

Ultimately, we hope that this document plays a role in inspiring individuals to rise to the challenge of making the MIT
School of Management the best management school in the world. We believe that one of the keys to becoming the best management school in the world will be to become the best managed management school. We feel that the MIT School of Management is a gem in the rough, with many fine resources. We would like to see this fine set of raw materials converted into an even better Sloan Master’s Program than we presently have. Moreover, we think that a well-managed management school could serve as a role model for its students.
Approach

We arrived at this topic as an outgrowth of our involvement with the Master’s Program Committee’s review of the core curriculum. We were both involved with the design and implementation of the Student Working Group process in January 1989, through which student opinion on core curriculum reform was gathered and presented to the Master’s Program Committee Subcommittee on Core Reassessment. After that effort, we began to wonder how likely it was that the student recommendations we had just presented would be adopted. How well did these recommendations fit with the culture and organization of the school? What were the incentives of the various parties involved? What operational obstacles existed?

This thesis attempts to answer these questions or at least shed light on some of these issues. We will focus on the two-year Sloan Master’s Program, which is the primary program of the MIT School of Management. The thesis presents challenges facing management education generally, and facing the school and the Master’s Program. It reviews the recommendations made by the students in January, and then examines the organizational issues that we have just mentioned. Besides presenting the data from the current students, the thesis examines new and challenging data from potential students.
Research Sources

We have used a wide range of sources in researching this thesis topic. Since we are very much in the middle of a management education experience, one major source of information is what we experience on a day-to-day basis. The way we are treated, the opportunities to which we are exposed, the conversations we have with fellow students weave together to shape our experience of Sloan and management education. Dorothy’s work with the Master’s Program Committee and Phil’s work with the Master’s Program Office in representing the school in a variety of settings are examples of how our experiences enable us to speak credibly about our topic.

In addition to ourselves as sources, we have sought to tap other people involved with Sloan. We have conducted focus groups with current Master’s students, interviewed alumni, faculty, recruiters, and administrators. We have reviewed survey results of current students. We have surveyed potential students who are visiting the school. We have analyzed data from the Graduate Admissions Reply Forms collected from each candidate admitted to Sloan.

We have digested the consulting studies commissioned recently by the school and prepared by McKinsey and the MAC Group. We have reviewed the school’s newest brochures and admissions materials, and viewed two videos — the one being sent to admitted students and a tape of the Dean’s focus group
with alumni/ae about the new mission. We have read articles from the popular press and management journals about the future of management education, and have examined the relative rankings of various graduate business programs that have been made over time. We have also drawn on recent reports on management education commissioned by the American Assembly of Collegiate Schools of Business and the Graduate Management Admission Council.

This research and the experiences and motivations we bring to this topic combine to form this thesis. This thesis can be thought of a tapestry or collage. Many inputs have been woven together. It is clear that the MIT School of Management is a complex organization with many stakeholders and many goals. We hope that this thesis is read with an open mind. It is our intent to be helpful. We recognize that few people will agree with all (perhaps most) of our conclusions.
Chapter II will discuss forces pressuring for change in management education and within the MIT School of Management. We will begin with a brief history of management education and the current challenges in the field. We will continue with background on the MIT Sloan School's history and direction. We will also present feedback from the "market", including analysis of the Graduate Admissions Reply Forms, which collect data from each admitted candidate.

Chapter III will present the results of the core curriculum review performed by the Student Working Group on Core Reassessment in January 1989. We will discuss the background to the core review, the Student Working Group process, their specific recommendations for core courses, and their general programmatic recommendations.

Chapter IV will examine the organizational context of the Sloan Master's Program. We will discuss the organizational complexity and culture through which change would be mediated.

Chapter V provides a set of suggestions that relate to operational aspects of the school. By no means comprehensive, this collection represents good ideas (in our opinion) that we thought should be documented.

Chapter VI will present our conclusions.
II. Forces for Change

Three forces are providing impetus for change at the MIT School of Management. First, the field of management education is being criticized for the types of managers it has been producing. Many argue that management schools are partly responsible for the decline of the American economy. Consequently in the 1980's there have been many voices advocating that management schools examine and change the ways they are training managers. As a leading School of Management, MIT is not immune to these criticisms, and has attempted to respond via its new mission statement.

The appointment of Lester Thurow as Dean of the MIT School of Management is a second force driving change at Sloan. He has been active in leading the development and implementation of the new mission and in strengthening the ties between MIT central and the School of Management. Both of these initiatives have increased the pace of activity within the school, as faculty and administration are moving to implement these visions.

A third, and potentially less well-recognized, change catalyst is the feedback that the "market" is providing. Current students, candidates, recruiters and alumni/ae are all sending signals back to the school. Some of these signals are misinterpreted, unheard or dismissed as unimportant. If it does nothing else, we hope that this thesis focuses and amplifies
these signals in a way that can lead to productive change at the school.

In this chapter we will begin by briefly reviewing the history of management education to provide a perspective from which the current round of criticism of management education can be viewed. We will then provide some historical background about the school, as a backdrop for understanding the current initiatives of Dean Thurow. The last section of this chapter will focus on the perceptions of the Master's Program from a customer/market point of view.
A Brief History of Management Education

Ever since Joseph Wharton's gift to the University of Pennsylvania in 1881 established the first American school of finance and commerce, university-level management education has been one of the most controversial educational disciplines. The century-old history of management education has been fraught with alternating periods of popularity and criticism. ¹

The controversy over management education is embodied in the dichotomy of perspectives regarding the appropriateness of management education in a university setting. At one end of the spectrum is an academic model where schools are devoted to the furthering of scholarly knowledge; at the other is the professional model where schools are charged with training practitioners.

Early criticism of Wharton's College of Commerce argued that the College's practitioner orientation was "incompatible with the collective cultural purpose of the university." ² Universities were supposed to teach how to think and reason, not to provide specific vocationally-oriented techniques and methods.


Despite this criticism, the popularity of business schools grew as demand for business graduates expanded rapidly. The first six decades of the 1900's witnessed exceptional growth. By 1925, there were 183 schools that had some form of business education either on a school or department level. Earl F. Cheit points out, "Enrollment in business schools rose sharply after World War II. By 1955, business had become the most popular undergraduate major." ³

By the mid to late fifties, criticism began again. Business education was viewed as being not as academically rigorous as was appropriate for university-level education. This clearly was a signal that the pendulum had swung too far toward the professional end of the spectrum, and that it was time for a more academic orientation. This new spate of criticism prompted both the Ford Foundation and the Carnegie Corporation to sponsor comprehensive studies of management education.

In 1959, each study yielded a report -- The Education of American Businessmen and Higher Education in Business, respectively. These reports suggested that academic standards and quality were generally low and uneven. Both reports advocated more rigorous course work, more academically trained faculty, more graduate-level work, and less undergraduate specialization. The authors stated that emphasis should be placed on an academic/research focus that furthered the body of

³ Cheit, p. 45.
knowledge, rather than a vocational focus that trained practitioners.  

Once again, management schools weathered the controversy. They accepted the recommendations found in the reports, improved in the area of academic rigor, and began to earn new respect on campus. The field began to draw research-oriented faculty and high quality students. As a result, the popularity of business schools was again on the rebound. During the period from 1965 to 1977, the number of MBA degrees conferred rose six-fold.  

The academic rigor of business schools gained added credibility in 1978 when Herbert Simon won the Nobel prize in Economics for his theory of decision making by business executives.

While the 1960's and 70's saw great strides made in academic research that elevated business schools to the same general level of academic respect as other graduate disciplines at universities, the 1980's brought to a head yet another round of criticism aimed at management training.

Many believe that an article written by Robert H. Hayes and William J. Abernathy in 1980, "Managing Our Way to Economic

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Decline", touched off the most recent wave of criticism. This article, published in the Harvard Business Review, was one of the first to link management education with the U.S. economic malaise.

The authors condemned management education, saying that it emphasized "a preference for (1) analytic detachment rather than the insight that comes from 'hands-on' experience and (2) short-term cost reduction rather than long-term development of technological competitiveness." They argued that this type of training fostered an attitude in managers that "a sense of commitment--to one's workers, customers, suppliers, even one's fellow managers--is an impediment." 6

Within four years, Time magazine, the New York Times and the Harvard Business Review ran articles that criticized the training that graduates had received. 7 The question as to whether business schools were doing their job, and more importantly, how they should do their job, again became in vogue. Just as the criticism in the 1950's led to studies assessing business school performance, this new round of criticism spurred the American Assembly of Collegiate Schools of


Business (AACSB) to commission a study by Lyman W. Porter and Lawrence F. McKibbin, *Management Education and Development: Drift or Thrust into the 21st Century?*

The Porter-McKibbin report echoed the sentiments of the Hayes and Abernathy article by stating that there "is a growing belief, thrust upon the United States by increasing international competitiveness ... that the American higher education establishment has not lived up to its obligation to produce highly competent, productively proficient, and ethically responsible graduates. America is seen by some to have lost its competitive edge, and business schools are seen as at least partly culpable." 8 Dean Thurow is similarly concerned, "I get a deep feeling of unease about what we’re doing. If our business schools are doing so well, why are American companies doing so badly?" 9 Business schools are seen as turning out students that "tend to be rather more narrowly educated than they ought to be if they are to cope effectively in a rapidly changing and increasingly complex world." 10

Many believe that this narrowness in education stems from the orientation of the schools on research rather than on

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9 Lester C. Thurow quoted in John A. Byrne, "Where the Schools Aren’t Doing Their Homework", *Business Week*, November 28, 1988, p. 84.

10 Porter and McKibbin, p. 317.
the needs of the future managers. Deans Richard West of New York University (formerly of the Amos Tuck School at Dartmouth), Scott Cowen of the Weatherhead School at Case Western Reserve University, and John Rosenblum of the Colgate Darden School at the University of Virginia elaborated on this issue at a recent Dean's panel on the future of management education.11

Dean West believes that given the changing nature of the world in the coming decades, business schools need to change their focus from "being the discipline and research juggernauts lauded in the 50's, 60's and 70's, to institutions that make education a serious priority ... we need to move away from emphasizing research that is becoming increasingly more narrow in focus and being published in arcane journals." 12

Dean Cowen stated that "management schools need to focus on value creation. We need to focus on whom the stakeholders are and what their interests are. We need to be learner and customer driven. We should be here to serve the learners, and their needs ... rarely does the research that faculty is advancing find its way back into the program and course work ... Business schools should be as creative and innovative as the organizations for which we are training people." 13


12 Deans' Panel.

13 Deans' Panel.
Dean Rosenblum believes in an emphasis on the "soft" skills that students need in order to "deal with change from both technical and political perspectives and with diversity due to changing demographics and a greater focus on internationalization ... Business school graduates need to develop leadership skills as they are a community that increasingly will be called upon to lead." ¹⁴

One could argue that these deans are at second-tier research schools, and that these comments are therefore self-serving, since these schools would find it easier to excel at practitioner-oriented programs than to excel at research-oriented ones. On the other hand, it may be that these deans are more able to criticize objectively a research orientation than could a dean of a first-tier research school.

The deans' assertions are reinforced by the suggestions of the Porter-Mckibbin report. In its recommendations, the report suggests that schools broaden their course offerings, provide an international slant to their teaching, address the information/service component of the emerging world economy, bring a more integrative focus to management education, and develop the "soft"/people skills in its graduates. These recommendations are in line with the desires of the marketplace "for more broadly educated people who not only can learn to cope (quickly) with financial and market vicissitudes of the business

¹⁴ Deans' Panel.
world, but who also can operate effectively in diverse managerial and societal settings." 15

What seems evident is that in order to meet the goals for management education outlined above, the emphasis on disciplines and quantitatively oriented research needs to be balanced with cross- and multi-functional educational experiences and more participative modes of learning. In those management schools' curricula that are heavily discipline-based, courses in such areas as leadership, ethics, international management, and management of technological innovation may deserve greater emphasis than they currently receive.

15 Porter and McKibbin, p. 314.
Sloan: History and Direction

The Sloan School had its origins at MIT in 1914, when management courses were offered to undergraduate engineers. A master's degree in management was offered in 1925, and the Sloan Fellows program was endowed by Alfred P. Sloan, Jr. in 1938. A second endowment by the Sloan Foundation created the Sloan School in 1952, with the expressed purpose of educating "the ideal manager". The Sloan School now offers the B.S., M.S., and Ph.D. degrees, as well as special programs for Sloan Fellows, Senior Executives, Managers of Technological Innovation, and Leaders for Manufacturing. 16

As the educational programs of the school have evolved, so has the mission. Originally a school for industrial management, the school became a more broad-based management school especially noted for its strengths in finance, applied economics, and management information systems. Sloan's reputation has been based on its pre-eminent research faculty. In the 1950's, 60's and 70's, faculty members at the Sloan School advanced the body of academic knowledge in economics (life cycle hypothesis), finance (Black-Scholes), organizational behavior (Theory X versus Theory Y), and in many other areas. This widely-recognized work elevated Sloan to the top academic tier of management education.

16 MIT School of Management, "1989 Sloan Master's Program" brochure, p. 17.
With the appointment of a new Dean, Lester C. Thurow, a new mission was identified for the school. The mission statement of the MIT School of Management now reads, "To be the recognized leader in the development and dissemination of knowledge for improving management in the context of a global economy with increasing technological competition and the need for more rapid organizational change." 17

If we were to array the leading management schools along a spectrum ranging from the academic to the professional, we would put schools like Harvard and Darden at the professional end, and Chicago and Northwestern at the academic end. Sloan would fall much nearer the academic end than the professional end.

Although numerous opinions exist as to the ideal location along this spectrum, there is no consensus. However, given Sloan’s current position on this spectrum, if Sloan wishes to place an equal emphasis on the "development and dissemination of knowledge", it may have to enhance its abilities to train practitioners.

The Dean’s new mission recognizes the need to continually improve and build off Sloan’s existing strengths. It recognizes that satisfaction with the status quo and failure to anticipate upcoming trends in business management is not

17 "The mission of the MIT School of Management", MIT Management, Spring 1988, p. 29.
enough. If the goal, according to Dean Thurow, really is "to break into the top ranking" 18 of management schools (the domain of Harvard and Stanford), then the question becomes, "How well will the school be able to deliver on the mission?" The answer to this question will depend on how well the organization can be organized, motivated, and mobilized to draw on the resources it has in the areas of organizational change, and international and technological management, without diminishing its current strengths.

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Feedback from the "Market"

The motivation of continuous innovation is not all that should be spurring the school to action. At the same time that the organization is trying to deliver on its new mission, feedback relating to the Master’s Program is being constantly provided by students, alumni/ae, recruiters and candidates. Some of this information never gets gathered, analyzed, processed, or tracked. As a result, the leadership of the School and the Master’s Program may be operating under assumptions that may or may not be true.

In an effort to better understand the current perceptions of Sloan, we have performed two sets of analyses: we have processed the Graduate Admissions Reply Forms, and researched the recent history of business school rankings.

The Graduate Admissions Reply Forms are used to inform the admissions office of an admitted applicant’s decision regarding where he or she plans to undertake his or her graduate studies. We analyzed the reply forms for the last three admitted classes to understand Sloan’s relative position from the candidate’s perspective. About 90% of the admitted applicants return this form¹⁹, and about 90% of these returned forms provide useable data.

¹⁹ Expert opinion of Tracey Greenwood, Master’s Program Office Administrator, whose duty it is to collect this data. May 17, 1989.
Analysis of Admissions Data

When Dean Thurow spoke with alumni/ae about the new mission, he stated that "we do very well at competing for new students with everybody except two institutions -- Harvard and Stanford. If you're admitted at Harvard and here, or Stanford and here, they win more than 50% of the time." 20

Our research confirms that MIT gets less than half of these candidates. While Harvard and Stanford do "win more than 50% of the time", we found that Harvard and Stanford actually win more than 94% of the time (see Exhibit 1). In 185 decisions between MIT and Harvard or Stanford, MIT was preferred only eleven times (see Table 1). This implies that we are not as competitive with Harvard and Stanford as we may have thought.

The Graduate Admissions Reply Form data also tell us that there are two other schools that have been successful at luring away students that we have accepted in each of the past three years. Wharton (University of Pennsylvania) and Tuck (Dartmouth College) have won more candidate decisions than they have lost to us, 66.4% and 60.6%, respectively, averaged over the past three years (see Exhibit 1). Two other schools have beaten Sloan in one of the past three years -- Kellogg (Northwestern University) and Yale. Columbia is also a school

20 Thurow, "An Argument".

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Exhibit 1: Admittees Preferences
Three Year Average of All Respondents

Source: 1986-88 Graduate Admissions
Reply Forms, Master's Program Office
TABLE 1
ANALYSIS OF GRADUATE ADMISSIONS REPLY FORMS DATA, 1986-1988
ALL ADMITTEES

<table>
<thead>
<tr>
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<th></th>
<th></th>
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<td>HARVARD</td>
<td>39</td>
<td>35</td>
<td>37</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>95.1%</td>
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<tr>
<td>STANFORD</td>
<td>18</td>
<td>16</td>
<td>16</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>95.1%</td>
</tr>
<tr>
<td>WHARTON</td>
<td>30</td>
<td>25</td>
<td>29</td>
<td>14</td>
<td>11</td>
<td>19</td>
<td>94.7%</td>
</tr>
<tr>
<td>TUCK</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>75.0%</td>
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<tr>
<td>KELLOGG</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>35.7%</td>
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<td>YALE</td>
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<td>6</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>14.3%</td>
</tr>
<tr>
<td>CHICAGO</td>
<td>10</td>
<td>23</td>
<td>12</td>
<td>21</td>
<td>1</td>
<td>8</td>
<td>35.7%</td>
</tr>
<tr>
<td>COLUMBIA</td>
<td>6</td>
<td>16</td>
<td>7</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>35.7%</td>
</tr>
<tr>
<td>UCLA</td>
<td>5</td>
<td>14</td>
<td>4</td>
<td>8</td>
<td>1</td>
<td>7</td>
<td>27.3%</td>
</tr>
<tr>
<td>DARDEN</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>33.3%</td>
</tr>
<tr>
<td>BERKELEY</td>
<td>1</td>
<td>11</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>8.3%</td>
</tr>
<tr>
<td>CARNEGIE</td>
<td>2</td>
<td>11</td>
<td>1</td>
<td>17</td>
<td>1</td>
<td>10</td>
<td>15.4%</td>
</tr>
<tr>
<td>CORNELL</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>0.0%</td>
</tr>
<tr>
<td>MICHIGAN</td>
<td>1</td>
<td>12</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>13</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

SOURCE: 1986-88 GRADUATE ADMISSIONS REPLY FORMS, MASTER'S PROGRAM OFFICE
to watch, as they have increased their win percentage steadily over the last three years from 27.3% to 33.3% to 35.0% (see Table 1).

We also analyzed the data by looking at the decisions of the US applicants. We did this because we believe that for three reasons their opinions may be more reflective of the current thinking among candidates. The first is that internationally MIT has a very strong reputation, and that the shadow effect from that reputation can carry over to the School of Management, thereby making the Sloan reputation less susceptible to quick swings in perception. Second, foreign students may feel more comfortable at Sloan since it has a reputation of accepting many foreign students. Third, we believe that American students may have more access to up-to-the-minute information about programs. They may have more friends who are going to the schools and/or may be able to visit and research programs first-hand, which may be harder for foreign students to accomplish.

We analyzed the decisions of candidates relative to MIT and fourteen other schools over a three-year period (1986, 1987, 1988 admittees), for a total of 42 summary data points. In 28 out of these 42 summary observations, removing the foreign students and considering only the US respondents caused Sloan to appear even less competitive. In another ten of the observations, there was no change, and in only four, was Sloan more competitive. Among US students, Kellogg joins Harvard,
Stanford, Wharton and Tuck as net winners against Sloan with an average of 51.9% over the three years (See Exhibit 2). Yale becomes a net winner the last two years in a row (55.6% and 57.1%, see Table 2), and UCLA becomes another school which has the distinction of having beaten Sloan in a single year (1987 - 57.1%). From this analysis we can conclude that in its biggest market, Sloan is less competitive than it is overall.

On the positive side, an interesting trend to note is the improved competitive position that Sloan is enjoying in 1988 over 1987. In ten of the fourteen schools overall and nine of the fourteen schools when looking at only US candidates, Sloan was more competitive or equally competitive in 1988 versus 1987 (See Table 3). In the case of Harvard, Sloan did not woo away any candidates in 1987, but in 1988 we won five students, two of whom cited the Leaders for Manufacturing Program, even though Harvard was higher on their rankings preference.

Another positive note is that the yield rate (matriculants/admittees) for the Sloan Master’s Program has increased somewhat in the last two years versus the three preceding years. In 1987 and 1988, the yield rate was 58% and 62%, respectively. This seems to represent an upward trend from the yields of 1984 (48%), 1985 (50%), and 1986 (51%). 21 If we are in fact getting a higher ratio of the same quality of candidate in the last two years versus the preceding three, this

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21 Data from Diane Katz, Director of Admissions, MIT School of Management, Sloan Master’s Program, May 10, 1989.
Exhibit 2: Admittees Preferences
Three Year Average of U.S. Respondents

Source: 1986-88 Graduate Admissions
Reply Forms, Master's Program Office
## TABLE 2
ANALYSIS OF GRADUATE ADMISSIONS REPLY FORMS DATA, 1986-1988
US ADMITTEES

<table>
<thead>
<tr>
<th>ABSOLUTE NUMBER OF PREFERENCES</th>
<th>WIN/LOSS PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W. L</td>
</tr>
<tr>
<td>HARVARD</td>
<td>34 1</td>
</tr>
<tr>
<td>STANFORD</td>
<td>15 0</td>
</tr>
<tr>
<td>WHARTON</td>
<td>23 7</td>
</tr>
<tr>
<td>TUCK</td>
<td>6 2</td>
</tr>
<tr>
<td>KELLOGG</td>
<td>5 6</td>
</tr>
<tr>
<td>YALE</td>
<td>1 5</td>
</tr>
<tr>
<td>CHICAGO</td>
<td>12 16</td>
</tr>
<tr>
<td>COLUMBIA</td>
<td>6 12</td>
</tr>
<tr>
<td>UCLA</td>
<td>4 10</td>
</tr>
<tr>
<td>DARDEN</td>
<td>2 4</td>
</tr>
<tr>
<td>BERKELEY</td>
<td>0 7</td>
</tr>
<tr>
<td>CARNEGIE</td>
<td>2 5</td>
</tr>
<tr>
<td>CORNELL</td>
<td>0 6</td>
</tr>
<tr>
<td>MICHIGAN</td>
<td>1 8</td>
</tr>
</tbody>
</table>

**SOURCE:** 1986-88 GRADUATE ADMISSIONS REPLY FORMS, MASTER'S PROGRAM OFFICE
Table 3
Comparison of 1987 and 1988 Admitted Candidate School Preferences:
MIT Gains Ground* or Stays Even in 19 of 28 Observations

"Wins" (%) versus Sloan

<table>
<thead>
<tr>
<th>All Respondents</th>
<th>US Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Harvard</td>
<td>100.0</td>
</tr>
<tr>
<td>Stanford</td>
<td>88.9</td>
</tr>
<tr>
<td>Wharton</td>
<td>64.1</td>
</tr>
<tr>
<td>Tuck</td>
<td>63.6</td>
</tr>
<tr>
<td>Kellogg</td>
<td>58.3</td>
</tr>
<tr>
<td>Yale</td>
<td>60.0</td>
</tr>
<tr>
<td>Chicago</td>
<td>38.2</td>
</tr>
<tr>
<td>Columbia</td>
<td>33.3</td>
</tr>
<tr>
<td>UCLA</td>
<td>33.3</td>
</tr>
<tr>
<td>Darden</td>
<td>0.0</td>
</tr>
<tr>
<td>UC Berkeley</td>
<td>30.0</td>
</tr>
<tr>
<td>Carn-Mellon</td>
<td>5.6</td>
</tr>
<tr>
<td>Cornell</td>
<td>16.7</td>
</tr>
<tr>
<td>Michigan</td>
<td>0.0</td>
</tr>
</tbody>
</table>

* Gaining ground is defined as a reduction of a school’s "win" percentage versus Sloan from 1987 to 1988. Instances of Sloan gaining ground are bolded.

Source: Analysis of 1987 - 1988 Graduate Admissions Reply Forms, Master’s Program Office
is a good sign. On the other hand, this may not be quite so positive a sign if we are getting a higher yield from a pool that for any reason is less attractive to us. As a hypothetical example, if the pool is more narrow in some way in the last two years versus the preceding three, then we need to examine whether the type of specialization we are attracting is what we want.

We can use the Graduate Admissions Reply Form data to examine Sloan's competitive position as of 1988 among students who have been accepted to Sloan. Among this group of potential students, Sloan can be ranked as high as tied for fourth (in the 1988 win/loss percentage for all admittees) and as low as seventh (in the 1987/1988 two-year average win/loss percentage for U.S. admittees). No matter which way one looks at these data, it is clear that Dean Thurow's conception of Sloan's competitive position, as stated on February 8, 1988, is not quite accurate.

Even this range may be optimistic if one attempts to extrapolate these conclusions to the candidate pool at large. Clearly this sample is biased in favor of Sloan, as the respondents already have affirmed interest in Sloan by choosing to apply. One way to make this study more representative would be to perform the same analysis with all the management schools' reply forms. If the positive 1988 performance trend can be attributed to the school's new direction (this is only a hypothesis), then successful implementation of the mission
becomes even more crucial in the future.
Analysis of Poll Rankings

Dean Thurow has noted (before last November’s Business Week ranking that placed Sloan fifteenth \(^{22}\)) that in terms of rankings of business schools, Sloan has been "absolutely consistent over the last 30 years. We haven’t fallen in those kind of perceptions, but we haven’t risen either ... clearly the big winner is Stanford and the big loser is Chicago ... US News and World Report ranked us fourth, which we believe is roughly fair." \(^{23}\)

One reason for the consistency in rankings over the past thirty years may be the consistency of the ranking criteria used in those polls. The authors of the Business Week article elaborated,

Until now, rankings have been based largely on the reputation of the schools’ professors and their published work in academic journals. Typically, B-school deans or faculty are asked to list the top schools in order of personal preference. A school’s prestige usually looms large in such ratings, and the deans and faculty members tend to give lots of weight to a school’s reputation for academic research. There’s no disputing that research is vital to both a school and to American business. But traditional surveys may not fully reflect a school’s teaching excellence, its curriculum, or the value of its graduates to Corporate America. \(^{24}\)

\(^{22}\) John A. Byrne, "How the Schools Stack Up: Business Week Rates the Top 20", Business Week, November 28, 1988, pp. 78-79.

\(^{23}\) Thurow, "An Argument".

\(^{24}\) John A. Byrne, "The Best B-Schools: A Dark Horse Wins -- And Some Prestigious Rivals Stumble", Business Week, November 28, 1988, p. 76.
Sloan has received rankings from a high of second to a low of seventeenth, depending on the criteria used for the poll. Sloan does well in the area of starting salaries for its graduates (second 25), reputation among deans of management schools (fourth 26), and according to author Tom Fischgrund in The Insider's Guide to the Top Ten Business Schools (fifth 27). Sloan finds the recruiting companies (seventeenth 28 & 29) and its own graduates (tenth 30) less supportive.

What may be more important than the number associated with the ranking is what the poll and its criteria reveal about the school. These results illuminate Sloan's strengths and weaknesses. Sloan is revered for its reputation as an academic institution. It rates highly in its research output and the reputation of its faculty members in their respective fields.

In the data on salaries and recruiters, firms seem to be sending a mixed signal, voting one way with their pocketbooks


29 Byrne, "How the Schools Stack Up", Business Week, p. 78.

30 Byrne, "How the Schools Stack Up," Business Week, p. 78.
and another way in a survey. Two possible explanations can be made for this apparent contradiction -- one explaining a too-low recruiter ranking and one explaining a too-high salary.

Sloan has a small number of students, so that firms may not have as much experience with our graduates and therefore rank us lower. The small number also serves to minimize the possible fields in which Sloan can excel. For example, it is widely known that Sloan is poor at placing students in consumer goods firms, yet is "first in computer technology and information skills". Also supporting this argument is the correlation between high recruiter approval ratings and the number of students in the program. The top nine rated schools in the Business Week survey along the recruiter dimension are among the top ten largest programs (see Table 4). NYU was the only program that had a large class size and a low ranking among recruiters.

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31 Mackay-Smith, Wall Street Journal, p. 31.
<table>
<thead>
<tr>
<th>Recruiter Ranking</th>
<th>Class Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Northwestern (Kellogg)</td>
<td>505</td>
</tr>
<tr>
<td>2. Wharton</td>
<td>743</td>
</tr>
<tr>
<td>3. Harvard</td>
<td>789</td>
</tr>
<tr>
<td>4. Chicago</td>
<td>645</td>
</tr>
<tr>
<td>5. Michigan</td>
<td>414</td>
</tr>
<tr>
<td>6. Columbia</td>
<td>725</td>
</tr>
<tr>
<td>7. Stanford</td>
<td>306</td>
</tr>
<tr>
<td>8. UCLA</td>
<td>391</td>
</tr>
<tr>
<td>9. Indiana</td>
<td>342</td>
</tr>
<tr>
<td>10. Duke</td>
<td>239</td>
</tr>
</tbody>
</table>

An argument to support the second hypothesis is that Sloan graduates tend to choose to pursue high-paying jobs (Consulting and Investment Banking) in the most expensive living areas in the country, possibly skewing the salary data. Correcting for cost of living and job type, Sloan graduates may not end up as high as second in salary. 32

One place where the school did not fare too well was in the Business Week survey of graduates, who ranked Sloan tenth along the dimensions of "the quality of the teaching, curriculum, environment, and placement offices." 33 Though concerns have been raised that there are problems with Business Week's methodology, Sloan's low rating should not be rejected out of hand, as it is one of the few programs with a small class size that did not do well on this dimension. As large size class size correlated well with recruiter ranking, small class size was a good indicator of positive signals from graduates (see Table 5).

32 In the "1988 Placement Report", published by the Master's Program Office, it is reported that 61% of the class of 1988 started their careers in Massachusetts (22%), New York (22%), or California (17%). It is also reported that 56.5% of the class took starting jobs in Finance (31%) or Management Consulting (25.5%).

33 Byrne, "How the Schools Stack Up", Business Week, p. 78.
Table 5

Programs with a Small Class Size Tend to Receive High Ratings from Graduates

<table>
<thead>
<tr>
<th>Graduate Ranking</th>
<th>Class Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dartmouth (Tuck)</td>
<td>161</td>
</tr>
<tr>
<td>2. North Carolina</td>
<td>145</td>
</tr>
<tr>
<td>3. Cornell</td>
<td>194</td>
</tr>
<tr>
<td>4. Virginia (Darden)</td>
<td>212</td>
</tr>
<tr>
<td>5. Northwestern (Kellogg)</td>
<td>505</td>
</tr>
<tr>
<td>6. Harvard</td>
<td>789</td>
</tr>
<tr>
<td>7. Duke</td>
<td>239</td>
</tr>
<tr>
<td>8. Stanford</td>
<td>306</td>
</tr>
<tr>
<td>9. Carnegie-Mellon</td>
<td>139</td>
</tr>
<tr>
<td>10. MIT (Sloan)</td>
<td>185</td>
</tr>
</tbody>
</table>

Summarizing the last two points, it seems that Sloan is caught somewhere in the middle. Its class size is too small for a high reputation with recruiters, yet its atmosphere is not conducive to overly positive feelings from graduates.

One signal that seems to be coming from the data that we have examined, and from subjective comments, is that Sloan is a niche player in management education. Sloan seems to have a high percentage of its US matriculants (45% over the three years) for which Sloan was the only top fifteen school to which they applied (in many cases the only school of any rank), or the only one to which they were accepted. (The other fourteen schools considered are the same ones listed in Exhibit 1). This data indicates that these students have a clear preference for Sloan, or only Sloan is interested in them. Only a small percentage (17.4%) of eventual US matriculants chose Sloan after being accepted at two or more of the top business schools.

The niche conclusion can be also supported by some of the qualitative comments made in an article discussing the survey results. *U.S. News and World Report* describes Sloan as a school with a "technical emphasis", noting that "nearly two-thirds of the students ... have engineering or science degrees ... The school is launching a master's- degree program in manufacturing-process technology to capitalize on the shift of interest from high finance to the shop floor." 34

34 "Money Majors", *U.S. News & World Report*, p. 82.
McKinsey and Company studied the Sloan Master's Program in 1987, and tested prospective student opinion of an early draft of the new mission and program description. The draft program description included a technology minor and an international summer internship. Based on prospective student reaction, a McKinsey consultant working on the study cautioned, "Sloan is already in a niche, and this wording of the mission reinforces this. The person seeking an MBA by and large wants to be a general manager." While the program has not in fact been specialized this drastically, Sloan should be wary of the possible negative effects of reinforcing the niche image.

Whether this niche position is a conscious effort on the part of the program or an unintended consequence of its actions, it should be noted and understood as a phenomenon. As one recruiter states (a belief common to many recruiters), "graduates [of a program] are only as good as when they came in ... I don't think you're going to change remarkably the values and abilities of a young person. So the better the students, the better the end product." 35 To heed this advice, Sloan must act in a way that does not narrow the range of candidates that it sees. Any unnecessary exclusion of the top prospective student candidates in the country may well impede Dean Thurow's attempt to "break into the top ranking".

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35 Edwin H. Wingate, senior vice-president for personnel at Dayton Hudson Corp., quoted in Byrne, "The Best B-Schools", p. 80.
To summarize, we have noted three factors that are or should be pressing for change in the Sloan Master’s Program: criticism of management education in general, new initiatives by the Dean, and feedback from the market. It is noteworthy that our interpretation of the market data reveals a different conception of Sloan’s relative standing in the marketplace than is held by some within the school.

Next we will examine the feedback from the Student Working Group regarding the core curriculum. This feedback will present additional challenges to the current Sloan Master’s Program.
III. Core Curriculum Review: Results of Student Working Group

Background

The core curriculum is a critical part of the educational product that any management school offers. It is the one standard part of the curriculum for which all students are responsible, and therefore is one thing outsiders can say with certainty a graduate from a given business school possesses. Combine this fact with the reality that the core fills one year of the two-year Sloan Master’s Program, and it becomes clear why the core curriculum has been the subject of periodic review efforts. The core was most recently reviewed in the academic year 1983-1984, with the current core curriculum adopted in the fall of 1985. This academic year, the Master’s Program Committee Subcommittee on Core Reassessment was charged with evaluating the effectiveness of this core, in general and in light of the school’s new mission.
Student Working Group on Core Reassessment

To provide student input into the Subcommittee's deliberations, the Student Working Group on Core Reassessment was formed. The Student Working Group met several times in January 1989 to evaluate the present core and formulate recommendations. Details of the process and recommendations of the Student Working Group are provided in upcoming sections of this chapter.

While the suggestions of the Student Working Group were rich in micro-level detail, several themes emerged as we reviewed their suggestions for the core curriculum:

- Students want more functional material at the expense of disciplinary material in the core.
- Students want more demonstration of managerial applications of concepts.
- Students want an integrated, coordinated program that makes clear the connections between the various areas of knowledge and application.

It is noteworthy that these themes are correlated with the recommendations of the dean's panel and the Porter/Mckibbin report as discussed in the previous chapter.
Methodology of Student Working Group

The Student Working Group was chartered to make a presentation to the Master's Program Committee Subcommittee on Core Reassessment regarding students' opinions of the Sloan core curriculum. In December 1988, all first- and second-year students were asked if they would be interested in serving in the Student Working Group during the Independent Activities Period of January 1989 to address these issues. Twenty-three master's students (seventeen second-year and six first-year) participated in the Student Working Group.

The first meeting was an all-day meeting. The students were split into three groups, and each group was assigned four to six of the core courses. Armed with the most recent syllabus for each of the core courses, each group reviewed the content of each course on a session-by-session basis, and discussed the strengths and weaknesses of the courses. Each small group then presented their conclusions to the entire Student Working Group and solicited group comments.

The Student Working Group reconvened the following week for a half-day meeting. They were then issued documents summarizing the comments from the previous week. Further discussion ensued and many of the issues were re-examined. The next day, another half-day meeting took place in which, in addition to issues specifically concerning the core, general Sloan curriculum and environmental issues were discussed. The
comments of the group were then consolidated into a set of specific recommendations about individual courses, a recommended new core curriculum, and general program recommendations. These recommendations were given to the Master’s Program Committee Subcommittee on Core Reassessment in a two-hour presentation on January 23, 1989.
Student Working Group’s Recommendations for Core Courses

An important point that was emphasized to the Master’s Program Committee Subcommittee on Core Reassessment was the need to increase integration and coordination among courses and assignments, and the need to enhance the quality and productivity of assignments, i.e., the output of learning per hour of study. The students asserted to the subcommittee that the out-of-class workload cannot be increased, and that there are opportunities to streamline the current workload by (1) coordinating and consolidating assignments between courses, and (2) careful review of the necessity and value-added of each assignment in each course.

This section will present the Student Working Group’s review of each course in the core curriculum. For each course, the Student Working Group identified strengths, weaknesses, and recommendations. It should be remembered that the Student Working Group was conducted in January 1989, so the reviews were based on a combination of first years’ impressions of Fall 1988 core courses and second years’ impressions of Fall 1987, Spring 1988, and Fall 1988 core courses. Core courses taught in Spring 1989 had not yet begun at the time of this review.

15.011 -- Applied Microeconomics

The core microeconomics course, 15.011, is currently a full semester course (nine credits), taught for twelve weeks,
two times a week, for a total of 24 sessions. It is currently
taught in the fall semester of the first year.

The Student Working Group felt that many valuable
concepts were discussed in 15.011, such as game theory, pricing
strategies, non-price competition, and cost-benefit analysis.
The use of cases to illuminate duopoly pricing in certain
sections was found to be valuable.

Weaknesses of the course were that it "focused on
quantitative analysis rather than conceptual understanding --
too much calculus, not enough managerial application."36 The use
and the role of the diagnostic exam was brought into question.
Students felt that material that was tested on the diagnostic
was retaught in 15.011, and that the diagnostic exam was an
unpleasant way to start out the two years at Sloan. The overall
recommendation on this issue was to eliminate the diagnostic and
replace it with review materials for students to study during
the summer before the first year. The students also suggested
that knowledge of these review materials should then be
expected, and the concepts should not be retaught.

The recommendations for this course were to shorten it
and combine it with 15.012, Applied Macro- and International
Economics, for a one semester course, meeting two times per

36 Student Working Group on Core Reassessment, "Notes from
Review of Core Courses", document distributed to Master's
Program Committee Subcommittee on Core Reassessment, January 23,
1989, p. 2.
week. It was suggested that the regulatory material in 15.011, while being very valuable, could perhaps be taught as a segment of a new core course on the Environment of the Firm. For the remaining material in 15.011, the Group recommended that more emphasis be placed on managerial applications, perhaps using games or simulations to reinforce concepts in a practical setting.

15.012 -- Applied Macro- and International Economics

The core macro- and international economics course, 15.012, is currently a full semester course (nine credits), taught for twelve weeks, two times a week, for a total of 24 sessions. The Student Working Group felt that a number of the macro- and international economics concepts covered in 15.012 were very valuable. However, the lectures in the second half of the course covering world economic issues, while making useful points, were found to be quite repetitive. Also, as noted in the review of 15.011, the Student Working Group felt that the diagnostic exams should be eliminated and review materials provided over the summer. The Group felt that the course should not repeat those areas covered by the diagnostic or review materials.

Recommendations for this course included consolidating the lectures from the second half, and perhaps offering a short lecture series or management seminar to cover these world economic issues. Another possible place in the core to cover some of these issues would be in the new course the students
recommended on the Environment of the Firm. It was recommended that the shortened 15.012 be combined with 15.011 into a one semester course.

15.061 -- Decision Support Systems II

The core probability and statistics course, 15.061, is currently a full semester course (nine credits), taught two times a week for twelve weeks, for a total 24 sessions. It is currently taught in the fall semester of the first year.

The Student Working Group found a strength of this course to be the grounding it provides in the theory of probability and statistics. However, little business context was given for the theory. The Group recommended that the theory be trimmed back to a half semester format, meeting three times per week, and that statistical techniques be integrated into the functional area core courses. For example, an exercise in interpreting market research data could be incorporated into the core marketing course. During the several months since the Student Working Group presentation to the Master's Program Committee Subcommittee on Core Reassessment, the statistics faculty has begun work on identifying areas of coordination and application for statistical techniques in other core courses.

15.062 -- Decision Support Systems III

The core operations research course, 15.062, is currently a full semester course (nine credits), taught for
twelve weeks, two times a week, for a total of 24 sessions. It is currently taught in the spring semester of the first year.

The Student Working Group recommended that the 15.062 material be streamlined significantly. While the Group felt that the concepts of linear programming were valuable, they felt that these concepts could be conveyed more briefly, and that some of the variations presented were overkill. Furthermore, the Group felt that the topic of Decision Analysis should be moved to 15.061, where it meshes better with the discussion of probability in the core probability and statistics course. The Group felt that game theory could be removed from the 15.062 course, as it is covered elsewhere in the core (15.011).

The Student Working Group also felt that the course focused "more on quantitative methods than on usefulness of tools in a management context". 37 Because the Student Working Group was conducted in January 1989, this comment was based on the version of the course taught in the spring of 1988. The faculty teaching the course has changed in the spring of 1989, and the syllabus has been modified slightly. Through the use of a guest speaker from Digital Equipment Corporation and other modifications to the course, the problem of not demonstrating managerial applications may have been somewhat alleviated this spring.

37 Student Working Group, p. 4.
15.280 -- Communication for Managers

The core communications course, 15.280, is currently a
two-thirds course (six credits), taught for eighteen weeks, once
a week for one and one half hours. It is currently taught from
the midpoint of the fall semester of the first year through to
the end of the spring semester of the first year.

The Student Working Group noted several strengths of
15.280. The course provided valuable opportunities to learn to
make oral presentations. The constructive feedback provided
immediately after oral presentations was very helpful. One-page
memo assignments forced clear, concise writing. The role-
playing exercise which helped in understanding differences in
cultural norms among the U.S. and other cultures was found to be
very valuable.

Weaknesses noted by the Student Working Group included
the repetition of reading assignments in class lecture. The
lecture material reiterating basic grammar and sentence
structure was found to be less valuable than other topics.
Written feedback was felt to be too slow in some cases.

The Student Working Group recommended that this course
be expanded to a full year, but meeting only once every other
week. While covering more calendar time, this arrangement would
reduce in-class hours. The increase in calendar time would
provide more videotape scheduling flexibility, while the
decrease in in-class time could be accomplished by allocating
less time to lecture material that is repetitive of the readings.

It was also recommended that the number of oral presentations be increased, and that extemporaneous speaking exercises be incorporated into class time. The Group felt that the cultural norm role-playing exercise could be used as a model for similar exercises on gender and race differences. Interviewing and resume and cover letter writing could be part of the curriculum. The classes addressing basic grammar could be made optional or help could be provided outside of the classroom.

The Student Working Group recommended that the group project that culminates the course be connected to class work from another course rather than be on random topics of the students' choice (this year, the group project will be based on the auto case which should address this issue). In this way, approaches to the same case could be compared. The Group also recommended that common topics be assigned for presentations so that the feedback focus is on presentation technique and visual aid effectiveness rather than on the subject matter which may not be equally familiar to everyone.

The Group recommended that the topics studied in 15.280 be reemphasized in other courses. For example, the importance of how presentations are made, the enforcement of time limits, and an emphasis on the quality of written papers
and oral presentations should be reinforced throughout the Sloan Master's Program. Finally, it was recommended that more people be allowed to waive into 15.281. This would even out the experience and background of the students in 15.280.

15.311 -- Managerial Behavior in Organizations

The core organizational behavior course, 15.311, is currently a full course (nine credits), taught for twelve weeks, once a week for three hours. It is currently taught in the fall semester of the first year.

The Student Working Group found that satisfaction with this course varied widely dependent on section. For example, not all sections used the same exercises, so when a given exercise was noted as a strength, it may have been from only one section. Likewise, some weaknesses are section-specific.

However, some generalizations can be made. Students preferred those sections with relatively more cases, class discussion, and exercises, and with relatively less lecture. For example, the Group felt that the current format of one three-hour session per week would be best utilized if lecture were at most one hour, and cases, class discussion, and exercises, two hours. Group exercises and group evaluation were found to be quite valuable; students commented that it was important to have international students in each group to encourage cross-cultural interaction.
Exercises which were specific to various sections that were found to be quite valuable were the manager's "in-basket" exercise (especially discovering at the end what experienced executives had done); the film "Twelve Angry Men"; Milgram's experiments movie; the Corrugated Paper Products, Inc. project; and the Looking Glass exercise.

Weaknesses of the course were that there was some repetition with 15.660 in some sections. The implementation of the Ethics Forum was weak, and students felt that ethical issues could have been woven into the course more, especially as they applied in case discussion.

Recommendations for the course included emphasizing exercises, cases, class discussion, and group interaction, and deemphasizing lecture in those sections with relatively more lecturing. The Student Working Group recommended that overlaps between 15.660 and 15.311 be eliminated to the extent they still exist. The Group recommended an increased discussion of ethics, incorporating theory and integrative, interactive exercises and/or case studies. Finally, the Group recommended increasing the emphasis on diversity of workplace issues, e.g., race and gender.

15.410 -- Accounting and Finance II

The core finance course, 15.410, is currently a two-thirds course (six credits), taught for six weeks, three times a
week, for a total of eighteen sessions. It is currently taught in the second half of the spring semester of the first year.

At the same time as the Group considered 15.410, it also considered 15.412 and 15.415, which are popular alternatives first year students often use to satisfy the core finance requirement. (15.412 is a full semester, two times per week, twelve credit course, taught primarily for out-of-course students, but which satisfies the Sloan core requirement. 15.415 is a full semester, three times per week, fifteen credit course required for concentrators.)

The students felt that the choice in the finance curriculum between 15.410, 15.412, and 15.415 is confusing and not productive. Since 15.415 is required for concentrators, students are forced to decide whether to concentrate or not in finance without having yet been exposed to any finance at all. The emphasis in 15.415 was seen as unnecessarily theoretical and oriented towards proofs and derivations. This characteristic did vary by section, however, with Professor Taggart's section of 15.415 in the spring semester of 1988 getting high marks for good balance between theory and application. If a student chooses not to take 15.415, then they take 15.410 or 15.412. 15.410 was viewed as insufficient grounding in finance for those students who do not plan to take more finance courses.

The recommendation of the Student Working Group was to develop one core finance course for all students. The Group
felt that this course should be comprehensive (meeting three
times per week for a full semester if necessary). Compared to
the current 15.415, it should have a reduced emphasis on proofs
and derivations and should include more business cases. The
course should explore international issues as well. The
students felt that the exercises for this course should require
the use of spreadsheets and statistical analysis.

15.515 -- Accounting and Finance I

The core financial accounting course, 15.515, is
currently a full semester course (nine credits), taught for
twelve weeks, two times a week, for a total of 24 sessions. It
is currently taught in the fall semester of the first year.

The scope of the material covered in Financial
Accounting was viewed as a strength, although it was felt that
less emphasis could be placed on preparing the financial
statements and more emphasis on interpretation and analysis.
The use of cases was encouraged by the students, and it was
recommended that the course develop materials requiring the use
of spreadsheets and statistical analysis. (This was viewed as
another potential application area for the 15.061 statistics
core material.)

The lack of managerial accounting concepts in the core
accounting course was viewed as a major deficit. The Group
recommended that Financial and Managerial Accounting both be
taught in the core. The Group felt that Financial Accounting
could perhaps be trimmed back to eighteen sessions, and Managerial Accounting could be added for another eighteen sessions. The Group suggested that some of the "special topics" covered in the second half of Financial Accounting could perhaps be trimmed back to accomplish this reduction in sessions.

The exact number of sessions, however, was not viewed as the important idea; the key was that the content of managerial accounting concepts be added to the core. If Managerial Accounting were added, it could provide background for, and coordinate with, other core course material, such as transfer pricing in Microeconomics, or break-even analysis in a number of functional area courses.

15.560 -- Decision Support Systems I

The core management information systems course, 15.560, is currently a two-thirds course (six credits), taught for six weeks, three times a week, for a total of eighteen sessions. It is currently taught in the first half of the fall semester of the first year.

The Student Working Group felt that the choice of topics covered in 15.560 was appropriate, but that the relative weight should be altered by placing more emphasis on management issues. While it was viewed as useful to understand programming, LISP was viewed as a less valuable language for management students than some other languages. The Student Working Group felt that DBase4, for example, could be used as a language to teach
similar lessons about programming, while being a more useful language later on for the students. The use of DBase4 as the language might also allow for economies with the database lectures. Time saved could be reallocated to the study of management issues.

At the student presentation of the results of the Student Working Group to the Master’s Program Committee Subcommittee on Core Reassessment, the students were told that the MIS faculty were already modifying the 15.560 course to use DBase4 rather than LISP. The Student Working Group also recommended that the 15.560 course include more cases like those in 15.568 to emphasize management issues. Finally, it was recommended that a real PC be brought into the classroom for a discussion of hardware, rather than using overhead transparencies to describe parts of the system.

15.660 -- Industrial Relations and Human Resource Management

The core industrial relations and human resource management course, 15.660, is currently a two-thirds course (six credits), taught for six weeks, three times a week, for a total of eighteen sessions. It is currently taught in the first half of the spring semester of the first year.

Because the Student Working Group met in January 1989 before the spring 1989 classes had begun, the evaluations of the course from this Group reflect the sections taught in the spring
semester 1988. The students participating in the Student Working Group had quite disparate opinions of this course depending on which section of the course a given student had attended. One of the strengths of this course was the topics covered, which were felt to be useful. The labor-management negotiation exercise was also found to be valuable. Weaknesses of some sections included too much lecture and not enough class discussion and case analysis. The quality of TAs also varied widely (this problem recurred in other courses as well). Materials in some sections overlapped with materials in some sections of 15.311.

Recommendations were to eliminate any existing overlaps with 15.311, to increase case discussion and class interaction in sections that are relatively lacking in these areas, and to increase use of exercises like the labor-management negotiation exercise.

15.760 -- Introduction to Operations Management

The core operations management course, 15.760, is currently a two-thirds course (six credits), taught for six weeks, three times a week, for a total of eighteen sessions. It is currently taught in the second half of the spring semester of the first year.

One highlight of this course was the book, The Goal. Useful concepts, such as line balancing, system optimization, and materials resource planning, were introduced and developed
in the course. Weaknesses involved the use of "too much ... 'Greek' notation" 3, and not enough emphasis on business issues and context for the specific techniques. The cranberry case assignment used in the spring of 1988 was found to demonstrate interesting points, but to be very time-consuming. In a subsequent 15.760 student/faculty feedback session in the spring of 1989, the faculty stated that they were teaching the cranberry case this year, but not requiring it as a written assignment.

The Student Working Group felt that this course was not an appropriate grounding in manufacturing for someone who takes only this course and no electives. The Group felt that a broad survey of key manufacturing issues should be provided.

Recommendations for 15.760 involved merging it with 15.062, Decision Support Systems III, into a one-semester, two times per week course. This recommendation was based in the desire to see the 15.062 material, the bulk of which is linear programming and its variations, substantially trimmed back and its applications clearly demonstrated through 15.760. The Student Working Group further recommended that the 15.760 course increase the use of cases and the discussion of issues, such as in 15.768, Operations Management in the Service Industry, and 15.769, Manufacturing Policy. The guest speakers and plant tours presently in the course were very well received, and more

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3 Student Working Group, p. 12.
tours presently in the course were very well received, and more of these were recommended.

The Group felt that it would be valuable for the course to explore the impacts of managerial accounting on production decisions. The plant tours were found to be the most useful part of the Schmenner text; it was recommended that these be extracted from the text as part of the readings packet and the rest of the text not used. Lessening the use of proofs and "Greek" symbols was recommended, as was the moving of detailed techniques into an elective for those who are interested in more depth.

Through the proceedings of the Master's Program Committee Subcommittee on Core Reassessment, it has become clear that the 15.062 faculty see many more applications for linear programming than just operations management, and would therefore not want it integrated into 15.760. There also seem to be historical reasons relating to the development of the operations management field of study that make a combining of the two courses infeasible. Specifically, operations management struggled for years to prove that it had arrived as an area separate and distinct from operations research, and so the idea of combining the two areas in one course was very unattractive to the faculty. Rather, it was viewed as more attractive, if any combinations were to be made, to combine 15.061 and 15.062.

15.810 -- Introduction to Marketing

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The core marketing course, 15.810, is currently a two-thirds course (six credits), taught for six weeks, three times a week, for a total of eighteen sessions. It is currently taught in the spring semester of the first year, either in the first half or the second half.

In considering the 15.810 course, the Student Working Group also considered 15.820, the follow-on six-week, three times per week course for marketing concentrators. The Group felt that the scope of topics covered in 15.810 and 15.820 was good, as were the use of cases and the Markstrat game. The general instruction on how to do a case analysis was helpful as well. The utilization of guest speakers was considered valuable. The Group also felt that the course summary provided at the end of 15.810 was very valuable, as was the professor's feedback in 15.820, where the professor graded all the assignments personally.

The course provided an introduction to break-even analysis, which the students found valuable. However, the Student Working Group felt that managerial accounting concepts should not be left to functional area courses like marketing to be introduced. Rather, the Group recommended that managerial accounting concepts be part of the core accounting course in the fall semester, so that they could then be applied in other core courses, such as marketing and operations management, in the spring.
The Student Working Group felt that the weaknesses of the courses were the computer exercises other than Markstrat (e.g., Robologic, Intergalactic Widgets), and an overemphasis on *In Search of Excellence*. Also, the Group felt that the course did not use enough analytical techniques.

The Student Working Group recommended that 15.810 and 15.820 be merged into a single full semester course, meeting two times per week, utilizing the best materials from both courses. This would include a shortened version of the Markstrat game, which is currently a large component of the 15.820 course. The Group also recommended that the course use more cases, and more analytical rigor. The Group felt that exercises should be developed that utilize spreadsheet and statistical skills and techniques. (This course was seen as one of the functional areas where the application of the 15.061 statistics material would be appropriate.)

15.930 -- Strategic Management

The core strategy course, 15.930, is currently a two-thirds course (six credits), taught for six weeks, three times a week, for a total of eighteen sessions. It is currently taught in the second half of the fall semester of the first year.

The Student Working Group felt that one of the strengths of this course was its use of the case discussion format. This was found to provide a good balance with the lecture format of many of the other first semester, first year courses. A second
highlight of the course was the use of videotapes of CEOs to supplement the written cases. Finally, the Student Working Group felt that the course provided a good introduction of strategic framework concepts.

One weakness found by the Student Working Group was that the case study method should be made more rigorous through the increased integration of theory and cases. Secondly, the Student Working Group noted that the course presented strategic problems only from the viewpoint of a CEO; the Group felt that it would be useful to integrate cases that involved the perspective of the middle manager. Finally, the Group felt that a summary of key points after each discussion would help to consolidate the learning from each case.

The Student Working Group recommended that the 15.930 course be expanded to a full semester course meeting twice a week and covering a wider range of topics. One underlying goal of this recommendation was to spread the heavy amount of reading material out over a longer time period chronologically. (As one Sloan faculty member that teaches another three-times per week subject has pointed out, the amount of student learning in a given course is proportional not to the number of class sessions, but to the number of weekends during the course.) Another goal behind this recommendation was to allow for the coverage of a broader range of topics. This broader range could include smaller start-up corporations rather than just the large conglomerates currently discussed. It could also include
functional strategies, for example, in marketing, manufacturing, R&D, and so forth.

The Group also recommended that cases portraying women and minority CEOs be utilized. The increased use of quantitative analysis to dissect cases was recommended as well. More feedback on student's class participation was desired. The students expressed an interest in seeing better integration of strategy theories, and of tools learned in other courses, with the cases used in 15.930. The discussion of ethical problems or cases was recommended.

Finally, the Group recommended an increased use of cold-calling to begin case discussion to encourage better class preparation and discussion. (Cold-calling is the practice of a professor naming a student to begin the case discussion immediately. The professor does not solicit volunteers.) One technique suggested here was occasional optional participation from students, such as used in 15.760, where students must be prepared to be called on in every other class.

New Course -- Environment of the Firm

The Student Working Group proposed a new core course on the environment of the firm. This course would cover four areas: international management, technology strategy, regulation and deregulation, and legal and ethical issues. In this way, it would help to incorporate two of the three mission areas, international and technology issues, as well as help
increase the understanding of corporate citizenship issues, business/government interactions, and managerial ethics. Since it covers such a broad range of topics, it would require faculty involvement from a number of fields. This course was proposed as a full-term course, meeting two times per week in the spring semester.
After reviewing the current core on a course-by-course basis, the Student Working Group recommended a new curriculum. This core can be summarized by the following chart:

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
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<tbody>
<tr>
<td>Micro/Macroeconomics</td>
<td>Operations Mgmt/L.P.</td>
</tr>
<tr>
<td>.011/.012 (3)</td>
<td>.760/.062 (3)</td>
</tr>
<tr>
<td>Statistics</td>
<td>Finance</td>
</tr>
<tr>
<td>.061 (4.5)</td>
<td>.400 (4.5)</td>
</tr>
<tr>
<td>MIS</td>
<td>Indus. Rel./HRM</td>
</tr>
<tr>
<td>.560 (4.5)</td>
<td>.660 (4.5)</td>
</tr>
<tr>
<td>Organizational Behavior</td>
<td>Marketing</td>
</tr>
<tr>
<td>.311 (3)</td>
<td>.815 (3)</td>
</tr>
<tr>
<td>Financial Acctg.</td>
<td>New</td>
</tr>
<tr>
<td>.515 (4.5)</td>
<td>Course (3)</td>
</tr>
<tr>
<td>Mgerial Acctg.</td>
<td>(Every other week)</td>
</tr>
<tr>
<td>.521 (4.5)</td>
<td>() = course hours per week</td>
</tr>
</tbody>
</table>

| Strategy                    | New                        |
| .930 (3)                    |                            |
| Communications              |                            |
| .280 (1.5)                  |                            |
General Programmatic Recommendations

The Student Working Group made general programmatic recommendations as well. These recommendations included:

- Place greater emphasis on managerial applications v. theory
- Enhance quality and productivity of assignments, i.e., increase output of learning per hour of study
- Increase integration of curriculum and assignments across courses
- Eliminate thesis, or at least make it optional
- Eliminate diagnostic tests -- provide supplemental review materials during summer
- Offer additional electives, particularly in underserved areas such as Strategy and Marketing
- Limit class enrollment of out-of-course students
- Reduce conflicts in course scheduling
- Examine effectiveness of waiver policies and of different track offerings based on previous experience and skills
- Provide incentives/training for improved quality of teaching
- Improve selection and training of TAs
- Develop more interaction with alumni
- Develop more interaction with business community
- Increase interaction between Sloan Fellows and Master's students
- Increase efforts to attract a broader range of firms recruiting on campus
- Enhance quality and care of facilities
- Improve computer center
- Enhance IAP opportunities, e.g., offer factory tours, integrative exercises, and/or trips abroad.
IV. Organizational Context

The last two chapters have alluded to several voices calling for change in management education and at the Sloan School. To understand the school’s ability to implement change, it is important to understand the organizational context through which changes will be mediated. Our purpose in this chapter is to describe the organizational landscape. The complexity of the organization’s structure and the role of culture and incentive systems on decision making processes are our two areas of focus.
Organizational Structure

The MIT School of Management is a complex organization composed of many groups, each having different constituencies and diverse goals. There are several "product lines" at the school within two main product groups - research products and training/educational products. Each faculty member has her/his own research product and may be a part of a larger research group.

In the educational products category there are several degree and non-degree options: the undergraduate, the two-year Master's, the combined 5-year B.S./M.S., the Ph. D., the Leaders for Manufacturing, the Sloan Fellows, the Management of Technology (MOT), and the Senior Executives programs. Additionally, the school offers educational opportunities to MIT out-of-course students, and to students enrolled at other graduate degree programs in the Boston area.

In a manufacturing environment, when a product line proliferates, the firm sometimes takes a focused factory approach to make those products more efficiently. It creates a factory within a factory, dedicating to each product specific resources that are its alone. The School of Management has done this to a certain extent, and with success. Some faculty teach only in the Sloan Fellows and Senior Executives Programs. Each program has its own facilities, as the Senior Executives have classes at Endicott House and the Sloan Fellows take their core
courses in E52-175. Students not enrolled in these programs are often restricted from taking classes offered by these programs.

The move to a focused factory approach is often successful for new products. They are often sheltered from the complexities of the old system. They have dedicated resources and as a result more autonomy. Their task is removed from the complexities of the parent/host company and can usually be accomplished efficiently and well. As evidence of how the focused factory concept works at Sloan, one program administrator states, "The MIT School of Management is probably recognized as the best in providing middle and senior level management education."

A drawback to this approach concerns the "leftovers" -- all the products that are made in the old factory with the remaining staff. At Sloan, the Master's Program tends to bear the brunt of dilution from out-of-course students and the undergraduate population.

Decisions made about the Master's Program tend to be framed by the political and organizational factors in the school, as this program is the biggest one and decisions made in the Master's Program often have implications that reach outside of the confines of the Master's Program. In discussions about the relative size of courses in the core, there is an undercurrent of concern about the size of the faculty within that discipline, as it is held that "how much of any given
discipline we teach in our programs determines the size of the faculty in that discipline". So, decisions about ccre courses are based on a complex set of criteria, not solely on what may be best for the learning experience.

Operationally, the Master’s program is also constrained by having to fit within the larger MIT system. For example, courses must be scheduled consistently with the Institute’s schedule. This constraint makes it difficult to offer modules for Master’s students that do not conform to a traditional multiple meetings per week, half or full semester format.

The different groups that the actors within this system serve add another layer of complexity. Actions that support one group may not further the aims of another. Agents in this system have several constituencies to serve. Stakeholders include current and future faculty, professional reference groups (faculty at other schools within the same disciplines), MIT, academia, recruiters, corporate sponsors, present and future students in the various programs, and alumni/ae. Satisfying all these stakeholders with the two product groups and multiple product lines under budget constraints and political pressures presents a number of management challenges.

This complexity may explain why one of the few major changes at the Sloan School in the past few years has been another spinoff-type initiative - the Leaders for Manufacturing program. This indicates to us that a new initiative may be
easier to effect than a change in the old system.
Culture and Incentive Systems

The ability to effect change should take into account the organization's culture and incentive systems. The Sloan School is first and foremost an academic research institution. This is dictated by the culture of MIT, the incentive and promotion systems within the school, and the hiring criteria used for faculty. Building off of this expertise into doing an even better job of training practitioners, as is suggested by the new mission statement ("develop and disseminate"), presents challenges to the organization and its culture.

Sloan's culture has been described by one faculty member as consisting of "individual faculty autonomy, a research emphasis, and a weak hierarchy. Sometimes it's positively anarchic. It's hard to get us to work as a team on projects; after all we're recruited for our autonomy." Another faculty member calls it an "ad hocracy. We come together to decide things on an as needed basis." Under these conditions it becomes easier to understand why the implementation of the mission cannot yet be claimed as a success.

Power in the organization is diffuse, mostly based in the senior faculty members. Committees are often formed to look at issues and make recommendations, but their ability to implement their recommendations is unclear. A committee, such as the Master’s Program Committee’s Subcommittee on Core
Reassessment, may be better equipped to define issues and debate alternatives than to implement its final recommendations.

The lack of hierarchy means that direct commands are a relatively inefficient means of effecting organizational change. Faculty members readily assert that, "you can't tell a faculty member what to do around here. That's not the way things are done." Given the diffuse and diverse nature of the power base, coalitions are hard to build. Power can be used for veto purposes rather than in a constructive way. Many agree that there are important managerial areas missing from the core (e.g. managerial accounting and international) and that some areas need to be shortened to accommodate the missing elements. Even if the majority of the faculty agrees that some existing courses should be replaced by important concepts now missing from the core, small faculty groups wield impressive power to protect their interests. So the challenge for a dean becomes how to motivate the entire faculty to move in the desired direction.

The quality of decisions can also be examined from an incentive and motivation point of view. Faculty members get no "credit" for working on a committee. Tenure decisions are based, as one recent tenure recipient states, "120% on research. Sure they tell you that teaching matters, but a top-notch researcher, no matter how lousy they are in the classroom, will still get tenure."
This reward system is described by Steven Kerr, in his article entitled, "On the Folly of Rewarding A, While Hoping for B."

Society hopes that teachers will not neglect their teaching responsibilities, but rewards them almost entirely for research and publications. This is most true at the large and prestigious universities. Cliches such as 'good research and good teaching go together' notwithstanding, professors often find that they must choose between teaching and research oriented activities when allocating their time. Rewards for good teaching usually are limited to outstanding teacher awards, which are given only to a small percentage of good teachers and which usually bestow little money and fleeting prestige. Punishments for poor teaching also are rare.

Rewards for research and publications, on the other hand, and punishments for failure to accomplish these, are commonly administered by universities at which teachers are employed. Furthermore, publication oriented resumes usually will be well received at other universities, whereas teaching credentials, harder to document and quantify, are much less transferable. Consequently, it is rational for university teachers to concentrate on research even to the detriment of teaching and at the expense of their students. 39

The demands of research at a prestigious school like MIT are substantial. Any activities that take time away from research are not embraced with enthusiasm. As a result it is difficult for faculty members on a committee to develop their ideas and substantiate their positions to the extent necessary. For example several years ago, a faculty member made a proposal for a minimalist core. In the memo, the author suggested making some courses optional even though the author admitted that he was not familiar with the content of some of the courses in


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question.

An incentive system based solely on research capabilities may not promote the appropriate level of course development. A good idea developed during a focus group with operations management faculty and master's students was viewed by a junior faculty member as "an excellent suggestion, but it would take too much faculty set up time." At a core sub-committee meeting when a faculty member proposed the creation of technology modules (a five session experience to learn about a specific technology), a senior member of the administration cautioned against spending time on such a task at the expense of research. This research orientation may be impeding organizational change within the Master's Program.

The tenure system may also be producing some unintended side effects. This system requires "upwards of twenty letters of recommendation from faculty in their area of study" (same recently tenured faculty member cited above). This means that faculty may have a greater incentive to develop bonds with faculty in the same discipline at other schools than to work with faculty in different disciplines at Sloan. This may limit the potential for interdisciplinary courses and a truly integrated core curriculum.

Changing the incentive structure need not require solely structural changes. Signals from constituents can also be effective. A simple gesture of thanks by the students during
Faculty Appreciation Day can and hopefully will create the awareness that teaching matters to the students. Even though teaching does not count heavily in the tenure decision, a personal appeal to the professors' sense of responsibility can be a powerful incentive.

What can the leaders in the school do to increase the motivation to bring to fruition the dreams of the mission statement? How can the leaders create organizational structures (permanent and temporary ones) that will free up the collective creativity, energy and commitment of the Sloan community? In what ways can the school strengthen the bonds between the institution and the constituent groups? These are the difficult organizational questions that face the school, the Master's program and its leaders.
V. Ideas for Change

In the course of researching this thesis topic, we have spoken to a number of people involved with the MIT School of Management and Sloan Master's Program. Some identified areas of concern regarding the school and the program. Some took the opportunity to provide constructive suggestions about how the school and the program could be improved. The following chapter is collection of suggestions for improving the life at Sloan that we have collected or developed along the way.

These ideas are organized loosely around the following topics: integration, teaching, and curriculum; communications and feedback; information, automation, and technology; alumni/ae relations, admissions, placement, and physical plant; and improving the camaraderie among students.
Integration, Teaching and Curriculum

Begin integrating courses one or two sessions at a time. There are many opportunities in the core for looking at a problem or exercise from two perspectives. For example, the Markstrat game can also be viewed from a group dynamics perspective, so have one session in Marketing where an OB professor runs class to discuss the dynamics of group decision making.

Discuss the same case on the same day from two perspectives. For example, the "John Deere Component Works" case can serve in an operations management course and in a managerial accounting course.

Effect an integration of the faculty. Instead of the current fourth floor, fifth floor, and E53 orientation, mix faculty members from all disciplines on all floors. Having people "live" together may encourage them to begin to work together.

Encourage the use of journals and role-playing in courses like OB and HRM. Learning about management is also learning about one's self and how one performs in a managerial setting. Allow for opportunities to practice in managerial settings, and for the recording of one's feelings and revelations about them.

Devote one session to an ethical discussion in as many as possible of the core courses (possible courses include Strategy, OB, HRM, Operations, and Marketing). While a program cannot
teach ethics, it can create situations that force people to discuss a difficult problem, and provide frameworks for thinking about ethical dilemmas. This discussion can give students an opportunity to explore themselves and practice wrestling with these problems in a safe setting.

To exercise the art of giving and receiving feedback, in courses that require an end of semester paper, have students bring in two extra copies of their assignment for distribution to their classmates for feedback. There are two benefits here—one being the practice in giving and receiving feedback, and the other being an increase in the number of areas, topics or ideas to which one is exposed at Sloan.

Make teaching training available for new professors. Harvard has a program like this, and according to a former Harvard faculty member, it is very well received. Concepts from 15.280 (Communications for Managers) can be emphasized for teachers in a classroom setting. An apprenticeship program where new faculty sit in on three or four of the better teachers' classes could also be a part of it. One faculty member suggested enrolling new faculty (especially ones from disciplines) in the Senior Executives Program. In that program, faculty can both observe teaching style and understand the kinds of managerial issues that senior managers find important, as well as gain exposure to other management fields besides their own. It also could be a way of building contacts for future guest lecturers.
Increase the use of guest lecturers and company visits in connection with specific course work.
Communications and Feedback

Establish a student government of representatives by section. Six representatives each from a pair of sections may suffice. This council will be a formal mechanism through which feedback about program or curriculum issues can be channeled to the faculty.

Establish a parallel council of all core faculty members teaching in a given semester to interface with the student government group and to meet amongst themselves.

Establish a suggestion box outside the Dean’s office and/or the Master’s Program Office. Suggestions can be gathered, examined and if necessary acted upon by the student government. To be viewed as effective, assure that the loop gets closed on all suggestions, by returning a copy of each suggestion to the initiator noting whatever further action was taken. Since we admire the Japanese for this, why not institute it ourselves?

Survey all students at the end of each year about the program as a whole, much like what Alan White currently does with the Sloan Fellows.

Solicit feedback from Larry Wein regarding his experiment this semester with a student liaison. If a positive experience, encourage spreading the program to other courses.
Information, Automation, and Technology

Encourage the continuation of Sloan Currents or a student newspaper like Sloan Currents. One way to do this is to provide an RA position (5 hours for each of two semesters?) for the editor's job.

Continue and expand the "Focus" newsletter. Scan the bulletin boards and other departments' announcements to add a section of "recommended activities around the Institute".

Develop an on-line database program for collecting and analyzing the results of the blue form course evaluations. Ultimately move to electronic entry of course evaluations.

Develop a common database in all departments of the Master's Program Office so that common data can be easily accessed by all departments.

Enable greater use of the Mitsubishi Screen in the lobby by making the keyboard and a VCR accessible. The keyboard can be used for inquiry of the database, and the VCR for television viewing (special program viewing) and for reviewing tapes of Distinguished Speakers.

Increase the number of computers available for student use. Make color graphics output devices available in the computer center.
Promote an increased awareness of Project Athena.

Wire some classrooms so that computers can be used more effectively in the classroom.

Have more telephones available to students. Consider allotting some phones where local calls can be made for free.
Alumni/ae Relations, Admissions, Placement, and Physical Plant

Maintain an Alumni/ae database independent of that maintained by MIT.

Increase efforts and funding for alumni fundraising and networking.

Make interviews available for admissions candidates. Utilize alumni to perform the bulk of these. This adds a personal touch to the admissions process, may strengthen alumni ties, and may assist in the selection process.

Analyze the Graduate Admissions Reply Forms annually.

Designate some office space for interview rooms or student time-share offices (when not in interview season).

Establish a media room, where students can tape mock interviews of themselves.

Physical Plant – Short Term: Change the art in the third floor corridors. Improve ventilation in the computer rooms. Make some classrooms more sophisticated in terms of presentation technologies. Install showers in E52. Properly furnish "MOT Lounge". Keep the Refresher Course open until 5 p.m. Add coffee machines next to cold beverage machines.
Physical Plant - Long Term: Establish a campus ("Sloan Court"?), by taking over and razing the several buildings between E-52, Dewey Library, and One Memorial Drive, and erecting a new L-shaped structure. This building could be located along Main Street on one axis and next to One Memorial Drive on the other. The building could be five stories high on the East side and twenty stories high on the North side. Combined with E-52, Dewey and Eastgate, this new building could define a courtyard. Within the new building, build a 500-seat amphitheater. To provide more parking facilities, raze the parking structure behind E-40 and erect one with larger capacity.
Improving Camaraderie

Introduce incoming students to each other (on paper at least) before the first year. Send everyone a resume book and/or a location-sorted directory so that people can meet before matriculating.

Replace diagnostic exams with a week of "pre-school". This week could be taught by second year teaching assistants to help people review the crucial calculus, economics, and perhaps accounting and computer literacy knowledge that will be expected of them when classes begin.

Introduce ethics to the new student. Have each group during the Socialization Workshop (or larger groups) discuss a code of ethics for their work at Sloan. Reconvene these groups during IAP to discuss what their experiences were during the semester, and review the code based on that discussion. This idea can also get people to know one another better, and may be an introduction to international differences.

Have Master's Program Office administration introduce themselves (early... in the socialization workshop?) and provide a synopsis of the kinds of things that they have done with students over the past years. This can help students to understand the types of activities that can be made possible.
Increase the number and frequency of appearances by Dean Thurow at informal gatherings of students.

Have each one of the twelve (or six pairs of) first year sections spend a week together during IAP on a field trip that visits factories in the Eastern New England area. Plans for this trip should be made during the whole first semester. Reinforcing the importance of manufacturing and improving the bonding between classmates could be nice side effects of this program.

Encourage the use of students to accomplish research, development and analysis staff work for faculty policy committees and administrative projects. Examples include writing programs in a database language for analyzing data collected from the course evaluation forms, researching the content of core curricula at other business school programs, or surveying alumni about the types of skills that they are using on the job.

Actively encourage community service as part of the Sloan experience. Have a bloodmobile come to Sloan, encourage nursing home visits, etc.

Include MOT’s and Sloan Fellows in the Sloan picture book.

In electives, where there are students from many different degree programs, it is often the case that many of the students do not know one another. One idea to address this problem would
be to have each student distribute a one paragraph biography to the other students.
VI. Conclusions

We discussed several forces for change that present challenges to the MIT School of Management and the Sloan Master’s Program. First, we briefly reviewed the history of management education and presented current criticisms that link the training that graduate business students receive with the current American industrial competitiveness problems. A second force for change was the internal mission review, change, and implementation process that has taken place under the new Dean, Lester Thurow. Thirdly, we presented an analysis of feedback from two sources, potential Master’s students and business school rankings.

Our analysis of three years of Graduate Admissions Reply Forms indicated that our principal competitors for admitted applicants are not only Harvard and Stanford, which the School has traditionally believed to be true, but also Wharton and Tuck. We demonstrated that averaged over the last three years, all four of these schools have won more times versus Sloan than they have lost when candidates are making decisions among schools to which they were accepted.

The analysis of business school rankings showed a wide disparity in rankings of Sloan, depending on the source and the criteria. Sloan tended to perform well in the ranking done by faculty and deans, which we ascribed to Sloan’s excellent faculty and research strengths. Sloan did less well in the
Business Week ranking done by recruiters and by graduates. While the methodology of the Business Week poll has been questioned, we noted with interest that programs with large graduating classes tended to get higher rankings from recruiters and that programs with small class sizes tended to have higher ratings from graduates. Sloan's small class size may therefore help to explain its low ranking by recruiters, but does not explain the low ranking by graduates.

After examining these forces for change, we reviewed student feedback about the core curriculum. In particular, we reviewed the results of the Student Working Group on Core Reassessment process that we had designed and implemented in January 1989. This Group arrived at many detailed recommendations for the core courses. Several themes that emerged were that students want more functional material at the expense of disciplinary material in the core; students want more demonstration of managerial applications of concepts; and students want an integrated, coordinated program that makes clear the connections between the various areas of knowledge and application.

Given these various external and internal challenges to the Sloan Master's Program that we had identified, we examined the organizational context of the program to try to understand how this context would mediate the various forces for change. We particularly focussed on the complexity of the organizational structure, and on the culture and incentive systems as two
aspects of the organizational context that would play a significant role in the implementation of change processes.

Finally, we presented a collection of innovative ideas for the School of Management and the Master's Program that we have come across in the course of researching this thesis. These ideas are in the areas of integration, teaching, and curriculum; communications and feedback; information, automation, and technology; alumni/ae relations, admissions, placement, and physical plant; and improving camaraderie among students. The set of ideas we presented were not a comprehensive set of recommendations for the school. Rather, we wanted to play the role of "scribe" and record some of the most innovative ideas we had come across. We hope that these ideas for change will be helpful to the current and future faculty, staff and students of the school in continually improving the program.

It is in this spirit of continuous innovation and improvement that we offer this document to the decision makers of the School of Management and to the Sloan community in general. As we said in the introduction to this thesis, we believe the School of Management is a gem in the rough. The School and the Master's Program have many fine qualities and we hope the ideas presented here may help in figuring out in what ways to polish the edges. In this way, we hope that our work will help in recognizing, clarifying, and addressing the challenges that face the School and the Master's Program.
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