Minutes of a Special Meeting of Faculty Council of Science held on June 29, 1977 at 2:00 p.m. in room 306 Buller Building.

Members Present: R. D. Connor, Chairman; Mrs. E. B. Ross, Professors
N. E. R. Campbell, C. C. Lindsey, F. J. Ward, P. R. King,
T. G. Berry, F. M. Arscott, H. Halvorson, J. Rauch,
E. Huebner, W. O. Pruitt Jr., R. B. Ferguson, W. C. Brisbin,
R. E. Longton, C. E. Palmer, A. Olchowecki, T. Dandy, J.
Gee, C. D. Anderson, D. H. Hall, M. Clutton-Brock, R.
Quackenbush, H. Lakser, J. A. Gerhard, C. K. Gupta,
F. Konopasek, F. M. Kelly, B. D. Macpherson, P. K. Isaac,
D. A. Young, B. Henry, P. D. Loly, K. W. Stewart, Mrs.
L. Burkowski, Professors P. A. Collens, S. K. Sinha,
S. K. Sen, R. Dowling, J. H. Loudfoot, P. L. Ellis,
N. R. Hunter, H. Finlayson, H. D. Gesser, H. Wayborn,
H. Duckworth, J. C. Jamieson, R. Wong, P. McClure, S. M.
Woods, R. G. Woods, C. R. Platt, N. Losey, H. Lees, Mr.
R. Russell, V. Simosko (56).

Regrets:

Professors W. van Oers, H. E. Kane, G. I. Paul, M. Samoiloff, H. E. Welch, J. Reid, G. E. Dunn, G. Losey.

The Chairman began by explaining that this was a special meeting to go over material relating to our undergraduate enrolment and financial position which had been circulated to the membership previously.

The Chairman then read his prepared statement. This is reproduced in full as Appendix 1 to these Minutes. The Chairman then invited comment and questions from the meeting.

Questioned as to whether or not any attempt had been made to determine why 'dropouts' do in fact drop out, the Chairman stated that every student leaving the Faculty is interviewed by the student advisors in his office. The reasons given varied from having got a job to going on a year's tour of Europe and it was doubtful that they represented the student's real reasons.

Dr. Jamieson said that a comparison between his department and the Chemistry Department at the University of Winnipeg showed that the withdrawal and failure rate was higher at the University of Winnipeg than here; 35% vs. 22%. Because of this he wondered if there were factors outside of the

Faculty that were responsible for our dropouts, perhaps the fault was with the high schools. He suggested that whenever and wherever possible, members of our faculty should make it known that our faculty along with the Faculty of Arts are in direct competition with the University of Winnipeg whereas most, if not all of the professional faculties do not have any such competition. He also pointed out that the professional faculties have articulation boards which periodically evaluate their standards so that they must maintain their high levels. In cases where they don't measure up, additional funds are usually provided for them in order that they upgrade their offerings.

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Professor N. Losey thought that combined individual efforts were not going to be sufficient to solve this problem. Not only do poor students drop out but many good ones do so also. She felt that if the academic staff could talk to these students before they made up their minds they might help to dissuade some of them. For a student to drop out the instructor should have to sign the drop out form and this would show he had talked to the student. She continued, to say that it was the uneven levels of attainment and the varying abilities of the students coming out of high school that caused her department so much trouble and made it so difficult for the department to accommodate all of them in one course. She said that maybe the answer was more make up programs so that the student could be placed at a level at which he could succeed, or perhaps even a 4-year general program.

Professor Kelly felt that the high schools were not doing as good a job with the students as they used to do and that the universities were not getting all of the top students as they once used to. The importance that the student and society put on grades was too great and was one of the factors contributing to the high dropout rate. The phenomenon of "grade inflation" was not unknown. Only about half of the bright students come on to university.

Dr. Duckworth agreed that the high school students' preparation varied greatly from school to school and this, he said, amplified the need for extra help and additional time to be spent with these students. We just don't take care of students. Dr. Duckworth noted that there are approximately 900 first year students and roughly 180 academic staff in the faculty. He suggested that perhaps each staff member be assigned 5 students and meet with them on several occasions during their first year in the faculty. The

Chairman said he had met teachers now in the school system who could remember the lack of interest in them when they were at university.

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Dr. G. Woods stated that the students coming out of Grade XII with grades of just over pass do not survive in first year mathematics. The establishment of the remedial mathematics course for such first year students has produced problems which have not yet been faced but which will have to be shortly. At the moment this course is voluntary, consequently students who really need the course are not necessarily the ones taking it. Dr. Woods felt the course should be made compulsory for those who need it. This would involve some sort of grading/testing program which would ultimately tend to increase the workload of the course and this would likely lead to the request that the course be assigned credit, i.e. ugsch's. If the course was given credit then this would lead to a lowering of standards of the mathematics program. The fact that the course does not have credit now means that the department and faculty do not get credit in terms of ugsch's and therefore no additional funding. If the remedial course was compulsory and did receive credit this would undoubtedly affect the other science departments which depend upon first year mathematics and any such change might not be acceptable to them.

Professor Young agreed that students in first year are very confused and lost and are in need of some sort of tutorial help. He read a short description of the tutorial system at the University of Oxford in England and concluded by saying that such a system, modified to our requirements, was needed here.

Dr. Henry was of the opinion that mathematics was central to Science and that the remedial course should be given without credit. He described the resource centre that Chemistry provided for their students. It is a course help area staffed by academics and open 40 hours a week. It gave the students individual help in their Chemistry courses and provided them with the personal contact with the staff members that is so necessary. Professor Henry then went on to say that in order for staff members to give extra time for teaching it meant that they would have that much less time for their research and it was the research effort that primarily contributed to the staff's academic career, promotion and salary. If staff were to be asked to carry extra teaching duties there would have to be greater recognition

of this than there is now,

In commenting on this statement the Chairman said that he felt the new faculty promotion guidelines did in fact give teaching its due recognition. Over the years many had been promoted who had not published in a decade but who gave excellent service in teaching.

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Dr. Gesser stated that he wished to prepare a notice of motion on the topic of entrance examinations by 1980-81, the context of which is attached to these minutes. The Chairman asked Dr. Gesser if he would agree to referring the motion to the Executive Committee of Faculty Council. Dr. Gesser agreed.

Professor Loudfoot observed that we seem to be going full circle by returning to the Faculty Adviser system of 20 years ago. Dr. Jamieson said Dr. Gesser's proposal was attractive but complex and the Chairman outlined the reasons for the failure of the Faculty Adviser system some years ago.

Professor Stewart pointed out to the Council that professional faculties have a choice of which student they accept into their programs. Naturally they will choose those with academically high grades. The dropout rate of such students will be much lower than that of the Faculty of Science which does not have such a choice.

Several staff members voiced their agreement with Dr. Gesser's proposal that the faculty institute entrance exams. It was felt that it was not the University's job to fix up the high school shortcomings. Entrance exams would highlight these weaknesses and surely the schools would remedy them. The Chairman asked if the faculty would be willing to set and mark the entrance exams as part of their normal duty. This point was not pursued.

In reply to the question, would our financial picture be any better if our dropout rate was 10% instead of 20%, the Chairman said that there would not likely be any immediate obvious difference but that during the following couple of years there probably would. This would be because of the financial relationship with student credit hours. Naturally if there is only a limited amount of money to distribute the largest amount will go to those areas that are operating with the lowest percentage of their staff entitlement. The fact that our dropout rate is high cannot help but filter down to the prospective students and influence their choice of programs.

Dr. Arscott said that teachers, on hearing that a remedial course had been found necessary, were quite concerned. He referred to the work of the Coish Committee and its recommendation that a Task Force be set up for first year Mathematics remedial courses. Over the past three years he had noticed a marked improvement in the level of attainment in Mathematics of the high school students. Dr. Arscott said that he was very much in favour of the tutorial system and felt that the faculty should promote it, and offered to propose a motion. The Chairman told Dr. Arscott that he planned to circulate the Minutes of this meeting to the Executive Committee for their action in this matter.

Dr. Gaunt said that he felt that we did not have to teach to the same level of knowledge as we have had in the past so long as we maintain our standard. There was a difference between levels of knowledge and standards. Dr. Anderson suggested that the faculty give lectures to high school classes, and even to parents on what University is about and what is required of the student by the faculty.

The Chairman thanked the members for their suggestions and recommendations. The meeting adjourned at 4:18 p.m.

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NOTICE_OF MOTION TO SCIENCE FACULTY

That entrance examinations to the Faculty be instituted commencing the year 1980-81.

In view of (1) the difficulties being experienced in first year Science -- the inhomogeneity of the background and relatively low level of the students and (2) the lack of specific requirements and standards, the above motion is proposed to minimize the problem.

It is assumed that the various departments in Science would co-operate in setting up the prerequisite program for entrance. Examinations written in spring (April, May) would be I. B. M. short answer (except perhaps for English) and set to evaluate the extent to which the students suit the prerequisite standards. Students who do not obtain the required grades can, after a suitable study program during the summer, write again in August.

It would be desirable to have a pilot program for the spring of 1978 in which the examination would be available to the schools wishing to participate. Hence by 1980, it would be possible to have twice arranged the mechanics of testing and to have correlated test performance with two first year science classes and one second year science class.

> Signed: H. D. Gesser Roy Dowling (Seconder)

June 29, 1977

APPENDIX I

DEAN CONNOR'S STATEMENT TO THE SPECIAL MEETING OF FACULTY COUNCIL HELD IN ROOM 306 BULLER BUILDING ON THE ABOVE DATE.

Preamble

The Dean opened the meeting by saying that it had been our custom for some while to discuss together the Faculty's financial position but as he wished to have a more thorough analysis of our position rather than have it one item on an extensive agenda a separate meeting has been called for today in order that we might give these matters their complete and undivided attention. The Dean then read a prepared statement; the text of which is as follows:

"In the Faculty of Science the graduate enrolment has been effectively constant for several years and is likely to continue. It can effectively be ignored in determining trends and shifts, loads and entitlements in the Faculty. We can therefore concentrate on the undergraduate enrolment.

"From the graph supplied you can see the drop in September UGSCHs generated at the close of enrolment for the years 1974-75, 1975-76, and 1976-77. The actual figures are 99,888, 95,265, and 93,147 - a 6% drop in two years. But the significant figures are those of December 1, for these are the ones on which the University generates its grant from the U.G.C. Here you will see that our December UGSCHs have dropped steadily from 97,780 in 1974-75 by 4% to 93,822 in 1975-76 and by a further 4% to 89,341 in 1976-77. This loss in UGSCHs represents a loss in entitlement of 15.5 positions. We have not been called on to deliver up 15 positions, though over the last few years we have had to surrender quite a few, one in Zoology, one in Statistics, one in Physics, one in the Dean's Office to say nothing

of the support staff positions lost. Having got the December enrolments assimilated what happens then? We are now losing by drop out a further 9% of our enrolment of September, when two years ago we lost only 5%. I pause to invite you to consider if this is a source of satisfaction. Why do students drop out? Were they poorly prepared, badly advised as to their capabilities, obviously in the wrong program, lazy, not devoted to study or did we fail them in some way? I would agree that not all students are adequately prepared at school but I cannot lay the blame entirely on the schools. Is it not just possible that we pitched our first year course too high having regard to the level of attainment at school? May we not have failed to give all the help and attention we might have given to those floundering? Were we in our offices when we said we would be? Did we go out of our way to explain the point of a lecture all over again to the student who had missed the point?

"Then of those who stayed with us to the bitter end we proceed to fail 8-9% of them. We have the highest failure rate in aggregate of any Faculty or School in this University. A record we have maintained since 1972 (at least) save for 1973-74 when we allowed the School of Music to wrest from us the torch. We have yet another distinction. We have the smallest percentage of first year students proceeding on to second year with the sole exception (in 22 Faculties and Schools) of the Faculty of Education. (See IS Book 1976 p. 37). These are our statistics.

"The thing that concerns me is that two years ago we had a 5% drop and a 9% failure rate. We now have a 9% drop out and an 8% failure rate. If our students drop out for academic reasons one would have expected a smaller failure rate with the larger attrition rate. I am in no way suggesting a lessening or a reduction in our standards but perhaps we could be of more

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help to the student and display towards him more concern. Our task should be to bring the student up to our standards especially at the first year level. Our first year students tend to be "lost". In previous years there was a week of induction into the Faculty. Now there is no concerted plan for induction as the professional faculties have. We no longer have a Freshie Week of carnival activities. We no longer have a Freshie Parade. We no longer have a Freshie Banquet. The new student in Science is largely left to find his own way. The conclusion is inescapable that the Budget Committee and the Senior Administration of this University decided that in the light of what we were doing we could no longer enjoy the level of support we have had and that we were to be reduced. I will return to this point.

"The U.G.C. gave this University \$6.81M more money this year than last, yet all the units of the University, Faculties and Schools, 0 & M, President's Office - the works - only received \$704,000 in new money. Some \$6M had to be kept to one side for items of which the highest amount was for salary increases - say some \$5M. Do you really feel \$700,000 is a reasonable fraction of our new money to pour into libraries, research board, Faculties etc. while we divide the bulk of our inheritance among ourselves?

"Look at our total expenditures. In two years they have risen largely by salary increments as you can see from the next page, from \$5.8M to \$7.2M, an increase of 29.3%, while our December UGSCHs went down 8.65%.

"Look at the next page entitled "Faculty Budget Position 1 April 1977". You will see to March 31st of this year from 1974/75 our salary pool rose from \$4.5M, an increase of \$1.3M (+29%) while our Special Academic funds dropped by \$4,000 and our supply budget to cope with annual inflation of over 20%/year received in the two year period the enormous increase of

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\$11,000 (+2.4%). Twenty-nine percent for salaries, less than 1/10th of that for our supplies and a net reduction in special academic funds. For this current year despite difficulties our special academic has increased by \$37,000 for 1977/78.

"Look at the last page. It is a statement of our present position for your information.

"As for the future, the following can be said.

"We are running this year on the extra \$19,242 plus an extra \$6,000 we obtained by presenting a special case. In addition we are running on salary money not used owing to retirement or resignation where we have not replaced the individual. This cushion has been invaluable. We have no additional salary windfalls for 1978/79. If the budget committee seeks to reduce us farther next year there are relatively few options open. We can cut a little here and a little there but a major reduction we could hardly accommodate and I wish you to know that I would view any further attempt at retrenchment in the Faculty very seriously and I would oppose it strongly. The root of the problem as I see it, is that the University appears to be perfectly willing to allow the academic services, libraries, laboratories, etc. to bleed to death for lack of support while all of our resources go into the maintenance of salaries. I realize the importance of maintaining competitive salaries, but it will be a little ludicrous having us standing around with students who have paid their fees in labs which cannot operate for lack of equipment, chemicals, supplies and adequate demonstrators."

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THE UNIVERSITY OF MANITOBA

Inter-Departmental Correspondence

DATE June 22, 1977

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FROM <u>R. D. Connor, Dean of Science</u>

SUBJECT:

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Dear Colleague:

A Special Meeting of the Faculty Council is called for Wednesday, June 29, 1977 at 2:00 p.m. in Room 207 Buller in order to discuss the position of the Faculty with respect to enrolment and future trends and the financial position of the Faculty as exemplified in the current budget. In order that all may appreciate to the full the true nature of our situation I would urge that those who can should attend. The attached material will be explained in full at the meeting. The initial presentation will last less than half an hour. The rest of the time will be spent answering questions and giving information, so the meeting is not expected to be long but I hope that you will find it informative.

Yours sincerely,

R. D. Connor Dean of Science

rdc/nl

Encs.

Dr. R. D. Connor Dean of Science Machray Hall