

SIMON FRASER UNIVERSITY

OFFICE OF THE VICE-PRESIDENT, ACADEMIC

MEMORANDUM

To: Senate

From: D. Gagan, Chair 
Senate Committee on Academic Planning

Subject: External Review / Academic Plan – School of Kinesiology
(SCAP Reference: SCAP 99 - 15)

Date: April 19, 1999

For Information

Attached are:

- Three-Year Plan for the School of Kinesiology and the summary of the External Review

MEMORANDUM
SIMON FRASER UNIVERSITY
FACULTY OF APPLIED SCIENCES

DATE: March 26, 1999
TO: Alison Watt, Secretary, SCAP
FROM: Ron Marteniuk, Dean, Faculty of Applied Sciences
RE: School of Kinesiology External Review – SCAP Approval

Enclosed please find the relevant documents in regard to the School of Kinesiology external review. I now wish to put forward the motion which follows:

Amended motion approved by SCAP April 14, 1999:

That SCAP approve the Academic Plan for the School of Kinesiology and forward it to Senate for information.



Ron Marteniuk, Dean
Faculty of Applied Sciences

RM/lc

Enclosures

**REVIEW OF SCHOOL OF KINESIOLOGY
FACULTY OF APPLIED SCIENCES
SIMON FRASER UNIVERSITY**

June 16, 17, 18, 1997

Members of External Review Committee

**Dr. P. Wainwright, Department of Health Studies and Gerontology, University of Waterloo,
Waterloo, ON. (*Chair*)**

**Dr. Z. Hasan, *School of Kinesiology and Department of Physical Therapy*, University of Illinois
at Chicago, Chicago, IL**

Dr. M. Smith, Department of Biology, Simon Fraser University, Burnaby, BC

Dr. S. Wallace, Department of Kinesiology, University of Colorado, Boulder, CO

I. ABSTRACT

During the years since the previous review in 1990 the School of Kinesiology, under the Directorship of Dr. J. A. Hoffer, has been active in planning for a future that takes into account role to be played by Simon Fraser University in the face of the rapidly evolving context of post-secondary education in British Columbia. In the 1996 report of the President's Committee on University Planning, interdisciplinary-related subject areas, including health-related programs, have been identified as areas with potential for growth. It is clear that the diversity of scholarly interests of the faculty, and hence the scope of the programs offered by the School of Kinesiology, places it in a unique position to contribute to the development, integration and dissemination of knowledge across a range of disciplines as it relates to human health and performance. The current mission statement of the School reads as follows:

“Our mission is to study human structure and function and their relation to health and movement. We seek to advance, supply and disseminate relevant knowledge and expertise”

In the interests of defining research and teaching emphases, the basic areas of study have been defined as i) movement and its control, ii) regulation and adaptation of physiological systems and iii) growth, development and aging, with applications identified in i) health promotion, ii) prevention of injury and disease, iii) functional evaluation and rehabilitation, iv) ergonomics/human factors, and v) environmental, exercise and work physiology. This is currently being operationalised in the undergraduate program through the development of core requirements which are accompanied by a choice of specialising in one of four streams, namely human movement, human factors, active health and physiological sciences. The graduate program offers students opportunities for specialised advanced research training and education in the areas that reflect faculty expertise, and where the diversity represents exciting possibilities for collaboration in research, and in teaching. In addition to its commitment to undergraduate and graduate education, including co-operative education at the undergraduate level, the School has

expanded its activities with respect to community outreach and education, examples of this being the Mobile laboratory, and the Geraldine and Tong Louie Performance Centre, as well as the Distance and Continuing Education programs.

The strength of any academic unit depends on the strength of its individual members, faculty, staff and students, as well as their dedication to serving the interests of the larger whole, in this case, the School. We were impressed by the accomplishments of the school in all areas, teaching research and service. The Undergraduate program is seen as generally strong and highly relevant to the needs of society with respect to preventive and rehabilitative health. However, the increasing demand for this program, as evidenced by the continued increase in enrollment, is putting considerable strains on the available resources with respect to both space and personnel. Although the implementation of the streams in the Undergraduate curriculum is seen as a positive development in terms of defining teaching emphases for the School, these have not been developed as well as they might, and presently are not regarded as functional. Further development of the undergraduate curriculum stands to benefit from increased involvement of the tenure-track faculty in the administration of the Undergraduate program, as well as increased consideration of the needs of the curriculum in making hiring decisions. With respect to their research endeavours, the faculty are regarded as very strong scholars who are making contributions to their respective research areas. This strength in research provides a firm underpinning for establishing an effective environment for very successful graduate education, although this could be improved by more interaction among faculty members in terms of graduate teaching and setting up collaborative research initiatives at the graduate level. One further area that needs to be addressed with respect to the graduate program is the establishment of consistent expectations of what constitutes a Masters or Ph.D. thesis, as well as mechanisms for ensuring that students complete the program in a reasonable time frame. The School provides valuable service to the community through its distance and continuing education initiatives, as well as through its outreach programs. Moreover, its continuing ties with alumni through the close association with the B.C. Association of Kinesiologists is to be commended.

Given the perceived strengths and achievements of the faculty and staff, as well as their expressed enthusiasm for the mission of the School, we were concerned about the level of divisiveness among some of the faculty, which appears to present significant obstacles to their effective collaboration with respect to both graduate and undergraduate teaching, as well as in research. The negative impact of this interpersonal conflict on the overall working environment appears to be considerable, particularly, but not exclusively, for staff members, as well as graduate students. The report of the 1990 external review saw the divisions as arising from a lack of focus in the School's mission, whereas we relate them as well to deficits with respect to collegiality and mutual respect among the faculty. The divisiveness within the School is clearly of long standing, and it has been endured during the tenure of the previous Director (who is also the Director-elect) as well as the present Director. We suggest therefore that the attempt to resolve these issues be a top priority of the new Director, and that he should discourage the development of cliques by adopting a decision-making process that is open to the participation of and input from all faculty.

In conclusion, we see the School of Kinesiology as a unit that is vital to the mission of Simon Fraser University in offering University-based education in health related areas. Despite the problems that we have identified, we deem it strong and well worthy of support in realising its considerable potential. We trust, therefore, that our recommendations will be seen as useful in helping it to achieve these objectives.

II. SPECIFIC RECOMMENDATIONS

Undergraduate Program

- i. The School and Administration should initiate a process to determine whether additional resources should be allocated to Kinesiology to meet the demands of their increasing enrollment.
- ii. We recommend that servicing a common undergraduate core become a priority for the School. In view of the increased enrollment more tenure-track faculty may have to become involved in the teaching the core courses, which will require reassessment of the

specialised courses currently being offered at the upper level. It is also important that new hires be able to teach the courses required by the core curriculum.

- iii. This core is seen as lacking two courses, the one being a course in the Social-Psychological aspects of Kinesiology, and the second a course in Scientific Methods and Research Design. Should the appropriate resources be assigned, the School may wish to consider hiring a faculty member with the appropriate expertise. Failing this, the School might consider the possibility of adding these courses in collaboration with other academic units on campus, e.g. Psychology.
- iv. The School should re-assess the role of the streams in the Undergraduate program. These have the potential to augment the focus of the curriculum. However, unless they are supported by the appropriate courses being available in the appropriate sequences, they are unlikely to be successful.
- v. Incentives and other measures should be instituted to elevate the importance of both teaching and the involvement of the tenure track faculty in the undergraduate program.

Graduate Program

- i. The School should take measures to actively promote cohesiveness and mutual awareness and respect among the different areas of study. Such measure might include:
 - regularly scheduled seminars with attendance by all members of the School, with speakers drawn from amongst the faculty (including faculty from other departments on campus), graduate students, and invited scientists
 - involvement of students in laboratory rotations
 - a requirement for a common graduate course in research design and methodology
- ii. In the interests of breadth, as well as of ensuring consistency of standards and expectations, the School should actively promote diversity in the membership of supervisory committees. At the Ph. D. level this is seen as particularly important for Part 2 of the comprehensive exams.
- iii. Supervisory committees should take a more active role in the guidance of students,

especially at the Masters level, where timely completion of the degree requirements appears to be a problem.

Faculty

- i. It is important that the School make it a top priority to re-establish collegial relations among the faculty. This may be facilitated by initiatives such as a retreat, possibly with the services of a professional mediator.
- ii. The procedures currently in place for faculty evaluation should be reviewed at both the level of Dean of the Faculty and the Director of the School.
- iii. The School should be encouraged to review its procedures whereby hiring decisions are made in order to ensure that there is an appropriate balance between the requirements of research (necessity to hire scientists with strong potential for generating and supporting research activity”) and teaching (necessity to support the established directions of the undergraduate, and, to a lesser extent, graduate curricula,).
- iv. Before any decisions can be made with respect to the hiring of the Environmental Physiologist, as well as the replacement for Dr. Richardson, the School needs to establish clear priorities with respect to the allocation of resource to the Environmental Unit.

Administration and Resources

- i. We recommend that a desk audit be considered to determine whether the secretaries are understaffed, and whether the Departmental Assistant is in a position to assume the demands generated by the additional students in terms of advising, etc.
- ii. As discussed above under Faculty (i), staff members should be included in initiatives to improve the working environment.
- iii. In view of the increased enrollment, the space needs of the administrative staff should be re-assessed.
- iv. Graduate students should be provided with a common area.
- v. A common seminar room should be found, of sufficient capacity to hold seminars involving all members of the School.

Internal and External Connections

- i. The School's excellent outreach programs should continue to be supported.**
- ii. The School may consider raising its profile on campus in various ways, for example, by participation in campus wide general interest lectures or colloquia.**

3-YEAR PLAN
OF THE
SCHOOL OF KINESIOLOGY

November, 1997

3-YEAR PLAN

1. ASSUMPTIONS

This plan has been prepared on the basis of an assumption that there will be no extra resources provided to the School of Kinesiology in terms of faculty, staff or operating budget for the 3-year period. Should it be the case that this assumption is violated, then other measures would have to be taken in order to cope with changed circumstances. However, given the assumption that the School of Kinesiology will remain with its current complement of faculty, staff and operating budget, we view the 3-Year Plan as outlined in this document as reasonable and feasible.

2. REPLACEMENT POSITIONS

During the next three years, the School of Kinesiology will have one retirement. This position will be vacant from September 1998. An application for authorization to replace this position has been made to the Dean of the Faculty of Applied Sciences. It is essential to the School to replace this position to help meet current demand for courses. Specifically, the School has requirements in terms of the teaching of neuroscience, nutrition and active rehabilitation. A decision with respect to the advertisement will be made when authorization is received. Applicants will be sought who have excellent research potential and who can contribute to the School in terms of the delivery of specific courses.

While our assumption is that no new faculty will be provided to the School of Kinesiology by the University, it is possible that external funds may be available. The Development Office has identified a major potential donation which may be directed in part to the School of Kinesiology. This possibility will be pursued.

3. UNDERGRADUATE PROGRAM

The following plan has evolved from discussions and decisions made by the Kinesiology Undergraduate Program Committee (UPC) over the last 18 months, from the Self Study document prepared by the School for the External Review Committee in Summer 1997, from the subsequent report of the External Review Committee, and from School responses to a position paper prepared by the Chair of the UPC on October 24, 1997.

A number of current practices will be maintained in terms of our offerings in the Undergraduate program. In particular, we intend to continue to provide the best possible program to our undergraduate students. Priority in this delivery will remain with our majors. Increased demand for our courses necessitates that over the next 3 years a study be undertaken to ensure that we make the best predictions that we can concerning enrollments. This study will use the services

of Analytical Studies as well as in-house analysis. Each semester the Departmental Assistant will prepare a table indicating the number of newly approved majors, the number of current majors, the number of spaces offered in each course, and the number of spaces filled in each course, the unfilled demand for each course, and the number of students graduating with each of the credentials. These data will be used in order to facilitate scheduling.

Intake

An increase of 40% in FTE's experienced between 1992 and 1997 has resulted in increasing difficulties for our majors in securing courses they need in a timely fashion. It is necessary that we reduce our intake of majors. We aim to reduce the number of majors to 120 per year from the current 150. This will be accomplished by manipulating the required CGPA for approval as a major. In the first instance, a CGPA of 2.5 in required 100 and 200 level courses will be used. Following the comprehensive study and evaluation of the effects of the new regulations, subsequent adjustments will be made (probably on an annual basis). We will increase the proportion of majors who are admitted directly from high school, maintain the proportion of majors who transfer from other programs at SFU, and decrease the proportion of majors admitted as transfers from colleges.

Total FTE's will be maintained by increased enrollment in 100 and 200 level service courses, but only when this can be achieved without increased resources (in particular, without increased teaching assistant resources). This may be achieved by elimination of tutorials, tutorials occurring every other week, use of open laboratories, or electronically provided laboratory experience (all decisions subject to the Collective Agreement with TSSU).

Scheduling

Following the results of the comprehensive study and on the basis of each semester's data provided by the Departmental Assistant, scheduling decisions will be made. It is anticipated that it will be required that core Kinesiology courses will be offered at least 2 semesters every years. The demand, however, will be monitored on the basis of the result of our studies. After some experience with this process, it should be possible to provide a 3-year schedule of course offerings which will be publicized to students so that they may plan ahead. The result of our study and data collection may also require the offering of increased numbers of courses in the Summer semester. We also intend to carry out a pilot project in which we "overbook" classes to match an anticipated drop rate. Effectiveness of this strategy will be monitored on a semester basis. As a result of oversubscription to classes, we have felt it necessary to institute a new system of managing the waiting list or demand lists for courses. Our new plan is to hire a temporary clerical person for the second week of classes each semester. This person will collect data regarding students attempting to gain entry into courses and will meet with faculty members teaching in that semester to decide the

priority for admission, enter the adds into the computer registration system and notify the students that they have been added.

Class Sizelformat

The size of KIN 200 level courses will be reviewed and where possible extended to accommodate demand. It is hoped that courses in the upper levels can be maintained at their current size. If enrollment is low, i.e., less than 15 students, these courses will be reviewed in order to identify the reasons that so few students are registering and consider whether the same rate of offering is appropriate.

Curriculum

The Undergraduate Program Committee will review the current program with the aim of reducing overlap among courses, which may result in reducing the total number of Kinesiology courses. It is anticipated that this may be in part counterbalanced by the establishment of new courses in areas of specialization of recently hired faculty members. Consolidation of course offerings at the 3rd and 4th year may enable us to offer the remaining courses more frequently.

A recent survey of students who graduated in 1993 reports that 100% of the Kinesiology graduates surveyed said that the instruction they received in Kinesiology was good or very good. Occasionally, negative reports about courses are received. If a particular course receives complaints or poor evaluations on a consistent basis, these courses will be reviewed and attempts made to address the problems.

A review will also be made of the role of KIN 203 and STAT 301 in our program. STAT 301 has been criticized as not meeting the requirements of the Kinesiology student. If this problem cannot be resolved, we will mount a new lower division course in measurement and evaluation. This will be accomplished with expertise of the existing faculty and may be a replacement for or a revision of KIN 203. It was recommended in the External Review that Kinesiology should offer a course in the psychology of physical activity. A modification to the existing course, KIN 320, so that it better covers such issues as motivation towards and adherence to physical activity will be made. This course might be re-titled, "The Social Psychology of Physical Activity." We will then consider whether this course should remain a specialty course or become a part of the core program.

Streams

The issues of streams remains somewhat contentious. Nevertheless, there seem to be compelling reasons to leave them as they are for now while we collect more objective data.

We shall reconsider streams once we have better student data and student access to courses improves by (a) a reduction in number of majors (see "intake"), (b) a reduction in total number of KIN courses in the Calendar (see "curriculum") and (c) increased frequency of offering each course (see "scheduling").

It is possible that external forces will have an impact on the streams. For example, the Human Factors Association of Canada has recently announced the requirements for programs to be accredited as providing appropriate training in Human Factors/Ergonomics. Our streams in this area will need to respond to this initiative.

Distance Education

Over the next three years it is anticipated that distance education will continue to form a significant part of our FTE's. Development of new courses will depend on demand and resources. Developments currently underway include our recently approved nutrition courses. By the end of the 3-year plan all courses for the Certificate in Nutrition should be available in the distance mode.

We will transfer responsibility for setting assignments to the person who will be the Course Supervisor (currently, assignments for the subsequent semester are set by the CS in the current semester). We will appoint Course Supervisor much earlier each semester, before the Centre for Distance Education deadlines for assignments and other changes to the course materials.

We also intend to improve return rate on evaluations of Tutor/Markers by students from current 18% to rates comparable to KIN courses taught on campus. We may accomplish this by (a) sending the evaluation form for Distance Education (DE) students who write exams out of town to their proctor rather than to the student him/herself and (b) administering the course evaluation for the DE students who write the exam on campus after the final exam.

We also plan to schedule revision of course materials (e.g., study guide, assignments, exams), rather than the current practice of revisions occurring on an ad hoc basis. This schedule will be publicized to the School.

Co-Operative Education Program in Kinesiology

In response to the positive comments regarding the Kinesiology Co-op Program noted in both the recent Kinesiology External Review and the Survey of 1995 Graduates, the Kinesiology Co-op Program remains committed to growth. This is reflected both in terms of the breadth of scope and number of workplace opportunities available to students. Our commitment to quality remains unwavering. As an example, current revisions of the overall co-op curriculum at SFU and provincially have been championed by the SFU Kinesiology Co-op Program, and as a consequence Kinesiology students have been the first recipients of this enhanced curriculum.

The goals are to continue to provide quality learning opportunities in workplaces relevant to Kinesiology, to facilitate and support the students in this learning, and to contribute to the enhanced education (and resultant employability) of the graduates of the Kinesiology program at SFU. We see the role of Co-op as complementary to the traditional academic programs at the University.

Currently we develop work term opportunities consistent with each stream as well as areas not directly focused on by the School but reflective of the marketplace into which our graduates enter (e.g. professional school, active rehabilitation). We hope to continue to respond to new employment related directions that faculty may bring through their research and teaching. As well, we will attempt to anticipate new markets and market trends. Wherever possible we strive to ensure SFU Kinesiology Co-op students are competitive in their chosen endeavours after graduation.

We are aiming to continue our 10-year growth pattern, anticipating approximately 8-10% growth per annum over the next three years which would see approximately 150 work term placements by the year 2000.

We also hope to explore the potential of Graduate Co-op, particularly in conjunction with the proposed Post-Graduate Diploma. As well, we hope to continue growth in rehabilitation and ergonomics and seek support for this by way of regular course offerings (existing and new) reflecting these areas.

4. GRADUATE PROGRAM

The Graduate Program Committee is currently considering the possibility of expanding graduate offerings. We see a demand for either a course-work masters degree or postgraduate diploma program. A recommendation concerning the nature of this expansion will be forthcoming from the GPC early in the new year. The GPC also recommends some changes to the existing graduate program. The proposed changes to the Graduate Program are intended to address problems of course scheduling, breadth of knowledge and uniformity of standards in different sub-disciplines. Courses which have not been recently offered and which have little prospect of being offered in the future will be removed from the Calendar. Courses will be implemented with a broad appeal to students in different disciplines. These will include:

- a course on research methods and design, which will include a component on statistical methods, appropriate to the research being conducted in the various laboratories of the School of Kinesiology. Instruction will also be provided in the use of available statistics software packages. This course may become a required course for every graduate student unless the student has previously passed an equivalent course or can demonstrate competency by a course challenge.

- a seminar course in which students will be required to present a seminar related to the activities of the laboratory in which they are conducting their research. It is anticipated that this will be a one credit required course which all graduate students will attend.
- a course dealing with scientific communication. Although this course will not be a required course, it is anticipated that it will have broad appeal and will serve to educate students about the research taking place in different laboratories.
- two survey courses which cover a spectrum of topics of interest to students studying physiological systems or motor control. These courses will be team-taught.

It is also intended that these courses become core courses for the new post-graduate diploma program or course-work masters. The introduction of courses with broad appeal and the increase in student numbers from a new program will make enrollments more predictable and should allow course schedules to be drawn up at least one year in advance. The regular offering and broad appeal of the new courses should also encourage greater participation by graduate students, as well as ensuring more exposure to the activities being carried out in different laboratories.

Measures are being undertaken to promote more involvement of supervisory committees in guiding the students' education and research. Recommendations for changes may include students being required to provide justification for the choice of each committee member before approval by the Graduate Program Committee. A process will be instituted whereby the student will be required to meet with each member of the supervisory committee at regular intervals at least twice each year to report on his/her progress. Supervisory committee members will be encouraged to advise the students in these meetings and will have the opportunity to express any concerns about the student's progress. The reports will be passed on to the Graduate Program Committee. The Graduate Program Committee will also take a more active role in ensuring that Ph.D. comprehensive examinations are broadly based and not simply tailored to the area of specialization.

5. INFRASTRUCTURE

A. Staff

A reorganization in the *technical staff* of the School has recently been made. The engineer in the School has moved to a half-time position with Kinesiology and a full-time technician has been hired. This move was made in order to satisfy demand within the School of Kinesiology. It was found that the high technical skills of the engineer were being under used in the day-to-day technical services

required by the School. Thus it was felt expedient to share his time with the Department of Psychology and to hire a technician to handle the routine maintenance and trouble-shooting of computer and equipment needs. It is anticipated that the new format of technical service will continue throughout the duration of the 3-Year Plan.

The other technical position within the department is that of Research Engineer in the Environmental Physiology Unit (EPU). This position will become vacant on January 1, 1999 as a result of the retirement of the incumbent. In order for the EPU to continue operations, it is advisable that this position be replaced by a chamber operator. It is to be hoped that an appointment will be made in which chamber operation can be combined with engineering and technical service which will be of benefit to other members of the EPU and the School of Kinesiology as a whole. It is also possible that part of the salary assigned to this position may also be used to fund a "soft money" position which could attract the services of a physician or other environmental physiologist who might work within the EPU. These proposals will be discussed by the Committee of the Whole at subsequent meetings.

A review of the functioning of the *central office* of the School of Kinesiology will be conducted. Specifically, it will be ascertained whether the current staffing within the unit is appropriate for the volume of work. In particular, a work audit will be carried out in order to determine whether adjustments should be made in the job descriptions of the Departmental Assistant and half-time Financial Clerk. Greater faculty involvement in the advising process will also be a priority.

The *Geraldine and Tong Louie Centre* is an important part of the outreach service and downtown presence of the School of Kinesiology. The current Executive Director has recently resigned, his resignation being effective December 19, 1997. Currently, 33% of this salary is provided by the School of Kinesiology. An ad hoc committee has been established to bring forward to the School recommendations concerning the replacement of that position and for the terms and conditions of the new position.

2. Equipment

The School of Kinesiology is dependent upon allocations of equipment money from the University for its teaching function, although faculty have frequently made available equipment bought from research grants for teaching purposes. While every attempt will be made to keep the equipment in the School of Kinesiology current so that our students may have access and learn from the latest developments in technology, it cannot be guaranteed that we will be able to replace equipment and to make updates on a regular basis. However, it is our continued intention that when equipment requests are reviewed computing and laboratory equipment for teaching purposes will have the highest priority.

3. Research

The School of Kinesiology maintains its commitment over the next three years towards achieving excellence in research. This will be partially achieved by providing a climate of encouragement and acceptance of faculty member's research. It is understood that the reputation of the School of Kinesiology beyond the local area is determined by the quality of the research and publications that this unit produces. Tangible support for research within the School of Kinesiology will be provided by the use of available funds. In particular, any fallout from sabbaticals, buyouts, or unfilled positions will be used in part to support faculty in their research endeavours. This may in part be by the use of such funds for providing leverage for applications for equipment and research support by faculty members. We will also continue the incentive recently introduced within the School of Kinesiology with respect to overhead recoveries from contract research. 50% of recoveries accruing to the School will be returned to the initiating laboratory. The School will continue to support applications for grants and contracts initiated by faculty members. In addition, the School will continue to provide funds from its resources for conduct of conferences and symposia organized by members of the School.

ATTACHED MATERIAL WAS AVAILABLE TO SENATORS ON REQUEST

FILED FOR INFORMATION

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OF THE
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A review will also be made of the role of KIN 203 and STAT 301 in our program. STAT 301 has been criticized as not meeting the requirements of the Kinesiology student. If this problem cannot be resolved, we will mount a new lower division course in measurement and evaluation. This will be accomplished with expertise of the existing faculty and may be a replacement for or a revision of KIN 203. It was recommended in the External Review that Kinesiology should offer a course in the psychology of physical activity. A modification to the existing course, KIN 320, so that it better covers such issues as motivation towards and adherence to physical activity will be made. This course might be re-titled, "The Social Psychology of Physical Activity." We will then consider whether this course should remain a specialty course or become a part of the core program.

Streams

The issues of streams remains somewhat contentious. Nevertheless, there seem to be compelling reasons to leave them as they are for now while we collect more objective data.

We shall reconsider streams once we have better student data and student access to courses improves by (a) a reduction in number of majors (see "intake"), (b) a reduction in total number of KIN courses in the Calendar (see "curriculum") and (c) increased frequency of offering each course (see "scheduling").

It is possible that external forces will have an impact on the streams. For example, the Human Factors Association of Canada has recently announced the requirements for programs to be accredited as providing appropriate training in Human Factors/Ergonomics. Our streams in this area will need to respond to this initiative.

Distance Education

Over the next three years it is anticipated that distance education will continue to form a significant part of our FTE's. Development of new courses will depend on demand and resources. Developments currently underway include our recently approved nutrition courses. By the end of the 3-year plan all courses for the Certificate in Nutrition should be available in the distance mode.

We will transfer responsibility for setting assignments to the person who will be the Course Supervisor (currently, assignments for the subsequent semester are set by the CS in the current semester). We will appoint Course Supervisor much earlier each semester, before the Centre for Distance Education deadlines for assignments and other changes to the course materials.

We also intend to improve return rate on evaluations of Tutor/Markers by students from current 18% to rates comparable to KIN courses taught on campus. We may accomplish this by (a) sending the evaluation form for Distance Education (DE) students who write exams out of town to their proctor rather than to the student him/herself and (b) administering the course evaluation for the DE students who write the exam on campus after the final exam.

We also plan to schedule revision of course materials (e.g., study guide, assignments, exams), rather than the current practice of revisions occurring on an ad hoc basis. This schedule will be publicized to the School.

Co-Operative Education Program in Kinesiology

In response to the positive comments regarding the Kinesiology Co-op Program noted in both the recent Kinesiology External Review and the Survey of 1995 Graduates, the Kinesiology Co-op Program remains committed to growth. This is reflected both in terms of the breadth of scope and number of workplace opportunities available to students. Our commitment to quality remains unwavering. As an example, current revisions of the overall co-op curriculum at SFU and provincially have been championed by the SFU Kinesiology Co-op Program, and as a consequence Kinesiology students have been the first recipients of this enhanced curriculum.

The goals are to continue to provide quality learning opportunities in workplaces relevant to Kinesiology, to facilitate and support the students in this learning, and to contribute to the enhanced education (and resultant employability) of the graduates of the Kinesiology program at SFU. We see the role of Co-op as complementary to the traditional academic programs at the University.

Currently we develop work term opportunities consistent with each stream as well as areas not directly focused on by the School but reflective of the marketplace into which our graduates enter (e.g. professional school, active rehabilitation). We hope to continue to respond to new employment related directions that faculty may bring through their research and teaching. As well, we will attempt to anticipate new markets and market trends. Wherever possible we strive to ensure SFU Kinesiology Co-op students are competitive in their chosen endeavours after graduation.

We are aiming to continue our 10-year growth pattern, anticipating approximately 8-10% growth per annum over the next three years which would see approximately 150 work term placements by the year 2000.

We also hope to explore the potential of Graduate Co-op, particularly in conjunction with the proposed Post-Graduate Diploma. As well, we hope to continue growth in rehabilitation and ergonomics and seek support for this by way of regular course offerings (existing and new) reflecting these areas.

4. GRADUATE PROGRAM

The Graduate Program Committee is currently considering the possibility of expanding graduate offerings. We see a demand for either a course-work masters degree or postgraduate diploma program. A recommendation concerning the nature of this expansion will be forthcoming from the GPC early in the new year. The GPC also recommends some changes to the existing graduate program. The proposed changes to the Graduate Program are intended to address problems of course scheduling, breadth of knowledge and uniformity of standards in different sub-disciplines. Courses which have not been recently offered and which have little prospect of being offered in the future will be removed from the Calendar. Courses will be implemented with a broad appeal to students in different disciplines. These will include:

- a course on research methods and design, which will include a component on statistical methods, appropriate to the research being conducted in the various laboratories of the School of Kinesiology. Instruction will also be provided in the use of available statistics software packages. This course may become a required course for every graduate student unless the student has previously passed an equivalent course or can demonstrate competency by a course challenge.

- a seminar course in which students will be required to present a seminar related to the activities of the laboratory in which they are conducting their research. It is anticipated that this will be a one credit required course which all graduate students will attend.
- a course dealing with scientific communication. Although this course will not be a required course, it is anticipated that it will have broad appeal and will serve to educate students about the research taking place in different laboratories.
- two survey courses which cover a spectrum of topics of interest to students studying physiological systems or motor control. These courses will be team-taught.

It is also intended that these courses become core courses for the new post-graduate diploma program or course-work masters. The introduction of courses with broad appeal and the increase in student numbers from a new program will make enrollments more predictable and should allow course schedules to be drawn up at least one year in advance. The regular offering and broad appeal of the new courses should also encourage greater participation by graduate students, as well as ensuring more exposure to the activities being carried out in different laboratories.

Measures are being undertaken to promote more involvement of supervisory committees in guiding the students' education and research. Recommendations for changes may include students being required to provide justification for the choice of each committee member before approval by the Graduate Program Committee. A process will be instituted whereby the student will be required to meet with each member of the supervisory committee at regular intervals at least twice each year to report on his/her progress. Supervisory committee members will be encouraged to advise the students in these meetings and will have the opportunity to express any concerns about the student's progress. The reports will be passed on to the Graduate Program Committee. The Graduate Program Committee will also take a more active role in ensuring that Ph.D. comprehensive examinations are broadly based and not simply tailored to the area of specialization.

5. INFRASTRUCTURE

A. Staff

A reorganization in the *technical staff* of the School has recently been made. The engineer in the School has moved to a half-time position with Kinesiology and a full-time technician has been hired. This move was made in order to satisfy demand within the School of Kinesiology. It was found that the high technical skills of the engineer were being under used in the day-to-day technical services

required by the School. Thus it was felt expedient to share his time with the Department of Psychology and to hire a technician to handle the routine maintenance and trouble-shooting of computer and equipment needs. It is anticipated that the new format of technical service will continue throughout the duration of the 3-Year Plan.

The other technical position within the department is that of Research Engineer in the Environmental Physiology Unit (EPU). This position will become vacant on January 1, 1999 as a result of the retirement of the incumbent. In order for the EPU to continue operations, it is advisable that this position be replaced by a chamber operator. It is to be hoped that an appointment will be made in which chamber operation can be combined with engineering and technical service which will be of benefit to other members of the EPU and the School of Kinesiology as a whole. It is also possible that part of the salary assigned to this position may also be used to fund a "soft money" position which could attract the services of a physician or other environmental physiologist who might work within the EPU. These proposals will be discussed by the Committee of the Whole at subsequent meetings.

A review of the functioning of the *central office* of the School of Kinesiology will be conducted. Specifically, it will be ascertained whether the current staffing within the unit is appropriate for the volume of work. In particular, a work audit will be carried out in order to determine whether adjustments should be made in the job descriptions of the Departmental Assistant and half-time Financial Clerk. Greater faculty involvement in the advising process will also be a priority.

The *Geraldine and Tong Louie Centre* is an important part of the outreach service and downtown presence of the School of Kinesiology. The current Executive Director has recently resigned, his resignation being effective December 19, 1997. Currently, 33% of this salary is provided by the School of Kinesiology. An ad hoc committee has been established to bring forward to the School recommendations concerning the replacement of that position and for the terms and conditions of the new position.

2. Equipment

The School of Kinesiology is dependent upon allocations of equipment money from the University for its teaching function, although faculty have frequently made available equipment bought from research grants for teaching purposes. While every attempt will be made to keep the equipment in the School of Kinesiology current so that our students may have access and learn from the latest developments in technology, it cannot be guaranteed that we will be able to replace equipment and to make updates on a regular basis. However, it is our continued intention that when equipment requests are reviewed computing and laboratory equipment for teaching purposes will have the highest priority.

3. Research

The School of Kinesiology maintains its commitment over the next three years towards achieving excellence in research. This will be partially achieved by providing a climate of encouragement and acceptance of faculty member's research. It is understood that the reputation of the School of Kinesiology beyond the local area is determined by the quality of the research and publications that this unit produces. Tangible support for research within the School of Kinesiology will be provided by the use of available funds. In particular, any fallout from sabbaticals, buyouts, or unfilled positions will be used in part to support faculty in their research endeavours. This may in part be by the use of such funds for providing leverage for applications for equipment and research support by faculty members. We will also continue the incentive recently introduced within the School of Kinesiology with respect to overhead recoveries from contract research. 50% of recoveries accruing to the School will be returned to the initiating laboratory. The School will continue to support applications for grants and contracts initiated by faculty members. In addition, the School will continue to provide funds from its resources for conduct of conferences and symposia organized by members of the School.

Approved 19 March 1998

RESPONSE TO THE EXTERNAL REVIEW

OF THE

SCHOOL OF KINESIOLOGY

December, 1997

This is a response from the School of Kinesiology to the External Review submitted by the Review Committee and presented to the School of Kinesiology on August 26th, 1997.

PREAMBLE

The School of Kinesiology was pleased to receive the External Review. It showed that in general terms the External Reviewers were favourably disposed to the program that is being offered at Simon Fraser University. Particularly, the review was complimentary with respect to the training that we provide our undergraduate and graduate students and the quality of the faculty and staff. The review did, however, make a number of suggestions and recommendations for the improvement of the program and operation of the School of Kinesiology. This response to the review is a reaction to those recommendations. It should be noted that the School of Kinesiology has just produced a ratified 3-Year Plan. This document is attached to this response and many of the recommendations of the External Review have had an impact on that document. In this response, therefore, I have referred to the 3-Year Plan where it is appropriate.

UNDERGRADUATE PROGRAM

The External Review reported that the Bachelor of Science degree offered in Kinesiology is popular amongst the undergraduates of Simon Fraser University. This is shown in the fact that the major program has grown by 43% since 1990. The demand for the program has, however resulted in a number of problems for the School because of pressure on existing resources. These resources have not grown at the same rate as the demand for the programs offered within the School.

The first specific recommendation by the External Review was that the administration of SFU and the School should initiate a process to determine whether additional resources should be allocated to meet the demand of the increasing enrolment in Kinesiology. In constructing the 3-Year Plan, our specific instructions were not to assume that there would be any increased resources. This response to the External Review is therefore predicated on the fact that the administration will not consider increasing the resources in terms of faculty, or operating budget, to the School of Kinesiology in the near future.

In the 3-Year Plan we detail the steps to be taken with respect to reducing the number of majors and rationalizing our course offerings. Our intention is to ensure that with current resources we can serve our majors appropriately, allowing them the opportunity to proceed to their degrees smoothly and in a timely fashion. This can be done while still meeting the target FTE set by the Dean. The second specific recommendation was that we ensure that teaching by tenure-track faculty in the undergraduate core become a priority for the School. While we accept that this should be a priority, it is our

contention that this has always been a priority for the School of Kinesiology. It is our contention that the External Review Committee did not understand that many of our lower level courses are in fact optional or service courses and that there is a significant contribution of tenure-track faculty to the core courses within the School of Kinesiology already. Below you will find a list of the core courses in Kinesiology with instructors involved for the last 3 years:

KIN 142	Asmundson (Lab Instructor)
201	Chapman (Faculty), Leyland (Lab Instructor)
203	Ward (Lab Instructor)
205	Parkhouse, Tibbits, Blaber (Faculty)
207	Goodman, MacKenzie (Faculty)
305	Parkhouse, Tibbits, Savage (Faculty)
306	Richardson, Bawa, Hoffer, Milner, Accili (Faculty)
326	Anthony (Lab Instructor)
407	Asmundson (Lab Instructor), Accili (Faculty)

In this context, the External Review Committee also recommended that any new position in the School of Kinesiology be hired with the specific understanding that they would contribute to the teaching of core courses. Note that Drs. Blaber and Accili are appointments made during this academic year and they are already contributing to the core program. One further appointment is planned during the coming year. A replacement for the retirement occurring in August, 1998 has been authorized and a search committee has been established. The School is in the process of deciding the area of search. An advertisement has been drafted and will shortly be circulated. The advertisement will be quite explicit about what the teaching requirements of the applicants will include. We are convinced that the new faculty members appointed will be able to serve the undergraduate program.

The third specific recommendation from the External Review was that two new courses should be developed. They suggested that a course in the social psychological aspects of kinesiology and a course in scientific methods and research design should be required. Discussions since the report was provided have resulted in an agreement that a revision should be made to KIN 320 which is currently titled "Cultural Aspects of Human Movement." This revision will result in the inclusion of those aspects of social psychology which the External Review Committee suggested were lacking in the current curriculum.

As a response to the External Review Committee, the Undergraduate Program Committee has reviewed the content of our current statistical and computer offerings (STAT 301 and KIN 207) in order to assess whether these meet the requirements of knowledge in computing and statistics and research design. As a result of this review, a faculty member

has designed a new course concentrating on statistics and research design. This proposal is currently before the Undergraduate Program Committee.

The fourth specific recommendation from the External Review Committee was that we should re-assess the role of the streams in the undergraduate program. The streams have not been particularly successful because demand for courses has resulted in students being unable to follow the streams in the sequence recommended in the handbook. We are taking measures to reduce the number of majors within the program and we will re-assess whether the steps we have taken enable students to gain entry to courses in a timely fashion. This is outlined clearly in our 3-Year Plan. There are additional considerations in this regard. Notably, the Human Factors Association of Canada has recently published a list of conditions upon which accreditation to an institution for human factors/ergonomics training will occur. The stream in human factors/ergonomics in Kinesiology must therefore be considered in the light of this accreditation process. A review of the extent to which we currently meet accreditation requirements is underway. Discussion has already begun with other post-secondary institutions to establish whether agreements can be made which will enable our students to find additional training required for accreditation.

The fifth recommendation of the Review Committee was that incentives and other measures should be instituted to elevate the importance of both teaching and the involvement of tenure-track faculty in the undergraduate program. Steps have been taken already within the School of Kinesiology in terms of participation in the Undergraduate Program Committee by providing alternates for faculty members on the committee. It should be noted that in a recent survey by Analytical Studies, students in Kinesiology who graduated in 1993, reported in a follow-up, that 100% of respondents were either very satisfied or satisfied with the instruction they received in Kinesiology. This suggests that the teaching at the undergraduate level by tenure-track faculty as well as instructors is of high quality. The student evaluations received in every semester support this contention.

THE GRADUATE PROGRAM

The External Review Committee made a number of recommendations with respect to the Graduate Program. Their first suggestion was that the School should take measures to promote cohesiveness and mutual awareness and respect among the different areas of study.

The first suggestion to achieve this was that regularly scheduled seminars should occur. This was instituted during the 1997-3 semester. It appears to be operating successfully. There has been good attendance by graduate students.

The second suggestion was that there should be greater involvement of students in laboratory rotation. After consideration, we have decided that a more appropriate

method of achieving this end would be to involve students in a compulsory graduate course in which presentations are made by students concerning the research in their own laboratory. A pilot course in 1997-3, with an enrolment of 12, in academic communication was mounted successfully and may serve this purpose. The Chair of the GPC has also instituted an orientation for new graduate students which involves familiarizing them with other laboratories.

A third recommendation was that there should be a common graduate course in research design and methodology. This is currently under consideration and a recommendation for such a course is likely to occur this year. Another recommendation with respect to the Graduate Program was that the School should actively promote diversity in the membership of supervisory committees and consider seriously the nature of the comprehensive exams at the Ph.D. level. This has been addressed by the Graduate Program Committee and a recommendation has been made to the School that justification of the Ph.D. supervisory committees should be made in terms of the areas represented by the faculty members involved. The Chair of the Graduate Program Committee has also instituted a new system in which graduate students will be interviewed by all members of the supervisory committee twice per year and a report on progress be submitted to the Graduate Program Committee. This regulation also satisfies the recommendation from the External Review Committee that supervisory committees should take a more active role in the guidance of students. It is hoped that, along with measures already in place, this will also enhance degree completion time. Similarly, the Graduate Program Committee will now take greater responsibility for ensuring that the components of the comprehensive exam do not only represent tests in areas specific to the area of research.

FACULTY

The External Review Committee suggested that it is important that the School give high priority to the re-establishment of collegial relations among the faculty. They suggested that initiatives such as a retreat would serve this purpose. The School agreed that establishing collegial relations amongst the faculty members is a high priority. It does not consider that a retreat would serve this purpose. Social interaction and an encouragement of mutual respect for both areas and orientations in the study of human structure and function are thought to be a more appropriate means of encouraging the establishment of these collegial relationships. Initiatives such as the increased frequency of departmental seminars and the broadening of the committee structure and comprehensive examination for the Graduate Program were thought to be ways that may help to solve this problem. In addition, the School is in the process of preparing a Constitution (currently a second draft is under review). Many of the disputes between faculty in the past arose over issues of procedures. It is felt that a written Constitution may help to eliminate such sources of friction. Since the review was received, an increase in collegiality has been achieved.

The second recommendation concerned the procedures currently used for faculty evaluation. This is obviously outside the scope of the School of Kinesiology. The School will continue to use faculty research, teaching and service as the criteria for evaluation as mandated by University policy.

With respect to faculty, the committee recommended that before hiring an environmental physiologist and a replacement for the School physician, the School needs to establish priorities with respect to the allocation of resources to the Environmental Physiology Unit (EPU). This has occurred. Dr. Andrew Blaber was appointed as the environmental physiologist. A committee to oversee the EPU was established, a new accounting procedure was developed and an arrangement has been made whereby renovations to the EPU can be made. An appointment has been made to replace the School physician. Dr. Charles Krieger will commence his appointment on July 1st, 1998. The School of Kinesiology has already sponsored his training in hyperbaric medicine.

ADMINISTRATION AND RESOURCES

The External Review recommended a desk audit be conducted in order to determine whether the secretaries and Departmental Assistant are able to cope with the current volume of work. The External Review suggested that staff members should be included in initiatives to improve the working environment. As a result of this suggestion the Departmental Assistant has organized a one-hour weekly staff meeting at which information can be shared, problems resolved and recommendations made to the Director. They also suggested that space needs of the administrative staff should be assessed. Our assumption is that no new space will be available for Kinesiology. We have, therefore, examined ways in which existing space may be better used. Renovations to the main office have been ordered and are scheduled to take place this semester (98-1). Similarly, they suggested that graduate students should be provided with a common area. While we agree with the External Review Committee that this would be optimum, it does not seem to us that giving up space from any of the other functions for this purpose would be appropriate. Unless additional space therefore is granted to the School of Kinesiology, we cannot see any way to provide graduate students with such a facility. Similarly, they recommended that a common seminar room should be found in which to hold seminars. Obviously, the External Review Committee did not understand the central scheduling of rooms which occurs at Simon Fraser University. We will continue to use the current system of scheduling of rooms and not seek a seminar room specific to our School.

INTERNAL AND EXTERNAL CONNECTIONS

The External Review Committee had two recommendations with respect to internal and external connections. Firstly, that the School's outreach program should continue to be supported. This indeed will be the case both in terms of the initiatives at Harbour Centre

and in terms of our Mobile Laboratory and Co-op Program. The School has just published a request for proposals for expansion of the activities at the Tong Louie Human Performance Centre. The Mobile Laboratory continues to visit schools. The Co-op program is expanding and the School has agreed to underwrite two co-op positions at the Tong Louie Centre and two research assistant positions in the summer semester on campus. The second recommendation was that the School should consider raising its profile on campus by participation in campus-wide general interest lectures or colloquia. Since the report was received, the new seminar series has been initiated and participation has already occurred with other departments from SFU. One of the Kinesiology faculty was also the first speaker in this year's President's Lecture Series. Three faculty members were speakers in the Faculty in Residences program in 1997-3.

The Director has initiated a monthly newsletter which reports on the activities of faculty, students and staff. Apart from circulation in Kinesiology, it is also sent to SFU's Media and Public Relations and other directors in the Faculty of Applied Sciences. We are convinced that the profile of the School of Kinesiology on this campus will be improved.

**REVIEW OF SCHOOL OF KINESIOLOGY
FACULTY OF APPLIED SCIENCES
SIMON FRASER UNIVERSITY**

June 16, 17, 18, 1997

Members of External Review Committee

**Dr. P. Wainwright, Department of Health Studies and Gerontology, University of Waterloo,
Waterloo, ON. (*Chair*)**

**Dr. Z. Hasan, *School of Kinesiology and Department of Physical Therapy*, University of Illinois
at Chicago, Chicago, IL**

Dr. M. Smith, Department of Biology, Simon Fraser University, Burnaby, BC

Dr. S. Wallace, Department of Kinesiology, University of Colorado, Boulder, CO

I. ABSTRACT

During the years since the previous review in 1990 the School of Kinesiology, under the Directorship of Dr. J. A. Hoffer, has been active in planning for a future that takes into account role to be played by Simon Fraser University in the face of the rapidly evolving context of post-secondary education in British Columbia. In the 1996 report of the President's Committee on University Planning, interdisciplinary-related subject areas, including health-related programs, have been identified as areas with potential for growth. It is clear that the diversity of scholarly interests of the faculty, and hence the scope of the programs offered by the School of Kinesiology, places it in a unique position to contribute to the development, integration and dissemination of knowledge across a range of disciplines as it relates to human health and performance. The current mission statement of the School reads as follows:

“Our mission is to study human structure and function and their relation to health and movement. We seek to advance, supply and disseminate relevant knowledge and expertise”

In the interests of defining research and teaching emphases, the basic areas of study have been defined as i) movement and its control, ii) regulation and adaptation of physiological systems and iii) growth, development and aging, with applications identified in i) health promotion, ii) prevention of injury and disease, iii) functional evaluation and rehabilitation, iv) ergonomics/human factors, and v) environmental, exercise and work physiology. This is currently being operationalised in the undergraduate program through the development of core requirements which are accompanied by a choice of specialising in one of four streams, namely human movement, human factors, active health and physiological sciences. The graduate program offers students opportunities for specialised advanced research training and education in the areas that reflect faculty expertise, and where the diversity represents exciting possibilities for collaboration in research, and in teaching. In addition to its commitment to undergraduate and graduate education, including co-operative education at the undergraduate level, the School has

expanded its activities with respect to community outreach and education, examples of this being the Mobile laboratory, and the Geraldine and Tong Louie Performance Centre, as well as the Distance and Continuing Education programs.

The strength of any academic unit depends on the strength of its individual members, faculty, staff and students, as well as their dedication to serving the interests of the larger whole, in this case, the School. We were impressed by the accomplishments of the school in all areas, teaching research and service. The Undergraduate program is seen as generally strong and highly relevant to the needs of society with respect to preventive and rehabilitative health. However, the increasing demand for this program, as evidenced by the continued increase in enrollment, is putting considerable strains on the available resources with respect to both space and personnel. Although the implementation of the streams in the Undergraduate curriculum is seen as a positive development in terms of defining teaching emphases for the School, these have not been developed as well as they might, and presently are not regarded as functional. Further development of the undergraduate curriculum stands to benefit from increased involvement of the tenure-track faculty in the administration of the Undergraduate program, as well as increased consideration of the needs of the curriculum in making hiring decisions. With respect to their research endeavours, the faculty are regarded as very strong scholars who are making contributions to their respective research areas. This strength in research provides a firm underpinning for establishing an effective environment for very successful graduate education, although this could be improved by more interaction among faculty members in terms of graduate teaching and setting up collaborative research initiatives at the graduate level. One further area that needs to be addressed with respect to the graduate program is the establishment of consistent expectations of what constitutes a Masters or Ph.D. thesis, as well as mechanisms for ensuring that students complete the program in a reasonable time frame. The School provides valuable service to the community through its distance and continuing education initiatives, as well as through its outreach programs. Moreover, its continuing ties with alumni through the close association with the B.C. Association of Kinesiologists is to be commended.

Given the perceived strengths and achievements of the faculty and staff, as well as their expressed enthusiasm for the mission of the School, we were concerned about the level of divisiveness among some of the faculty, which appears to present significant obstacles to their effective collaboration with respect to both graduate and undergraduate teaching, as well as in research. The negative impact of this interpersonal conflict on the overall working environment appears to be considerable, particularly, but not exclusively, for staff members, as well as graduate students. The report of the 1990 external review saw the divisions as arising from a lack of focus in the School's mission, whereas we relate them as well to deficits with respect to collegiality and mutual respect among the faculty. The divisiveness within the School is clearly of long standing, and it has been endured during the tenure of the previous Director (who is also the Director-elect) as well as the present Director. We suggest therefore that the attempt to resolve these issues be a top priority of the new Director, and that he should discourage the development of cliques by adopting a decision-making process that is open to the participation of and input from all faculty.

In conclusion, we see the School of Kinesiology as a unit that is vital to the mission of Simon Fraser University in offering University-based education in health related areas. Despite the problems that we have identified, we deem it strong and well worthy of support in realising its considerable potential. We trust, therefore, that our recommendations will be seen as useful in helping it to achieve these objectives.

II. SPECIFIC RECOMMENDATIONS

Undergraduate Program

- i. The School and Administration should initiate a process to determine whether additional resources should be allocated to Kinesiology to meet the demands of their increasing enrollment.
- ii. We recommend that servicing a common undergraduate core become a priority for the School. In view of the increased enrollment more tenure-track faculty may have to become involved in the teaching the core courses, which will require reassessment of the

specialised courses currently being offered at the upper level. It is also important that new hires be able to teach the courses required by the core curriculum.

- iii. This core is seen as lacking two courses, the one being a course in the Social-Psychological aspects of Kinesiology, and the second a course in Scientific Methods and Research Design. Should the appropriate resources be assigned, the School may wish to consider hiring a faculty member with the appropriate expertise. Failing this, the School might consider the possibility of adding these courses in collaboration with other academic units on campus, e.g. Psychology.
- iv. The School should re-assess the role of the streams in the Undergraduate program. These have the potential to augment the focus of the curriculum. However, unless they are supported by the appropriate courses being available in the appropriate sequences, they are unlikely to be successful.
- v. Incentives and other measures should be instituted to elevate the importance of both teaching and the involvement of the tenure track faculty in the undergraduate program.

Graduate Program

- i. The School should take measures to actively promote cohesiveness and mutual awareness and respect among the different areas of study. Such measure might include:
 - regularly scheduled seminars with attendance by all members of the School, with speakers drawn from amongst the faculty (including faculty from other departments on campus), graduate students, and invited scientists
 - involvement of students in laboratory rotations
 - a requirement for a common graduate course in research design and methodology
- ii. In the interests of breadth, as well as of ensuring consistency of standards and expectations, the School should actively promote diversity in the membership of supervisory committees. At the Ph. D. level this is seen as particularly important for Part 2 of the comprehensive exams.
- iii. Supervisory committees should take a more active role in the guidance of students,

especially at the Masters level, where timely completion of the degree requirements appears to be a problem.

Faculty

- i. It is important that the School make it a top priority to re-establish collegial relations among the faculty. This may be facilitated by initiatives such as a retreat, possibly with the services of a professional mediator.
- ii. The procedures currently in place for faculty evaluation should be reviewed at both the level of Dean of the Faculty and the Director of the School.
- iii. The School should be encouraged to review its procedures whereby hiring decisions are made in order to ensure that there is an appropriate balance between the requirements of research (necessity to hire scientists with strong potential for generating and supporting research activity”) and teaching (necessity to support the established directions of the undergraduate, and, to a lesser extent, graduate curricula,).
- iv. Before any decisions can be made with respect to the hiring of the Environmental Physiologist, as well as the replacement for Dr. Richardson, the School needs to establish clear priorities with respect to the allocation of resource to the Environmental Unit.

Administration and Resources

- i. We recommend that a desk audit be considered to determine whether the secretaries are understaffed, and whether the Departmental Assistant is in a position to assume the demands generated by the additional students in terms of advising, etc.
- ii. As discussed above under Faculty (i), staff members should be included in initiatives to improve the working environment.
- iii. In view of the increased enrollment, the space needs of the administrative staff should be re-assessed.
- iv. Graduate students should be provided with a common area.
- v. A common seminar room should be found, of sufficient capacity to hold seminars involving all members of the School.

Internal and External Connections

- i. The School's excellent outreach programs should continue to be supported.
- ii. The School may consider raising its profile on campus in various ways, for example, by participation in campus wide general interest lectures or colloquia.

III. REVIEW PROCESS

Members of External Review Committee

Dr. P. Wainwright, Department of Health Studies and Gerontology, University of Waterloo, Waterloo, ON. (*Chair*)

Dr. Z. Hasan, *School of Kinesiology and Department of Physical Therapy*, University of Illinois at Chicago, Chicago, IL

Dr. M. Smith, Department of Biology, Simon Fraser University, Burnaby, BC

Dr. S. Wallace, Department of Kinesiology, University of Colorado, Boulder, CO

Process

In preparation for the review, the School prepared a comprehensive self-study, which was provided to the reviewers before the visit, together with the other documents listed in Appendix 1. Further documents (also listed in the appendix) were provided during the course of visit, some at the specific request of the committee e.g. copy of the previous review. The schedule of the three day site visit is provided in Appendix 2.

The self-study was clearly written and constituted a thorough and comprehensive presentation of the School's activities with respect to research, teaching and service, together with the resources available to support the attainment of its objectives in these areas. Faculty, staff and students had been solicited for input during the preparation of the document, and had the opportunity to meet the committee to provide additional information if they wished. These meetings were particularly useful in providing the committee with an appreciation of some of the personal issues that were clearly important factors contributing to the context within which the business of the School was being conducted.

Mandate of the Committee

The following report is structured according to the mandate of the committee to review the School of Kinesiology in terms of four specific areas:

- i. Undergraduate and graduate programs
- ii. Faculty complement and teaching, research and service contributions of faculty members
- iii. Administration in terms of size, effectiveness and adequacy of resources
- iv. Interaction with other units in the University, and relationships with the community and alumni.

IV. REPORT

1. Programs

Undergraduate Program

Brief Introduction

The undergraduate degree program in the School of Kinesiology is one of the more popular undergraduate programs on the Simon Fraser University of campus. As indicated by the School's Self-Study Report and the Simon Fraser University Fact Book (16th edition), the undergraduate program is the 9th most popular major and currently consists of over 400 students. Enrollment in the major has grown by 43% since 1990, which has affected both the size of the classes and course offerings. To meet this challenge, the School has increased the size of the degree program's core classes from 60 to 90 students and has increased the offerings of these classes from two to three semesters a year. By all accounts, the quality of the classes has been maintained, but continued and expected increases in the number of majors will pose a significant challenge to these efforts.

In addition to the written materials provided to us by the University and the School regarding the undergraduate program, the External Review Team interviewed many of the tenure track faculty, instructors, staff, Undergraduate Program Committee (the three tenure track faculty members who serve on this committee were either unavailable or chose not to attend our interview

session), undergraduate student representatives, Co-op Coordinators, the B.C. Association of Kinesiologists, and the Dean to learn more about the status of the undergraduate program and views about its future development. As a result, we have divided this section of our report into the strengths of the undergraduate program, its weaknesses and a list of recommendations to help the school further develop its program into the next century.

Strengths

One of the strengths of the undergraduate Kinesiology degree program is its popularity. The rapid growth in undergraduate majors over this last decade is indicative of this popularity which, in some sense, is to be expected given the growing interest in health, wellness and rehabilitation sweeping Canada, the United States and other countries around the world. We see Kinesiology to be among the leaders in providing the basic science necessary to advance knowledge in these areas and in providing the training of future professionals to meet the growing demands for adequate health care and health promotion in our societies. The Department should be commended for recognizing its role in this regard and for initiating new and exciting programs to meet these challenges (such as their community outreach and co-operative education programs) and for hiring quality instructors and tenure track faculty that support its undergraduate and graduate programs.

With few exceptions, the quality of the teaching at the undergraduate level is very good as indicated by our interviews with undergraduate students and evident from the student evaluations. In addition, there seems to be unanimity among the instructors and the tenure track faculty that the undergraduate program is vital to the overall mission of the School.

The External Review Team's impressions of the School's outreach programs were highly favourable. The SFU Kinesiology Mobile Lab, the Geraldine and Tong Louie Human Performance Centre located at the Harbour Centre Campus, and the Co-op program in Kinesiology were seen by us as significantly contributing to the School's visibility in the community and in enhancing the undergraduate experience. We strongly support the continuation

of these programs.

Weaknesses

In spite of these strengths, there are major issues within the undergraduate program that need to be addressed. These issues are: increasing enrollment demands, tenure track faculty involvement, the undergraduate streams, and curricular issues.

The increasing popularity of the Kinesiology undergraduate degree has placed considerable stress on course availability and the continued maintenance of instruction quality due to the size of the classes. The number one issue raised by the undergraduate students was the availability of the core classes. Even though the School has attempted to address this issue by increasing the offerings of these courses, apparently their availability to students during the fall, spring and summer sessions is far short of what is required. There are a number of possible solutions to this problem. One strategy would be to prioritize the offerings of classes such that the core classes would receive the highest priority and the elective classes the lowest priority. Thus instead of offering so many elective courses, more resources would be put in increasing the availability of the core classes. This would probably mean much more teaching of the core classes by the tenure track faculty (see below tenure track faculty involvement issue). Multiple sections of each core class need to be offered to meet the demands of increased enrollment. We also believe the Administration needs to carefully assess the needs for additional faculty hires to meet these demands. Of course, another strategy is to place some cap on enrollments in the School. However, we are not certain whether this is a strategy widely practised on the Simon Fraser campus. We are also not convinced this is the preferred strategy because it limits the students' legitimate rights to pursue any degree they wish to attain. The actual size of the core classes is also a major concern of the students and the faculty within the School. Increasing class offerings is certainly one strategy to help reduce class sizes. Another strategy is to allow the lecture portion of the class to grow but to increase the availability of the tutorial and laboratory sections. This strategy would possibly require an increase in teaching assistant support. We recommend that the School evaluate the current responsibilities of the teaching assistants to determine

whether an increase in tutorial and laboratory sections could be possible.

In general, it seems to us that the demands being put on the School by increasing enrollment is a major issue that should be addressed by the School and the campus administration. The popularity of certain degree programs has always waxed and waned throughout the history of universities, and a responsible Administration should allow for budgetary flexibility to put additional resources in those programs vital to the University (as we believe Kinesiology is). We recommend that a process be initiated by the School and the Administration to determine whether additional resources be allocated to Kinesiology to meet the demands of their increasing enrollment.

Although all the tenure track faculty regularly teach undergraduate classes, a much fewer number teach the 200 level core classes, with the bulk of the teaching at this level being done by instructors, who, by all accounts, do an excellent job. We believe this practice must be addressed because we feel it vital that beginning Kinesiology students be exposed to and interact with the tenure track faculty. There are other indications that the involvement of the tenure track faculty in the undergraduate program may be less than optimal. The Undergraduate Program Committee (UPC), for example, is headed by an Instructor and not a tenure track faculty member. Again, while we were impressed with the dedication of the Instructors to the undergraduate program, we were surprised that a tenure track faculty member is not chairing the UPC. There are also indications that the faculty on the Committee do not attend the meetings on a regular basis. In addition, we believe that, together with the current student evaluations, there should be instituted a faculty peer evaluation program, as is common in many departments. Although it is our understanding that new course proposals are ultimately approved by the School, there appears to be little regulation of the development of new course proposals by the tenure track faculty, particularly in terms of the overall direction of the curriculum. Finally, there seems to be little communication among the faculty about the content of courses and issues related to potential course overlap. In summary, while the efforts of the Co-op coordinators and the instructors on behalf of the curriculum must be commended, we found the imbalance between their degree of influence on the direction of the undergraduate curriculum compared with that of the tenure-track

faculty somewhat troubling. By no means are we implying the Co-op coordinators and instructors should not have input to curricular changes. Rather, we are recommending that the tenure track faculty play a much greater role than currently appears to be the case.

We believe that the perceived lack of involvement of the tenure track faculty in the undergraduate program is partly due to the lack of incentives to do so. We heard from several faculty members that good teaching is not greatly rewarded and poor teaching results in no punitive measures, and there appears to be a general belief that research is more highly scrutinized than teaching in the School. A related issue is that of tenure-track faculty being unwilling to assume administrative responsibility in the form of Chair of the Undergraduate Committee. Again this may be because there are no incentives available to offset the heavy demands on time made by this position; such incentives might include a large reduction in teaching, or increased resources to support additional research personnel. We recommend that incentives and other measures should be instituted to elevate the importance of both teaching and the involvement of the tenure track faculty in the undergraduate program.

In 1993, the School created four concentrations or 'streams' in the undergraduate program: active health, health and physiological sciences, human factors/ergonomics and human movement studies. Acknowledged by the School in their Self-Study Report and by several interviews we had during our visit, the stream concept is not working well. A lack of faculty involvement and inconsistent attendance at meetings of the stream chairs and other committee members has not benefited the viability of the streams concept.

Conceptually, we find the four streams to be a reasonable breakdown of the major areas within Kinesiology, but practically we question their effectiveness. One of the problems appears to be that the lack of availability of the core courses means that students are often unable to attain the necessary prerequisites in the appropriate sequence. We also believe that the further development of the streams may require resources to be put in elective class offerings that compete with the core classes. In addition, unless the tenure track faculty are more involved in the undergraduate

program, the streams concept will never be effective. Thus, we recommend the School seriously re-consider the necessity for streams in the undergraduate program.

We also find that there are certain legitimate areas within Kinesiology that are not represented in the undergraduate core curriculum. One apparent weakness is the lack of a psychological or social-psychological Kinesiology core class. We believe that all Kinesiology majors should be exposed to this area. The current core is heavy on the 'biological' side of Kinesiology and light on the 'behavioural' side, providing the students with a rather biased and narrow view of Kinesiology. We believe this class would provide all Kinesiology majors with background information on the motivations related to adherence to exercise and rehabilitation programs, motivations for participation in physical activity and exploration of *why* people chose or do not chose to be physically active. Thus, we recommend a psychological or social-psychological Kinesiology course be added to the undergraduate core and appropriate resources be assigned.

In addition, Kinesiology students are not required to take a class in research design and scientific methods. We believe this area is critical for students in Kinesiology. One way to address this issue is to insure that research methods specific to each major area of Kinesiology are taught in the other core classes. But since there are many commonalties of research and scientific methods across all areas of Kinesiology, we believe this content would be best served in a single class as a prerequisite to the other core classes. We recommend that a course in research and scientific methods be added to the undergraduate core and appropriate resources be assigned.

Graduate Program

The courses offered in the graduate program, reflecting the expertise of the faculty, cover a broad and diverse range of topics. The diversity represents a strength of the program, and it is recognized as such by faculty as well as graduate students. The students come to the graduate program in Kinesiology with a variety of interests, and the School is able to offer them a range of choices for specialization. As for the depth of the course offerings, we found nothing that would indicate an inadequacy. Course scheduling does present some problems because of small

enrollments; these problems are not peculiar to this School, but they could perhaps be alleviated by attracting students from other departments into some of the courses, and by other changes affecting the structure of the program, discussed later.

One unfortunate byproduct of the diversity of specializations is that graduate students tend to become identified early on with one or another faction within the School. They tend to take all their courses within their factional area, and thus have little exposure to the basic concepts, much less the current issues or techniques, pertaining to other areas of research within Kinesiology. Even the comprehensive examination is a misnomer because it is often tailored to the area of specialization.

It was pointed out to us by some graduate students that once the requisite courses have been taken, the fear of a decrease in the grade point average acts as a disincentive to taking courses in other areas of Kinesiology. This fear could be obviated by the simple mechanism of allowing a pass/fail option for courses beyond what are deemed requisite for the student. Broader participation by graduate students in the varied course offerings of the School would help lower the factional barriers, apart from increasing enrollments in the graduate courses. Despite the barriers between different groups of faculty, it is salutary that the graduate students enjoy a high level of communication amongst themselves, and form, to all appearances, a cohesive group. They have, therefore, the potential to promote better communication among the faculty.

It is part of the School's philosophy not to require a core of courses for all graduate students. We recognize that it is desirable to promote diversity of academic pursuits within the School, and therefore we do not recommend that an onerous set of core courses be mandated. We do believe, however, that the School, and Kinesiology in general, will be served well by promoting communication amongst the different areas. Possible ways of achieving this, in addition to encouraging students to take courses beyond their areas of specialization, include: (1) Regularly scheduled seminars, with speakers drawn from amongst the faculty, graduate students, and invited scientists. (2) Laboratory rotations, in which a graduate student spends part of a semester in a

laboratory other than that of his/her mentor. (3) A graduate course in research design and methodology. (4) Diversity in membership of supervisory committees for Part 2 of the comprehensive examination, to ensure breadth of knowledge. We are confident that the faculty can enlarge upon this list of options, and choose those best suited to the School.

Graduate progress and support.

The graduate students have displayed an impressive level of scholarship through their publications in diverse, well-respected journals. The record of Kinesiology graduate students garnering awards at the University and Faculty levels is also outstanding. Clearly, they are making excellent progress, for which they and the faculty of the School are to be congratulated.

Graduate student support, in the form of teaching and research assistantships, is in general well managed and readily available; the students themselves recognize this fact. There is some disaffection, however, over the exclusive role of the supervisor in deciding whether the student's progress is satisfactory, and thus whether a Research Assistantship should continue. Perhaps greater involvement by the student's supervisory committee would help alleviate this concern. It appears that students find the involvement of the School in their progress to be minimal, which is also brought out in the Exit Questionnaire data. This may be related to the feeling of being part of a faction rather than the School, a matter that needs to be investigated. Another matter that needs to be investigated by the School's faculty is the rather long time, comparable to that for a Ph.D., that is spent in obtaining a Master's degree. The expectations a student has to fulfill in order to produce a satisfactory thesis/dissertation seem to vary among laboratories. To some extent this disparity is the inevitable price of the diversity of research areas; but insofar as it leads to a feeling of unfairness among some students, the School and the Graduate Program Committee should attempt to redress the problem by actively promoting diversity in the membership of supervisory committees, instead of taking a hands-off approach. There is also concern about the consistency of participation in the students' guidance by some supervisory committees.

2. Faculty

Size of faculty complement in relation to workload.

The faculty complement is that of 22 & 1/4 tenure track positions, with three positions currently vacant and being actively recruited. In addition to the tenure track faculty, the School employs five laboratory instructors who undertake the teaching of a large number of courses in the undergraduate program, including the distance-education courses. These numbers (tenure-track faculty and instructors) represent an increase since 1990 that reflects in part a response to the increase in undergraduate enrollment. We suggest that the Administration consider either setting a limit to the enrollment, or increasing faculty complement; failing this, the curriculum and mode of delivery may have to be modified accordingly.

Hiring

We recognise that faculty hiring decisions are an important factor both in maintaining the overall quality of academic units, as well as determining their overall emphases in terms of research and teaching. In times of increasing competition for diminishing research funds, it is imperative that people hired as new faculty have strong records supporting their ability to generate financial support for themselves and their graduate students. The School has had considerable success over the past years in attracting such high quality scholars, as well as in providing them with the necessary resources to set up their laboratories. In the face of budgetary restraints, it is recommended that efforts be maintained to continue to provide adequate funds to recruit new faculty of this calibre and enable them to set up their research.

Nevertheless we see two issues that need to be addressed in connection with hiring, these being the ways in which hiring priorities are set and in which the hiring process is implemented. In common with other programs in Canada at this time, the challenge faced by this School is that of being sensitive to the realities of the economic environment, which often requires specific skills of graduates, without compromising the development of the critical and analytical abilities that are fostered most effectively in a strong academic environment. Therefore we recognise that in making hiring decisions there is a fine line to be walked between i) hiring the best scholar and ii) considering the needs of the curriculum, particularly at the level of undergraduate education (and

also at the graduate level, should a professional degree be implemented). Although it is recognised that a healthy curriculum will be evolving continually to reflect the strengths and interests of its faculty, there will always be some constraints imposed by the need for graduates to fill a particular societal niche. Currently the areas for further new hires have been identified as a i) a Health Scientist, ii) an Environmental Physiologist and iii) a position left vacant by the untimely death of Dr. Tom Richardson, with the question being of whether the replacement should also be a physician.

From the point of view of the directions being taken by the undergraduate curriculum, there is clearly a need for a Health Scientist with interests in Nutrition and Health Promotion. The ad for this position is broadly written, as is sensible in the interests of casting a wide net and thereby attracting a strong pool of candidates. There is, however, no reference to what the expected teaching contributions of the successful candidate might be. This seems to have created problems previously, where the teaching needs of the program have not been emphasised, or accepted as part of the defined responsibilities. In fact, it was surprising to see the emphasis being put on developing initiatives in the areas of Nutrition and Health Promotion, given the almost total reliance at present on sessional instructors to develop and teach these courses. Thus there were concerns expressed about the hiring process, particularly with respect to the perception that a policy to hire the best scientist, without due consideration of the curriculum, might not always be optimal in terms of the overall interests of the School. There was also a concern that an approach to hiring the best scientist based on criteria such as number of publications etc., might fail to take into account the fact that norms will vary according to the discipline, and that often “apples and oranges” comparisons are being made. It was suggested that collective wisdom would more likely ensue from broad representation of faculty from different areas on hiring committees, as well as incorporating into the process the opportunity for broad consultation within the School with respect to the merits of particular candidates. It is therefore recommended that the department review its procedures whereby hiring decisions are made to ensure a balance between the requirements of scholarship and teaching. The present practice, whereby the search committee submits only one candidate for the faculty to vote up or down is also not conducive to

the promotion of collegiality among the different areas of Kinesiology. The decision of whom to hire should include an assessment by all the faculty of which candidate among those qualified by research and teaching is most likely to foster an atmosphere of mutual respect and collaboration among the different areas.

The fact that the position for the Environmental Physiologist is being advertised at the assistant professor level may prove problematic in view of the intent that the individual hired will be able to continue teaching and research activities related to the use of the facilities of the Environmental Physiology Unit. The maintenance of this unit is very resource intensive, and the continued funding necessary for generating the appropriate resources for its ongoing maintenance and operation may necessitate hiring someone with an established track-record in this area. Decisions about the future of this unit also have implications for whether or not the replacement position for the third faculty position should be a physician with the required expertise, or whether the services of a physician with the appropriate training, might be provided on an "ad hoc" basis as needed. Thus the position of the School in terms of committing resources to this unit needs to be resolved before the latter two hires are made.

Faculty Background and Collegiality

Although the background of the Kinesiology faculty places them collectively in a strong position to support the development of collaborative initiatives in teaching and research, this potential might be better exploited than is currently the case. Currently there does not appear to be much collaborative interaction among the tenure-track faculty with respect to either research activities or graduate teaching. This may reflect, in part, the relatively specialised nature of the graduate education offered (discussed under graduate program above). Thus it may be that it is in the undergraduate program that this potential for cohesion among the faculty will be most easily realised. But the success of this initiative will depend on the extent to which the tenure track faculty are involved in taking an active role in the continuing development of the undergraduate curriculum (discussed in detail under undergraduate program above).

There appear to be serious divisions among the faculty which are proving extremely corrosive to departmental morale, including that of staff and students. Although this may be related partly to differences in style and personality, the larger issue underlying these differences may be one that is unique to multidisciplinary departments, particularly those with an applied emphasis. For such groups to function effectively requires an appreciation of, as well as respect for, the contribution to be made by the different research approaches. One way of classifying the background of these faculty is according to their areas of research interests, which are described in the self-report as follows: exercise physiology/biochemistry (2), neurophysiology (3), environmental physiology (2), cardiac physiology (1), motor behaviour (5), biomechanics (2), biochemistry/toxicology (2), endocrinology/diabetes (1). Another way of doing this, which may prove helpful in this instance, is according to the level of analyses applied to the research problem. This latter approach leads to the identification of two alternative ways in which the research interests of the Kinesiology faculty might be stratified, the first "horizontal" stratification being represented by either a behavioural or a physiological approach, and the second "vertical" stratification representing operationalisation of a problem at either a systems or a molecular level. These approaches are not mutually exclusive; the mechanistic understanding of a phenomenon described at the systems level, either behaviourally or physiologically, may well require the deployment of modern technology in the form of cellular or molecular tools. Thus, while it is true that human health and performance are measured ultimately at the systems level, in many instances genuine understanding, as well as application of solutions to problems in these areas will result only from the integration of knowledge gained from all levels of analysis. However, it appears to us, that in some instances, boundaries, either horizontal or vertical, have been established between groups of faculty, and these are unfortunately accompanied by not inconsequential feelings of not being respected, and, in fact, of being threatened by "the other side". There also appears to be some frustration with the perceived unfairness of an evaluation system that does not have "teeth" to redress problems that had been identified with respect to the performance of individual faculty.

We view these problems, if left unaddressed, as having the potential for an exceedingly destructive impact on the morale of the School. We therefore recommend that the School make it

a top priority to work towards resolution of these issues. One way of accomplishing this might be to hold a School retreat that includes the contribution of a professional mediator. Other initiatives, such as regular departmental seminars, accompanied by some opportunity for social interactions, may prove useful in fostering better understanding of diverse research areas, and hence better personal relationships. We also recommend a review of the procedures in place for faculty evaluation, at the level of both the Dean of the Faculty and Director of the School.

Research, Teaching and Service Contributions of Faculty

Overall we see the individual faculty as very strong scholars, with active research interests, and, in some instances, they have fruitful collaborative interactions with other institutions. The research is being published in respected refereed journals, and the faculty have been successful in obtaining research funding, with a total (all sources) of \$977,389 in the 1995/96 fiscal year.

With respect to teaching, whereas the University norm is described as four courses per year, in recognition of the involvement of most of the tenure-track faculty in research and graduate supervision, as well as involvement in undergraduate projects, the normal teaching load is described as three courses, two undergraduate and one graduate. Notwithstanding, many faculty perceive an increase in workload due to increased class size, and the necessity in some courses for faculty to conduct labs/tutorials. While the summer has traditionally been identified as a research term for many faculty, the three trimester system with increased demand by students for core courses during the summer may require a restructuring of teaching and research terms.

Moreover, in the absence of additional faculty positions, continuing increases in enrollment may erode the ability of faculty to offer students individualised instruction in the form of small courses with projects; it may also require faculty to be more involved in teaching the core courses and to optimise the offerings of the more specialised upper-year courses.

As instructors are not required to be engaged in research and graduate supervision, they have correspondingly higher teaching loads, which include the distance and education courses. The instructors also make important contributions to the undergraduates in terms of academic advising

and counselling, as well as other service contributions. Tenure-track faculty contribute at all levels of service within the University, as well as to their scholarly communities. Faculty members did not complain of excessive service responsibilities.

3. ADMINISTRATION

Size and Effectiveness

In this section, we provide an assessment of the size of the School's administrative and support staff and the effectiveness of the administration of the School.

The general administrative structure of the School appears to be quite sound. The Director receives support for a Secretary and a Department Assistant. There is a Chair of the Undergraduate Program Committee and a Chair of the Graduate Program Committee who each have Secretaries. In addition, the school has a Co-op and Financial Secretary. There are other Directors and representatives who attend to matters of the Library, the Environmental Physiology Unit, the Geraldine and Tong Louie Human Performance Centre and other duties. Thus, the structure of the School does not appear to us to have any apparent flaws. However, the effectiveness of the administration of the School is of concern.

The secretarial staff expressed their views that they were understaffed. Their explanation was that there has been a rapid increase in undergraduate student growth which has not been accompanied by increased resources. We are not in a position to evaluate the validity of the secretaries' concerns. But we recommend that a desk audit be considered to determine whether the secretaries are understaffed, and whether the Departmental Assistant is in a position to assume the demands generated by the additional students in terms of advising, etc.

The secretaries also expressed a need for more courtesy, confidence and credibility in their work. They believed that some faculty, and to some extent the Director, could be more supportive of their efforts. Once again, it is difficult for us to evaluate these concerns but we received several comments from faculty, students, and staff that the working environment within the School was

far from optimal. Part of the problem is divisiveness among the faculty that permeates through the School. We heard reports of unruly faculty meetings, rude and unkind remarks among faculty, student and staff and a general disrespect for others' work. Another part of the problem is that the Director attempted to make certain changes that he felt were in the best interests of the School which were not supported by some faculty. As a result, the general effectiveness of the School administration did not appear to us to be acceptable, given the high quality of faculty, students and staff. A new Director will be taking over in the fall 1997 and there is optimism by some that improvements will be made in the working environment of the School. This optimism is not shared by all. It is our view that real constructive interaction among the various divisions of the School will not improve until communication, respect and understanding is restored. This will not be an easy task for the Director. It is our belief that the new Director must address this problem head on and take specific measure to improve the working environment of the School.

For example, as discussed above, there appear to be divisions within the School along the lines of both areas (physiological and behavioural) as well as research emphasis (whole body/systemic and reductionistic. In addition, there are personality conflicts among the faculty that perhaps are more difficult to address. Regarding the area and research emphasis divisions, it is our recommendation that the new Director open the lines of communication among these divisions, so that faculty, staff and students (to some degree) can begin to speak with one another in a mutually respectful manner. One suggestion may be to start by getting representatives of these divisions together to talk about common problems and ways these problems may be solved. Another suggestion is to hire the services of an outside facilitator to be present at faculty and other important meetings. In addition, the School's colloquium series could be planned and coordinated by representatives of the various divisions. Finally, the School might consider adopting a laboratory rotation requirement that would require graduate students to spend time in laboratories outside their area of specialization. Establishing a nurturing, trusting and healthy working environment in the shortest possible time is critical for the School's further development as it moves closer to the 21st century. We see it as a vitally important task for the new Director to set the tone for tolerance and understanding within the School which it desperately needs at the present time.

Adequacy of resources

The space needs of the research personnel have been met to some extent by the renovations and additions of recent years, though crowding continues. As well, a common area has been provided for undergraduate students, but is lacking for the graduate students. Provision of such an area, and of a seminar room, would be helpful in alleviating the space shortage in the research laboratories. It would also serve to promote communication among the different laboratories, by acknowledging that the graduate students are citizens of the School, in addition to being members of their laboratory groups. High on the priority list, however, should be the space needs of the administrative staff. Despite the large increase in undergraduate enrollment in recent years, the increased demands on the administrative personnel, and their needs for space, have not been addressed.

The computer facilities, and the equipment available in the School for teaching and research purposes, are excellent. The newly hired engineer is widely recognized as doing an excellent job of supporting the computer systems. His skills, however, would be more productively utilized in the design of new equipment, in teaching a course in instrumentation, and in other pursuits appropriate for a Ph.D. engineer. Once the computer network system is in a sufficiently stable state, it could be supported by lower-level technicians or work-study students. The environmental chamber is a unique piece of equipment for research activities, assuming that external support can be generated for such research. This may entail advertising the availability of this equipment more widely than has been done. The high cost of maintenance of this equipment, together with the cost of making a certified physician available, is not justified by the use made of it in teaching alone, unless there is a sufficient market for the skills that can be taught using this equipment.

The animal facility at Simon Fraser is outstanding. The library resources appear adequate. The list of the journals charged to the Kinesiology budget, however, lacks any reasoned basis, and is merely historical. Many journals of importance to Kinesiology are presumably being charged to other departments, and vice versa.

4. Connection of School within and outside the University

Interaction and integration with other units.

The School has taken important and effective steps to increase its visibility, particularly off the Simon Fraser campus. Our general conclusion is that the School's various out-reach programs are excellent. The Co-op program in Kinesiology provides excellent opportunities for the undergraduate students to expand and apply their practical knowledge gained through the Kinesiology curriculum. In addition, the Co-op coordinators are dedicated and hardworking individuals who take considerable pride in their accomplishments and interactions with the undergraduate students. The Distance and Continuing Education programs appear to us to be working effectively. We found the activities engaged in by the Kinesiology Mobile Lab and the Geraldine and Tong Louie Human Performance Centre at the Harbour Centre to be creative, very visible and well received by the community. We strongly endorse their continued operation. Finally, the interaction of the School with the Alumni and particularly the B.C. Kinesiology Association is good. Our only concern is that the Co-op program and the B.C. Kinesiology Association to some degree seem to be 'driving' the undergraduate curriculum perhaps to a degree greater than necessary. This is not to suggest that the undergraduate curriculum should be operated without sensitivity to the changing career and professional opportunities for Kinesiology graduates. The undergraduate program should be thought of a dynamic entity with some flexibility necessary to meet the needs and interests of the undergraduate student. But the adoption of new elective courses influenced by the Co-op program and by the B.C. Kinesiology Association should not be done hastily. The creation of new Kinesiology elective classes to better prepare Kinesiology students for a specific career should involve considerable planning. The consequences of adopting new courses should be understood in relation to such factors as course availability, involvement of tenure track faculty and instructors and necessary instructional resources. Other than this concern, we believe the School has done exceptionally well in making itself visible off the campus.

The visibility of the School and its faculty on the Simon Fraser University campus was somewhat

more difficult for us to assess since we did not interview faculty in other departments. Our impression was that the visibility of the faculty and of the School's mission could be increased across the campus. For example, the Vice President for Research and the Dean of Graduate Studies told us that the overall mission of the School was not clear. We see the mission of Kinesiology at the University as vital to advancing knowledge on the structure and function of the human body and to human health and wellness. If this mission is not well perceived on campus as well as it is off the campus, it is very important for the School and its Director, and to some extent the Dean, to take the necessary steps to improve the School's visibility. It was also not clear to us whether the School's various colloquia are well advertised on campus, how regularly the faculty interact or collaborate with faculty in other Departments and whether the senior faculty within the School participate on the campus-wide committees. All of these efforts could improve the School's visibility on the Simon Fraser University campus.

V. APPENDICES

APPENDIX 1

Documents Provided

Terms of Reference for the Review Committee
Senate Guidelines for External Reviews of Academic Units
University Calendar
Administrative Organization Chart
University Fact Book
Graduate Studies Fact Book
Graduate Studies Data
Report of *ad hoc* Committee on Planning Priorities
Self Study (two books)

Further documents provided during visit

Report of 1990 External Review Committee
Graduate Student Exit Survey
Research Grants and Contracts to Academic Departments at Simon Fraser University
Kinesiology Teaching Schedule by Instructor from 96-1 to 98-3
Kinesiology Course Schedule 1996/1997
Kinesiology Core Course Offerings 1993/94- 1997/98
Kinesiology Core Course and Instructor Evaluations, 1994-3 through 1997-1
Kinesiology Student Association Report to External Review Committee

APPENDIX 2

Schedule for External Review Committee

SCHOOL OF KINESIOLOGY June 16, 17 & 18, 1997 SCHEDULE FOR EXTERNAL REVIEW COMMITTEE

Monday, June 16

8:00 - 8:45	Continental Breakfast meeting with Dr. David Gagan, VP Academic, Dr. Ron Marteniuk, Dean, Faculty of Applied Sciences, Dr. Bruce Clayman, VP Research & Dean of Graduate Studies, Dr. Katherine Heinrich, Special Assistant to Dr. Gagan on Academic Planning & Ms. Alison Watt, Director, Secretariat Services	DUC
8:45 - 9:00	Meeting of Committee Members (Dr. Hoffer will escort to School)	DUC
9:00 - 11:00	Meeting with Dr. Andy Hoffer, Director of the School 9:00 - 9:30 - Current status of School and future directions 9:30 - 11:00 - Tour of School and Laboratories	K9624
11:00 - 11:15	Break	K9624
11:15 - 12:15	Meeting with Undergraduate Program Committee (Chair: Mr. Stephen Brown)	K9624
12:15 - 1:30	Open Lunch with Faculty, Staff, Student Representatives in Coffee Room	K9635
1:30 - 2:30	Meeting with Undergraduate Students in KSA Common Room	K8504
2:30 - 3:00	Break	K9624
3:00 - 5:00	Individual / group meetings with Faculty Members	K9624

Tuesday, June 17

8:15 - 9:00	Meeting with Dr. Bruce Clayman	SH 3200
9:00 - 9:45	Meeting with Dr. Ron Marteniuk	K9624
9:45 - 10:00	Break	K9624
10:00 - 12:00	Individual / group meetings with Faculty Members	K9624
12:00 - 1:00	Sandwich Lunch meeting with Graduate Program Committee (Chair: Dr. John Dickinson)	K9624
1:15 - 2:15	Meeting with Graduate Students	K9624
2:15 - 2:30	Break	K9624
2:30 - 4:00	Animal Care Facility visit and Mobile Lab visit (escorted by Dr. Hoffer)	ACF+ML
4:15 - 5:00	Meeting with Co-op Coordinators and representatives from the B.C. Association of Kinesiologists	K9624
5:15 - 6:30	General Reception (Faculty, Staff, Student reps & BCAA reps)	DUC

Wednesday, June 18

8:30 - 9:00	Visit Geraldine & Tong Louie Human Performance Centre	Harbour Centre
9:15 - 10:00	Travel to SFU Burnaby	HC 2910
10:10 - 10:30	Meeting with Department Assistant, Ms. Sophie Dunbar	K9624
10:30 - 10:50	Meeting with Administrative Support Staff	K9624
10:50 - 11:00	Break	K9624
11:00 - 11:20	Meeting with Technical Support Staff	K9624
11:30 - 12:15	Meeting with Ms. Sharon Thomas, Library Collections	K9624
12:30 - 3:00	Committee Lunch (no guests) / spare meeting time / initial drafting time (At the committee's invitation, there was a meeting during this time with Dr. John Dickinson, Director-elect of the School)	DUC
3:00 - 3:45	Meeting with Dr. Hoffer	DUC
4:00 - 4:45	Meeting with Drs. David Gagan, Ron Marteniuk, Bruce Clayman, Kathy Heinrich and Alison Watt	PCR

ASB =	Applied Sciences Building
ACF =	Animal Care Facility
DUC =	Diamond University Club
ML =	Mobile Lab
PCR =	President's Conference Room, Third Floor, Strand Hall
SH =	Strand Hall

SIMON FRASER UNIVERSITY

Office of the Vice-President, Academic

Memorandum

To: Senate Committee on Academic
Planning

From: David Gagan 
Vice-President, Academic

Re: External Review of the School of
Kinesiology

Date: August 26, 1997

I attach, for your consideration, the report of the external review committee for the School of Kinesiology.

I read this report with great interest because our School of Kinesiology is constructed around the academic collaboration of a diverse group of sub-disciplines which continues to be augmented by additional sub-disciplines as the School's definition of "Kinesiology" expands and evolves. In short, for good reason the School historically has very much been a unique work in progress.

However, as the review committee's report makes clear, Kinesiology appears to have reached a point where consolidating its strengths may now have to be considered a higher priority than expanding the scope and diversity of its activities. This is the result, in part, of the success of its current programs as measured by undergraduate enrollments. It is also the result of on-going fiscal retrenchment which has altered the balance of workload relative to resource entitlements everywhere in the University. Finally, it is partly the result of a culture, within the School, that appears to have stressed individual *laissez-faire* to the point where diversity has compromised the School's ability to prioritize its activities in order to meet its instructional obligations.

For all of these reasons, the review committee has recommended that the School: identify a revised core undergraduate curriculum; make the teaching of these core courses a higher priority for tenured faculty than teaching senior level undergraduate electives; make competence to teach aspects of the core curriculum a condition of appointment for newly-hired faculty; make accessibility to core courses for undergraduates the cornerstone of workload policies; and re-examine the balance of teaching and research priorities among tenured faculty in relation to the demands of the core curriculum.

The reviewers address other consequential matters, including collegiality within the School, overspecialization in graduate programs, and the adequacy of supporting resources. Without underestimating the seriousness of these matters, it would appear, in my view at least, that developing the collective will required to resolve

SIMON FRASER UNIVERSITY

Office of the Vice-President, Academic

Memorandum

To: Dr. John Dickinson
Director, School of Kinesiology

From: David Gagan *David Gagan*
Vice-President, Academic

And: Dr. Ron Marteniuk
Dean, Faculty of Applied Sciences

Re: External Review Report and School Response Date: May 25, 1998

Thank you for sending me the Response to the External Review of the School of Kinesiology on April 8. I apologize for the delay in outlining the next step in the process.

In the time since my memo to you of September 3, 1997 conveying a copy of the report to you and the School, all units within the University have developed three years plans. I want to integrate the planning and external review cycle and I propose to proceed in the following manner:

"Departments which have already been through External Reviews recently, but whose external review reports have not yet gone to SCAP or Senate will be encouraged to attach their 3 year plans as part of their response to the external review. These should be discussed with the Faculty Dean with a view to preparing a final draft of the plan for the Department which has the support of both the department and the Dean. The Dean will be responsible for presenting the plan including the external review to SCAP. "

In your case - because of the timing of the review report and the development of the 3 year plan - you presumably have already incorporated recommendations from the External Review into the 3 year plan. It is therefore now up to Dean Marteniuk to indicate whether the plan for the School is acceptable to him, and for him to bring this forward to SCAP for approval.

I am therefore asking Dean Marteniuk to review the response of the School to the External Review Report along with the 3 year plan, work out with the School any adjustments which are required and bring this forward to SCAP for approval in the near future.

cc: A.J. Watt

the larger problem described above is an important first step in addressing the other issues confronting the School.

The successful resolution of these matters should keep the School on its historical track as a national model for the discipline.

Attachment

/pjs
scap/kines/2206

Called

SIMON FRASER UNIVERSITY

Office of the Vice-President, Academic

MEMORANDUM

September 3, 1997

To: Dr. John Dickinson, Director, School of Kinesiology
From: David Gagan, Vice-President, Academic *David Gagan*
Subject: External Review Report

Attached is a copy of the report of the External Review Committee which I received recently.

We will be implementing the new procedures for dealing with external review reports (see sections 11-15 of the attached guidelines approved by Senate). You should arrange for the report to be made available to faculty, staff and students in the School. I am sending copies to the President, Deans Marteniuk and Clayman, and Dr. Kathy Heinrich, and we will be distributing copies of the External Review report to members of the Senate Committee on Academic Planning together with my own comments on the report contained in the attached memorandum dated August 26, 1997.

I would like to invite you to attend SCAP on 8 October to receive any comments which SCAP members may have about the report. In order for SCAP members to have the opportunity to be fully prepared for this meeting, a copy of the School's Self Study will be available in Secretariat Services (Registrar's Office) for consultation by members.

Following this initial consultation, the Department is expected to prepare an academic plan as outlined in section 12 in consultation with the Dean, and the academic plan will then be forwarded to SCAP for approval. A copy of the approved plan will be sent to Senate for information. I suggest that you should aim to get this process accomplished in the Fall so that we can get this to SCAP in the Spring of 1998. Dr. Kathy Heinrich is available to assist you and the Department in the preparation of the plan for the Department.

Please let me or Alison know if you have any questions about this, and please advise Alison of your availability for SCAP.

Enclosures

- cc: J.O. Stubbs
- R.G. Marteniuk
- B.P. Clayman
- K. Heinrich
- A.J. Watt