



A REPORT TO THE TECHNION SENATE BY THE LAST ELECTED DEAN OF THE GRADUATE SCHOOL

“Better is the end of a thing than the beginning thereof...”
Ecclesiastes, VII, 8

INTRODUCTION

During my three “13-month” years of service as a Senate elected Dean of the Graduate School, I acted according to my belief that the essence of this job is to support our graduate students and their advisors: to help them in their studies and research, to promote a good relationship between them, to encourage them and keep up their enthusiasm, and to do nothing that would make them feel that a cold, unyielding and bureaucratic Graduate School impedes them in any way. This I did within the framework of our rules and regulations, as must be done: without being dogmatic, respecting the spirit and purpose of the rules, acting within their framework with a positive attitude, and with the understanding that exceptions and special cases always arise and have to be dealt with. In the cases when I could not help, I felt it is my duty to make the reason for the rules, and why we cannot break them, well understood.

I firmly believe in "full transparency" in administrative and managerial decisions, hence I always made sure that all considerations were made available and explained to those affected by my decisions. I paid careful attention to suggestions, criticisms and complaints (even in cases when they were expressed impolitely, or even by yelling and shouting, because I felt that these were results of feelings of frustration and/or honest concern) and I tried to either clarify the reasons for my decisions and actions and why I cannot act otherwise, or to make changes that I felt were necessary to improve our ways. There were some (very reasonable) suggestions I could not implement (even in spite of my wishes), due to the many constrains under which we operate and in these cases, I apologized to the proponents and tried to explain why we can not do better.

ACTIVITY REPORT

In my "vision" statement of three and a half years ago, I promised never to "change things just for the sake of departing from past procedures". Indeed, I did not seek to change processes that were, in my opinion, running properly. I also said there, that the Graduate School is a large but smoothly run operation by a wonderful group of competent and dedicated people. Some things, however, were done, as I felt they would further enhance the very important role the Graduate School plays at the Technion and improve the services it provides to our faculty and our graduate students (and in doing so, the great team of the Graduate School gave me full and enthusiastic support).

Reporting and Transparency

I initiated the publication of a comprehensive yearly statistical report titled "A VIEW ON THE GRADUATE SCHOOL" summarizing the relevant admissions, follow-up, scholarship and graduation information for the current year and the previous 4-year period. Browsing this report will enable its intended readers (the management, the deans and the members of the Senate) to detect trends and to check the influence of various financial and managerial measures that are taken, on the student population and efficiency of studies etc.

Early on during my term as Dean, I proposed to decide on the allocation of scholarships to the various Technion departments not based on "history" but rather on a well-defined formula that measures the "productivity" of each department, in terms of PhD and MSc graduates and the temporal "efficiency" of their graduate programs. I believe that this allocation formula should be made public, but this decision is yet to be made by the Technion Management.

Visibility and Interdisciplinarity

I initiated a showcase lecture series entitled "THERE IS SOMETHING NEW UNDER THE SUN". The series is run by the Dean with the purpose of providing a forum for outstanding graduate students to present their work to a wide Technion audience. These lectures, I believe, contribute not only to the dissemination of information about the world-class research carried out by brilliant students in various Technion departments, but also to the promotion of interdisciplinarity by exposing our graduate students and their advisors to the work that is done at other departments. I have tried to select interesting topics for these lectures, as well as truly talented lecturers from among the many great students I met. We informed the Technion spokesman about these lectures, and, indeed, almost all the research topics presented later made headlines in Technion and other publications.

I further encouraged interdisciplinarity by using the Dean's discretionary scholarship funds to help students who embarked on interdisciplinarity projects and thereby "fell between" the departments' concerns.

Student Population and Recruiting Issues

With about 600 potential advisors (the faculty) at the Technion and about 2400 graduate students in our PhD and MSc research programs, the Technion operates, in my opinion, very near its advising "capacity" (about 4 advisees per advisor). It is interesting to note that, while the number of management-granted graduate fellowship "portions" declined over the period 2000-2005, the total number that were distributed (combining management-grants with faculty donations) remained steady

over the years. The research-oriented graduate student population (PhD candidates and MSc students) also remained nearly constant at around 2400. Therefore, in the case of research students, we can influence only the ratio between the number of people in the MSc and PhD programs. My view is that the only way to influence graduate students to continue towards a PhD, is to make this program rewarding to them and their advisors and their departments. Indeed, several financial measures to encourage outstanding students to go for the direct PhD tracks are already showing signs of success. The number of PhD candidates increased from about 600 to about 800 in three years. We must aim to have more PhD students, and in fact the research MSc program should become a gateway towards direct PhD tracks. The number of people graduating with a research based MSc degree should be minimized (to cases where they can not proceed or really do not want to). Most MSc students should pass after at most 2 years, to direct PhD tracks (and get the “formal” MSc degree during their studies). Ideally, of the 2400 research oriented graduate students we should have about 1/3 in their MSc years and the rest of about 1600 in the PhD program.

We, of course, aim to enroll outstanding graduate students from all the Israeli universities, and even from universities abroad. While the availability of generous scholarships is the most important means of attraction, we also initiated an advertising campaign focused on student publications and newspapers at all Israeli universities, since advertising in these places is inexpensive and reaches the right audiences. In order to attract more foreign research students we must overcome language, political and financial barriers.

The total enrolment at the Graduate School increases over the years and can continue to increase only due to the important non-thesis (non-research) programs the Technion can offer. To recruit students to these programs I see a very important and growing role for our Continuing Education and External Studies unit.

Scholarships and International Exchanges

The availability of generous scholarships is of utmost importance. As we have about 2400 research students we should aim to grant scholarships to all of them. If we would allocate an average of 3 portions to a research student (36 per year) we would need 87,000 portions, however, a significant portion of our students are external, hence do not require scholarships, therefore we managed so far, by distributing to our students about 60,000 portions. Lately the Technion has started a serious campaign to raise donations for scholarships (and since we need about NIS60 Million = \$13 Million/year, it would be ideal to have a \$250 Million “endowed-fund” for the Graduate School!).

Our students also need support to attend conferences and to spend time at research laboratories abroad. While in the past about \$70K per year were available for “International Exchange” purposes, they, unfortunately, disappeared when I started my term as Dean. I have worked as hard as I could, helping the Technion Societies’ campaign for graduate scholarships and for the establishment of a permanent “International Exchange Fund” for our graduate students. Lately I received news that a generous donor I talked to on the importance of an International Exchange program has indeed earmarked a considerable amount toward the establishment of a \$1 Million endowment that will yield about \$50K yearly for this purpose. Following this, the Technion president announced that a yearly \$20K will be made available for this purpose starting now. I shall continue to work with all my friends to campaign for support for our Graduate Students, since I sincerely believe this is of utmost importance for our survival as a serious research university.

Several faculty members approached me with proposals to set up programs of collaboration with prestigious universities and Research Labs abroad. I welcomed such proposals and raised the issue with the Management, which issued a formal declaration that such programs will be “favorably considered” once the Technion and the partner institution “champions” will draw precise plans for such collaborations. I have asked about 5 groups to draw such plans, but no definite responses were yet submitted. I hope these programs will indeed materialize in the near future.

I also worked on trying to establish formal International Exchange Agreements with several outstanding universities abroad. Unfortunately, I can not say that I encountered an attitude of enthusiastic support from the part of the officials in charge of this subject at the Technion. I hope this will change in the future.

Daily Life and Ethics

A total of about 4000 graduate students are enrolled at the Technion. Their studies and research and life run smoothly most of the time, for most of them. However, problems do arise from time to time. They concern advisor-student relationships, course-work requirements and ethical issues involving collaborations and the combination of outside work and activities with research, teaching and studies at the Technion. When such problems arise, the Dean has a delicate and important role to play. In the (fortunately very few) cases where severe crises arose, I have been very lucky to have the full and generous collaboration of the Technion advisors and, in many cases the understanding and cooperation of the students involved, towards the resolution of the problems. In my position as Dean, I had to be an impartial mediator, sincerely caring about the students’ welfare and did my best to help find solutions not involving lawyers and litigation. There is, to my knowledge, only one case that I leave unresolved, in addition to one that I inherited and am passing it on. (These unfortunate cases, in which we, the Technion, are, in my opinion, completely correct, will, maybe, go on forever!)

Some of the ethical issues that repeatedly arose, concerned plagiarism. In our time and age, when children are used to thinking that home-work and projects are “cut and paste” activities on “materials” freely available on the InterNet, some of our students were surprised to be told that we expect their presentations and projects to be original and to properly acknowledge all the sources of “inspiration” and various references. Because of this, I prepared a short “ETHICS IN RESEARCH” booklet to be distributed to all graduate students at the beginning of their studies.

The Graduate School Facilities and its "Corporate" Image

Almost all previous deans asked for the allocation of 4 additional rooms to the Graduate School offices at the entrance level of the Churchill building (in exchange for space we had elsewhere) and two years ago we finally succeeded in obtaining them from management. This greatly improved the quality of life and the quality of service provided to the students, as our filing cabinets were removed from the corridors to a proper filing room. The Graduate School also started to use a new logo and a “modern corporate image” in all its publications. Our website is up-to-date and functional in its design and currently being improved and modernized. It contains important information on opportunities for International Scientific exchanges, a bulletin board for advertising topics for research proposed by faculty, and will soon have an announcements bulletin-board where the prizes and achievements of our students will be posted. Furthermore, for each advisor, full lists of past students together with information about what their present position is will be posted on our Web-site.

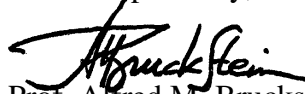
CONCLUDING REMARKS

All in all, I very much enjoyed my 4 years as Deputy Dean and my subsequent 39 month as Dean of the Graduate School. I am leaving the Graduate School in good shape and in good hands and I am really very happy to return to my research and to my students and family. The wonderful Technion graduate students, the Nobel prize won by Hershko and Chiechanover (based on his PhD thesis), the possibility I had to add a “Summa Cum Laude” to Chiechanover’s Technion PhD degree, the showcase lecturers, the great researchers here, the students’ successes and papers, the Graduation Ceremonies (and the writers who were guests of honor at those: Nathan Yonathan, Edna Mazia and Meir Shalev) and the wonderful and generous people from the Technion societies, the Honorary Doctorate Recipients and the Harvey Prize awardees I met, were for me a source of great joy. I even enjoyed writing and delivering speeches on various topics at various occasions.

The sad parts of my time as Dean were the (fortunately few) personal and ethical problems that did arise from time to time. And, since nothing can be perfect, I must admit that there was an unpleasant part in my job, and it had to do with my personal perception and belief of what the Graduate School Dean’s position should be at the Technion. As some of you know, I have announced for over two years ago, that I shall not seek another term of office simply because the Technion Senate changed the very essence of the position of Dean of the Graduate School. Three years ago I ran for this office and was elected as the Dean in full Senate elections (where all 200 senate members were asked to vote by mail, not only those present at some meeting). However, shortly afterwards our Senate was approved a series of measures that changed the Managerial structure of the University and dissolved the all-professors senate. The position of Dean of Graduate School (along with the Dean of Undergraduate Studies) was effectively downgraded in the new management structure, to a deputy of the senior Vice-President. I was utterly unhappy with these decisions, made at meetings of our Senate that, despite the graveness of the matters discussed, were not very well attended. At the time (as all my friends heard) I wanted to resign but I stayed on because by doing so, I delayed by two more years the application of the New Laws to the Graduate School. During those two years I did my job as best I could, as an independent, Senate-elected Technion dean. The Technion President and all our management heard, during this period, my sincere and unbiased opinions, and probably did not enjoy part of my statements, votes and decisions. My total freedom of action derived entirely from my position as Senate-elected Graduate School Dean, and from my firm decision not to seek re-appointment as a (weakened) Dean.

In summary, I wish to thank you, members of the (yet full) Technion Senate, for having elected me to serve the Technion in this most important academic-management position, and sincerely hope I did not disappoint you in any way.

Yours respectfully,



Prof. Alfred M. Bruckstein

Technion Ollendorff Chair in Science

Last Senate Elected Dean of the Graduate School