

## DOCUMENT RESUME

ED 093 260

HE 005 719

TITLE Perspectives and Plans for Graduate Studies. 10. Physical Education, Kinesiology, and Related Areas 1974.

INSTITUTION Council of Ontario Universities, Toronto.; Ontario Council on Graduate Studies, Toronto. Advisory Committee on Academic Planning.

PUB DATE 74

NOTE 178p.; Related documents are HE 005 533, 563, 603, 604, 647, and 671 .

AVAILABLE FROM Council of Ontario Universities, 130 St. George Street, Suite 8039, Toronto, Ontario M5S 2T4 Canada (\$5.00)

EDRS PRICE MF-\$0.75 HC-\$9.00 PLUS POSTAGE

DESCRIPTORS \*Curriculum Planning; \*Graduate Study; \*Higher Education; Interinstitutional Cooperation; \*Physical Education; Program Descriptions; Program Planning; \*Statewide Planning; Universities

IDENTIFIERS \*Canada

## ABSTRACT

This report is one of a series of disciplinary planning assessments for graduate studies in Ontario, Canada, concerning physical education, kinesiology, and related areas. Recommendations suggest: (1) There should be a limited number of discipline oriented Ph.D. programs focused on the generation of knowledge appropriate to sociology of sport, exercise physiology, and psychomotor behavior. (2) There should be a limited number of discipline-oriented master's programs. (3) The number of professionally oriented master's programs should be increased. (4) The universities should give serious consideration to the consultants' recommendations that not all titles of graduate degrees in this area include the phrase "physical education" but that the title reflect the character of the program. (5) While recognizing the general importance of part-time study for master's degrees, there be no programs specifically designed for part-time study for specialized professional master's degrees or doctoral degrees. (6) A specialized masters program in the theory of coaching should be planned for future implementation. (7) Planning for the future at the doctoral level could include an additional program in exercise physiology and one in social science of sport. (8) The universities offering graduate programs maintain close contacts with a view to sharing limited resources. Additional recommendations concerning various universities are included. (MJM)

ED 093260

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PERSPECTIVES AND PLANS  
FOR GRADUATE STUDIES

10. PHYSICAL EDUCATION,  
KINESIOLOGY,  
AND RELATED AREAS 1974\*

Advisory Committee on Academic Planning  
Ontario Council on Graduate Studies

74-12

\*The status of this report is given in Item 2 of the statement of principles, on page 1.

HE 005 719

PERSPECTIVES AND PLANS FOR GRADUATE STUDIES

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## F O R E W O R D

The Advisory Committee on Academic Planning (ACAP), as presently constituted, was established by the Ontario Council on Graduate Studies at the request of the Council of Ontario Universities in January, 1971. The Advisory Committee's terms of reference were directed broadly toward the effective planning and rationalization of long-term graduate development in Ontario's universities both at the level of individual disciplines and at a more general level. The Advisory Committee's activities are based on the premise that graduate work is the one area of university activity in which specialization among universities, cooperative arrangements and comprehensive planning are most necessary.

In March, 1971, concern over the rising costs for support of graduate work prompted the Ontario government to institute a general embargo on funding for any new graduate programme, that is, one which had no students enrolled on May 1, 1971. This embargo was subsequently modified to include only those disciplines in which over-expansion was felt to be potentially most serious. ACAP was to begin immediately planning studies in those disciplines which remained embargoed.

The disciplinary planning process begins with the formation of a discipline group composed of one representative from each university with an interest in graduate work in the planning area. The discipline group assists in defining the precise academic boundaries of each study, scrutinizes the data collection forms, prepares a list of potential consultants; maintains contact with the consultants during the study, and prepares a commentary on the consultants' report.

The final decision on consultants for the planning study is made by ACAP. The consultants are requested to make recommendations on programmes to be offered in Ontario, desirable and/or likely enrolments, the division of responsibility for programmes among universities, and the desirable extent of collaboration with related disciplines.

While the consultants' report is the single largest element in the final report on the planning study, ACAP considers the statement of each university's forward plans to be most significant. These forward plans are usually outlined prior to the planning study, and are used as a basis for comments from the universities concerned on the consultants' report.

On receipt of the consultants' report, and comments on it from the discipline group and the universities, ACAP begins work on its own recommendations for submission directly to the Council of Ontario Universities. COU considers the input from all sources, and prepares the position of the Ontario university community.

The following report is one of a series of disciplinary planning studies carried out by the Advisory Committee on Academic Planning and to be published by the Council of Ontario Universities. The emphasis of the report is on forward planning, and it is hoped that the implementation of COU's recommendations will help to ensure the more ordered growth and development of graduate studies in Ontario's universities.

\* \* \* \* \*

Report and Recommendations  
concerning Graduate Studies in  
Physical Education, Kinesiology and Related Areas

On the instruction of the Council of Ontario Universities, the Advisory Committee on Academic Planning has conducted a planning assessment for physical education, kinesiology and related areas. The resultant report from ACAP is attached together with the consultants' report, the comments by the discipline group, and the comments of the individual universities. The procedure followed and the planning techniques used are described in the ACAP report and are not repeated here. It is important for the reader to read the ACAP report and attachments in order to understand the recommendations in this Report from COU.

The Council received the ACAP report and supporting documentation on May 3, 1974.

As a result of these discussions this Report and Recommendations were prepared and approved by the Council on June 7, 1974. The Report is addressed to the Ontario Council on University Affairs and the universities of Ontario.

The following principles have been adopted and will apply to this and all other COU Reports arising out of assessments.

1. Discipline assessments by ACAP should form the basis for planning by the universities of their development of graduate studies, particularly PhD programmes. On the basis of these assessments, COU should make its own recommendations on currently embargoed programmes. Each university must retain the freedom and responsibility to plan and implement its own academic development. However, the universities in embarking on a cooperative planning process have signalled their intentions of cooperating with the COU recommendations.
2. Universities generally plan their emphases in graduate study on the bases of related departments, not of single departments. Initially the sequential nature of the discipline planning assessments makes this difficult. However, by the summer of 1974 there will have been assessments of most of the social sciences, all of the physical sciences, engineering doctoral work, and a number of professional areas. On the information and recommendations then available, each university should be able to make decisions concerning its support of graduate programmes in these areas. Amendments to university responses to the individual discipline planning assessments may

then be made in the wider context of a group of related disciplines and amendments to COU's original Reports on an individual discipline may be required.

3. The first concern in planning is to review the quality of graduate opportunities and of students in Ontario universities and to make judgements about how to proceed or not proceed based on quality considerations. The procedures have made use of highly qualified independent consultants who have no direct interest in the universities in Ontario. Accordingly, COU feels bound to accept their judgements about quality where they are stated clearly unless unconvinced that their conclusions about quality are consistent with their evidence. COU's recommendations in the case of programmes which are of unsatisfactory or questionable quality will call for discontinuation or the carrying out of an appraisal, if the continuation of the programme is not crucial to the province's offerings. In some cases, however, there may be a particular need for the programme and the appropriate recommendation will be to strengthen it, with an appraisal following that action. It is also possible that if there were found to be too large a number of broadly-based programmes there could be a recommendation to discontinue the weakest; in this case, an appraisal for a more limited programme might be relevant.
4. A second consideration is the scope of opportunities for graduate work in the discipline. Do the Ontario programmes together offer a satisfactory coverage of the main divisions of the discipline?
5. Numbers of students to be planned for will depend on the likely number of applicants of high quality and in some cases may relate to an estimate of society's needs. Such estimates may be reasonably reliable in some cases and not in others. If the plans of the universities appear to be consistent with the likely number of well-qualified applicants and there is either no satisfactory basis for estimating needs or there is no inconsistency between a reasonable estimate of need and the universities' plans, then COU will take note of the facts without making recommendations on the subject of numbers.

If the numbers being planned for by the universities are grossly out of line with the anticipated total of well-qualified students, or a reliable estimate of needs, COU will make appropriate corrective recommendations. Depending on the circumstances, these may call for a change in the total numbers to be planned for and indications of which institutions should increase, decrease, or discontinue. The recommendations in serious cases may need to specify departmental figures for each university for a time. If the numbers being planned for are insufficient, the recommendations may call for expansion, or new programmes, and may have implications for both operating and capital costs.



Unless there are exceptional circumstances, the recommendations concerning enrolment will not call for a university to refuse admission to any well-qualified student who wishes to work in a field in which that university offers a programme and in which it has the capacity to accommodate the student.

6. The quality of graduate programmes is partly dependent on size, and for each programme, depending on how it is designed and its scope, there is a minimum size of enrolment below which quality may suffer. That number cannot be expressed for the discipline as a whole but only for individual programmes depending on their purpose, their resources and their design.
7. Universities will be expected to notify COU if they intend to depart from the COU Report in any way which they believe might have a significant bearing on the provincial plans.
8. Appraisals arising as the result of assessments are to be based on the standards but not necessarily the scope of the acceptable programmes in the province.

#### General observations concerning physical education

1. Only four universities (Ottawa, Waterloo, Western Ontario and Windsor) offer master's work and none offer doctoral work in physical education.
2. In Canada, physical education advances have lagged behind those in other countries. The comparatively late development of undergraduate programmes and the almost complete absence of graduate programmes and research have very few parallels in the international community.
3. It appears that in physical education, more than in other areas, Canada has relied on the United States for the training of highly qualified manpower.
4. Because of this lack of advancement, we are in a unique position to develop scholarly work in this field not on the American model but rather along the lines found in those countries, mainly in Europe, which have gained international recognition for their advances in physical education.
5. There are two types of master's programmes in physical education - discipline-oriented and professional. Discipline-oriented programmes emphasize the scientific and research aspects of the field while general professional programmes emphasize education in the broad aspects of the total field. The specialized professional programmes provide training for specific positions such as administration for sports bodies, exercise rehabilitation, etc.

## Recommendations

It is recommended that:

1. (a) There should be a limited number of discipline-oriented PhD programmes focused on the generation of knowledge appropriate to sociology of sport, exercise physiology and psychomotor behaviour.  
  
(b) The Appraisals Committee be advised to include as appraisers of any doctoral programme one consultant with a European approach to physical education and one from an appropriate cognate discipline.
2. There should be a limited number of discipline-oriented master's programmes.
3. The number of professionally oriented master's programmes be increased. These programmes would be either general or specialized professional and would not have as an objective the preparation for PhD work.
4. The universities give serious consideration to the consultants' recommendation that not all titles of graduate degrees in this area include the phrase "physical education" but that the title reflect the character of the programme.
5. While recognizing the general importance of part-time study for master's degrees, there be no programmes specifically designed for part-time study for specialized professional master's degrees or doctoral degrees. This recommendation is not intended to preclude individual arrangements whereby some students do some of their work for these degrees on a part-time basis, but it is important that the fraction of part-time students be small, particularly during the next few years during which the Ontario universities will be establishing the kind of quality standard which is considered to justify these new undertakings.
6. A specialized master's programme in the theory of coaching should be planned for future implementation.
7. Planning for the future at the doctoral level could include an additional programme in exercise physiology and one in social science of sport in addition to those recommended for specific universities.
8. The universities offering graduate programmes maintain close contacts with a view to sharing limited resources and to developing joint programmes as well as to planning specific areas in which to develop strength to avoid duplication.
9. The University of Guelph proceed with its plan to offer a generalized approach to the disciplinary master's programme in human kinetics.

10. Lakehead University, after strengthening its staff, proceed with its plan to offer a specialized professional master's programme in motor behaviour and play of exceptional children.
11. Laurentian University proceed with its plan to introduce a master's programme in child development studies to be offered by the Department of Psychology and the School of Physical Education subject to favourable appraisal and not before 1976. Other plans for graduate study in physical education should not be pursued.
12. McMaster University, after strengthening its staff (perhaps by cross-appointment), proceed with its plan to initiate a specialized professional master's programme in applied human biodynamics offered by the Department of Physical Education in cooperation with the Faculty of Medicine subject to favourable appraisal.
13. The University of Ottawa continue its discipline-oriented and general professional master's programmes and proceed with its plan to offer a specialized professional master's programme in exercise rehabilitation subject to favourable appraisal, where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches. The specialized programme requires the continuing support of the Faculty of Medicine.
14. Queen's University, after strengthening its staff, proceed with its plan to initiate a general professional master's programme, a specialized professional programme in exercise rehabilitation, and a small discipline-oriented master's programme in exercise physiology, all subject to favourable appraisal, where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches.
15. The University of Toronto not implement a master's programme until support of the university and cognate departments have been improved and additional senior faculty added.
16. The University of Waterloo, after strengthening its staff, proceed with its plan to initiate a PhD programme initially in the area of sociology of sport and later in psychomotor behaviour subject to favourable appraisal and that it continue to offer a discipline-oriented master's programme.
17. The University of Western Ontario, after strengthening its staff, proceed with its plan to initiate a PhD programme in the area of exercise physiology subject to favourable appraisal and that it continue to offer both a discipline-oriented and a general professional master's programme. It would not be inconsistent with overall provincial planning if, after considering the consultants' views, the University should decide that it can develop the PhD in exercise physiology simultaneously with one or both of a specialized professional master's programme in exercise rehabilitation, where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches, and a specialized professional master's programme in the motor behaviour of exceptional children, both subject to favourable appraisal.

18. The University of Windsor continue to offer both a discipline-oriented and a general professional master's programme.
19. York University, after strengthening its staff (possibly by cross-appointment), proceed with its plan to offer master's programmes in the areas of (1) sport administration, (2) adaptive physical education, and (3) psychology of sport, all subject to favourable appraisal.
20. In view of the acceptance of these recommendations by COU and the completion of this planning assessment, the Ontario Council on University Affairs request the Minister to remove the embargo on physical education, kinesiology and related areas in accordance with the original announcement of the Minister that new graduate programmes would be embargoed until, for each discipline, a planning study has been conducted.

Notes concerning the Recommendations

Re: Recommendation 7

In the light of expressed intentions by the Universities of Western Ontario and Windsor which differ from those of their comments in Appendix C, COU encourages these two universities to begin discussions leading towards the development of a joint doctoral programme in social science of sport, as suggested by the consultants.

Re: Recommendation 15

In the light of the University of Toronto's current plan, it was not envisioned by ACAF that the University would be ready to offer a master's programme within the five-year planning period.

Re: Recommendation 17

Amongst other areas, the discipline-oriented master's programme in exercise physiology includes research on cardiac patients.

June, 1974.

ADVISORY COMMITTEE ON ACADEMIC PLANNING

ONTARIO COUNCIL ON GRADUATE STUDIES

REPORT TO THE COUNCIL OF ONTARIO UNIVERSITIES

ON

PHYSICAL EDUCATION, KINESIOLOGY AND RELATED AREAS

May 31, 1974

## GENERAL INTRODUCTION

For some years now, the universities of Ontario have been committed to the belief that the quality and effectiveness of graduate study in the province can be ensured only by collective and cooperative action. This implies a mechanism for continuing consultation and agreement so that the plans of each university for each of its disciplines are concerted with those of the other universities. At any given time there will exist a plan for the development of each discipline, with agreed and understood roles for each department; since graduate education is the most advanced formal intellectual activity and is, therefore, undergoing change, it is necessary that such plans be kept under regular review and be subject to ready amendment.

The Council of Ontario Universities has assigned to the Ontario Council on Graduate Studies the task of advising it on the development of such plans and of the steps to be taken to carry them into effect. The Standing Committee which carries out these tasks for OCGS is the Advisory Committee on Academic Planning. A significant role is also played by the discipline groups, one of which is established for each subject, with a representative from each interested university. Each discipline group has the function of assisting and advising ACAP in connection with its own subject.

The above may give the impression that the planning activity is fragmented on a disciplinary basis. This would, of course, not be acceptable. Since the development of one department in a university should not be considered independently of its contribution to the rest of its university and of the influence of the university as a whole on the department, it is most important that universities as institutions play a central role in the planning process. One of the most effective ways of doing this is by indicating to ACAP the nature of institutional commitments to a department and institutional aspirations for the department.

The most significant single input to a planning assessment is the set of statements from each university of its plans for its department. When these are subjected to collective scrutiny it may be found that their totality constitutes a reasonable plan for the discipline in Ontario, but in any case this set of plans is the first approximation to the provincial plan, which the planning assessment may have to refine if there are duplicated features, lacunae in offerings, too large a total enrolment, or other reasons to recommend altering some of the university plans. The universities are also involved in that the bodies that act on ACAP reports, i.e. both COU and OCGS, are composed of universities.

The formal documents stating the responsibilities of ACAP and the Discipline Groups are Appendix F. Briefly summarized, it is ACAP's function to advise on steps to be taken to implement effective provincial planning at the graduate level, to promote the arranging of the graduate programmes of the province in order to enhance and sustain quality and to avoid undesirable duplication, and, when necessary, to carry out formal planning reviews for disciplines. A discipline group has the responsibility of keeping

under review the plans for graduate work in the discipline and making regular progress reports to ACAP in connection with graduate work in that subject. To make all this possible, it has been agreed that ACAP may communicate directly with universities and discipline groups, to request necessary information, to discuss reports, to convene meetings, and to make and receive proposals for the future.

The above information has been given in some detail because it constitutes the mechanism currently approved by COU for cooperative graduate work. It is fair to say that in 1971 there was no mutually agreed plan for graduate study in any discipline. Our task is not only to generate the first such plan for each subject but also to ensure that it is kept under continual review.

There are four fundamental components in the plan. The first is analysis of the fields of study, the formats of study which should be available to prospective students in the province. The second is an estimate of overall provincial enrolment at master's and doctoral levels based principally on the likely numbers of highly qualified applicants. In regard to considerations of manpower needs for the province of Ontario, ACAP is conscious of the unreliability of forecasts and, except in special cases, subscribes to the approach proposed in the Macdonald Report (1969):

"The country as a whole and the provinces must be concerned about manpower requirements. This concern can be expressed in the first instance through careful survey and forecasting of manpower needs on a continuing basis. Such forecasts should be given wide circulation. It is reasonable to expect that universities will respond by creating additional opportunities for study in the areas of shortage. In addition, the universities through their counselling services have a duty to advise students about the opportunities in various fields from the standpoint not only of intellectual challenge but also of vocational prospects and social utility. The reaction of prospective students to such forecasts is likely to provide an effective control. We believe the market-place, if its trends are made explicit, offers an adequate governor to prevent serious surfeit and to encourage movement of students toward fields of opportunity."

The third component of the plan is an indication of the role to be played by each department in terms of the programme it will offer and its academic emphasis. Clearly the quality of the offerings of a department is a dominant factor in determining its role. Cooperative arrangements between departments are stressed. The fourth component consists of an examination of the enrolment plans of the universities and consideration as to whether the universities' plans and the predicted enrolment for this discipline are consistent. If not, some appropriate action should be recommended to COU. It will be seen that although there may also be other aspects, these are four necessary components in such a plan.

One must hasten to add that the future is uncertain and that to forecast intellectual trends, student interests, and employment markets five years hence is to undertake to examine many variables. Of course, this is not

a new exercise since all universities have had to make decisions about building, staff hiring, library expansion, equipment investment and so forth and have done so on a basis of similar forecasts. Perhaps sometimes the forecasts have been more intuitive than consciously recognized, but they have certainly been there. All that is new is to make such plans systematically for the province.

It will be realized that, at a minimum, the ongoing planning procedures we have indicated requires annual reporting of enrolments and annual examination of admission standards. When there are indications from these or other sources that some aspects of the plan for the discipline are not being realized, it will be necessary for ACAP to initiate a review. Such a review would usually not involve outside consultants. Whether the impetus came from a discipline, a university or ACAP itself, comments would be sought from all concerned and the review would culminate in a report to COU recommending an amendment to the plan.

If a university notifies COU of its intention to depart from its accepted role (for example to enrol numbers substantially at variance with its understood plan), ACAP will review the situation in the light of any other such notification it may have received and any other pertinent factors. The extent of any further study would depend on the situation, but if ACAP felt that the university's new plan could be a cause for concern, its first step would be to seek full discussion with the university. Normally there would already have been discussion in the discipline group and between universities and the university would have reached its intention after a careful examination of the general situation of graduate study in the discipline. Thus the ACAP decision would be straightforward and a change in plan would be recommended to COU through OCGS. If, however, ACAP still felt that there was a probability that the university's action might be found, on further study, to be potentially harmful to the system, it would probably next seek comment from other universities concerned and from the discipline group. In any case, ACAP would eventually make some recommendation to COU (through OCGS) concerning the variation.



## PROCEDURE

On the advice of the Ontario Council on Graduate Studies, the Council of Ontario Universities on September 17, 1971 instructed the Advisory Committee on Academic Planning to conduct a formal planning assessment for physical education, kinesiology and related areas.

A Discipline Group was formed consisting of a member named by each interested university. A list of members is attached as Appendix E. Dean A. D'Iorio held the ACAP physical education portfolio and attended meetings when ACAP representation was necessary.

The procedure and terms of reference for the planning assessment is attached as Appendix D.

The Discipline Group began its meetings in October, 1972. In accordance with the procedure, the Discipline Group provided ACAP with a list of possible consultants. ACAP obtained the services of Professor J.A. Faulkner of the University of Michigan, Professor G. Lueschen of the University of Illinois and Dr. A.W. Matthews of the Pharmacy Examining Board of Canada. Brief curricula vitarum appear as Appendix G. Dr. Matthews played the role of the senior Canadian academic from outside the discipline in this planning assessment. The consultants held their first meeting in Toronto in April, 1973, and discussed with the Discipline Group their schedule of visits to the universities. These took place from June until October.

The draft report of recommendations was presented to the Discipline Group for informal comments on November 30, 1973 and the final report was subsequently received and distributed December 10, 1973. The universities were requested to submit comments to ACAP by January 25 and the Discipline Group by February 8 after it had seen the comments of the universities.

The Discipline Group comments plus those of the universities appear in Appendices B and C respectively. The latter includes only those comments specified by each university for publication.

This report then is based on these data, reports and comments, and sets out recommendations for COU on the plan for graduate work in physical education in the province for the next several years.

As is required, this report is made directly to COU. It has been transmitted also to the Ontario Council on Graduate Studies for information.

## RECOMMENDATIONS

It is emphasized that the consultants' report (Appendix A) is an essential and integral part of this report to COU. In the main body of the ACAP report we have dealt only with those aspects of the consultants' report which appear to be particularly significant or which have led us to recommend courses of action.

We deal first with some recommendations of general application to physical education in Ontario. As has been our custom with other disciplines, we prefix our recommendation to COU with the symbol 'C' to avoid confusion with numbering in the COU report.

### C1

- (a) It is recommended that there should be in Ontario a limited number of discipline-oriented PhD programmes focused on the generation of knowledge appropriate to sociology of sport, exercise physiology and psychomotor behavior.
- (b) It is further recommended that the Appraisals Committee include as appraisers of any doctoral programme in this field one consultant with a European approach to physical education and one from an appropriate cognate discipline. (See pages A-1 [Recommendations 1 and 11], A-21 - A-34 and A-52 - A-55)

### C2

It is recommended that there should be only a limited number of discipline-oriented master's programmes in Ontario. (See pages A-1 [Recommendation 2], A-21 - A-34 and A-52 - A-53)

### C3

It is recommended that the number of professionally oriented master's programmes be increased. These programmes would be either general or specialized professional programmes and would not have as an objective the preparation for PhD work. (See pages A-1 [Recommendation 3], A-21 - A-34, and A-52 - A-53)

### C4

It is recommended that the universities give serious consideration to the consultants' recommendation that not all titles of graduate degrees in this area include the phrase "physical education" but that the title reflect the character of the programme. (See pages A-1, [Recommendation 5] and Appendix H)

### C5

It is recommended that there be no programmes specifically designed for part-time study for specialized professional master's degrees or doctoral degrees. (See pages A-3 [Recommendation 20] and Appendix H)

C6

It is recommended that a specialized master's programme in the theory of coaching should be planned for future implementation. (See pages A-2 [Recommendation 17] A-40 - A-41 and A-43 - A-44)

C7

It is recommended that planning for the future at the doctoral level could include an additional programme in exercise physiology and one in social science of sport in addition to those recommended later in this report for specific universities. (See pages A-1 [Recommendation 7] and A-2 [Recommendation 10], A-40 - A-42 and Appendix H)

C8

It is recommended that those universities offering graduate programmes maintain close contacts with a view to sharing limited resources and to developing joint programmes, as well as to planning specific areas in which to develop strength to avoid duplication. (See page A-3 [Recommendation 21])

C9

It is recommended that the University of Guelph proceed with its plan to offer a generalized approach to the disciplinary master's programme in human kinetics. (See pages A-2 (Recommendation 15) and A-42 - A-43)

C10

It is recommended that Lakehead University, after strengthening its staff, proceed with its plan to offer a specialized professional master's programme in motor behavior and play of exceptional children. (See pages A-2 [Recommendation 14] and A-43 - A-44)

C11

It is recommended that Laurentian University proceed with its plan to introduce a master's programme in child development studies, to be offered by the Department of Psychology and the School of Physical Education subject to favourable appraisal and not before 1976. Other plans for graduate study in physical education should not be pursued. (See pages A-2 [Recommendation 15] and A-44 - A-46)

C12

It is recommended that McMaster University, after strengthening its staff (perhaps by cross-appointment), proceed with its plan to initiate a specialized professional master's programme in applied human biodynamics offered by the Department of Physical Education in cooperation with the Faculty of Medicine subject to favourable appraisal. (See pages A-2 [Recommendation 14] and A-46 - A-47)

C13

It is recommended that the University of Ottawa continue its discipline-oriented and general professional master's programmes and proceed with its plan to offer a specialized professional master's programme in exercise rehabilitation subject to favourable appraisal where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches. (See pages A-2 (Recommendations 12 and 14), and A-37 - A-38).

C14

It is recommended that Queen's University, after strengthening its staff, proceed with its plan to initiate a general professional master's programme, a specialized professional master's programme in exercise rehabilitation, and a small discipline-oriented master's programme in exercise physiology, all subject to favourable appraisal, where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches. (See pages A-2 (Recommendations 14 and 15) and A-47 - A-48).

C15

It is recommended that the University of Toronto not implement a master's programme in physical education within the planning period. (See pages A-2 (Recommendation 18) and A-48 - A-70).

C16

It is recommended that the University of Waterloo, after strengthening its staff, proceed with its plan to initiate a PhD programme initially in the area of sociology of sport and later in psychomotor behaviour subject to favourable appraisal and that it continue to offer a discipline-oriented master's programme. (See pages A-1 (Recommendations 7 and 8), A-2 (Recommendations 13) and A-38 - A-40).

C17

It is recommended that the University of Western Ontario, after strengthening its staff, proceed with its plan to initiate a PhD programme in the area of exercise physiology subject to favourable appraisal and that it continue to offer both a discipline-oriented and a general professional master's programme. Further it would not be inconsistent with overall provincial planning, if after considering the consultants' views expressed on pages H-5 and H-6, the University should decide that it can develop the PhD in exercise physiology simultaneously with one or both of a specialized professional master's programme in exercise rehabilitation, where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches, and a specialized professional master's programme in motor behaviour of exceptional children, both subject to favourable appraisal. (See pages A-1 (Recommendation 7), A-2 (Recommendation 12) and A-40-A-41).

C18

It is recommended that the University of Windsor continue to offer both a discipline-oriented and a general professional master's programme. (See pages A-2 (Recommendation 12) and A-41 - A-42).

\* C19

It is recommended that York University, after strengthening its staff (possibly by cross-appointment), proceed with its plan to offer master's programmes in the area of (1) sport administration, (2) adaptive physical education, and (3) psychology of sport all subject to favourable appraisal. (See pages A-2 (Recommendations 14 and 16) and A-49 - A-50).

C20

It is recommended that COU adopt the recommendations of this report, and in the expectation that its members will act in accordance with them, COU inform CUA that it has adopted these recommendations and request that the embargo on physical education, kinesiology and related areas be now removed, in accordance with the original announcement of the Minister that new graduate programmes would be embargoed until, for each discipline, a planning study had been conducted.

## SYSTEM RECOMMENDATIONS

At the present time there are only four master's programmes and no doctoral programmes in physical education in Ontario universities. The Universities of Ottawa, Waterloo, Western Ontario and Windsor have master's programmes. In stating plans for this study, these four proposed to introduce doctoral programmes and seven others proposed to begin master's work. We are recommending the implementation of two doctoral programmes and some master's work at six additional universities.

In Canada physical education developments have lagged behind development in other countries. The comparatively late development of undergraduate programmes in physical education and the almost complete absence of graduate programmes and research have very few parallels in the international community. It appears that in this area, more than in others, Canada has relied on the United States for the training of highly qualified manpower.

On an international scale physical education shows three general features: an increased awareness for interdisciplinary research in sports-medicine, psychology, sociology and history of sport; the development of education theories and the scientific study and promotion of competitive athletics; and concern for the development of programmes for the handicapped and disabled.

The consultants suggest that models for the development of academic departments should be based on the Scandinavian countries, where a clear understanding of research in the field has been in existence for over 100 years; Germany, where medical scientists support research in sport; Japan and Eastern European countries, where substantial scientific research is carried out. Universities in Ontario are in a unique position to provide a much needed reform of physical education in North America by modelling their graduate programmes on those with international reputations.

It is only on the basis that the thrust of doctoral programmes will be in this direction that we feel able to recommend an expansion into doctoral work in this field.

The consultants distinguish between discipline-oriented and professional programmes. Discipline-oriented programmes emphasize the scientific and research aspects of the field. General professional programmes emphasize education in the broad general aspects of the total field. This type of programme would likely appeal to elementary and secondary physical education teachers and could be offered on a part-time basis. The specialized professional programmes provide training for specific positions; two examples are posts in exercise rehabilitation and sports programmes for patients, handicapped and mentally retarded persons, and posts as administrators for sports bodies at local, provincial and national levels.

The Discipline Group has been very active throughout the conduct of this assessment and has had detailed discussion. In particular, they produced a detailed plan which ACAP has examined in preparing this report. We expect the Group's activity to continue while the recommendations of the consultants and COU are given effect.

Table 1

Full-Time Master's Enrolment in Physical Education  
Kinesiology and Related Areas, 1970-74

<u>University</u>	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>
Ottawa	17	11	22	9
Waterloo	-	-	4	12
Western Ontario	14	16	21	18
Windsor	<u>11</u>	<u>11</u>	<u>12</u>	<u>18</u>
Total	42	38	59	57

Table 1 presents historical data for full-time graduate enrolment in physical education. The consultants recommend an expansion into doctoral work as well as an increase in the number of master's programmes. They indicate in Table 8 (page A-56) a likely full-time enrolment distribution for an increase of 2 1/2 times the current enrolment. However, a summation of the universities' plans results in a quadrupling of current enrolment. ACAP recommends that the universities plan for enrolment near that indicated by the consultants and not expect the large increase called for in their original plans.

For a number of universities the consultants have recommended additions to or strengthening of faculty before a proposed programme is implemented. ACAP has included this advice to the universities in its own recommendations because it seems to be valid. However, we realize that the ultimate test for implementation of a programme is appraisal and a university can seek an appraisal without acting on this advice.

Recommendation C1

- (a) It is recommended that there should be in Ontario a limited number of discipline-oriented PhD programmes focused on the generation of knowledge appropriate to sociology of sport, exercise physiology and psychomotor behavior.
- (b) It is further recommended that the Appraisals Committee include as appraisers of any doctoral programme in this field one consultant with a European approach to physical education and one from an appropriate cognate discipline. (See pages A-1 [Recommendation 1 and 11], A-21 - A-34 and A-52 - A-55)

At the present time there are no PhD programmes in physical education in Ontario. Given that only academic excellence justifies the implementation of PhD programmes, the discipline urgently needs bodies of knowledge for integration and identity within the field. Some PhD programmes should therefore be developed. Moreover our recommendation for PhD work is based on the assumption that it will have interdisciplinary scientific foundations of the type associated with the European universities.

### Recommendation C2

It is recommended that there should be only a limited number of discipline-oriented master's programmes in Ontario. (See pages A-1 [Recommendation 2], A-21 - A-34 and A-52 - A-53)

It is expected that the discipline-oriented master's programmes would likely be at universities which offer PhD programmes, since they would normally lead to doctoral work and faculty resources for this type of programme would be limited elsewhere. Currently there is too much emphasis on these programmes at the master's level compared to the general or specialized professional programmes.

### Recommendation C3

It is recommended that the number of professionally oriented master's programmes be increased. These programmes would be either general or specialized professional programmes and would not have as an objective the preparation for PhD work. (See pages A-1 [Recommendation 3], A-21 - A-34, and A-52 - A-53)

The specialized professional programme provides trained professionals with a high level of competence in one problem area. For example, such graduates may qualify for advanced positions in preventive health care, corrective exercise for handicapped or disabled persons, rehabilitation or sport administration. However, the number of such specialized professional careers in sport and other activities is limited. Other areas which do not justify an exclusive programme development should be incorporated in a more general professional programme. General professional programmes should also deal with the general theory of physical education. It is likely that many elementary and secondary physical education teachers would be interested in this type of programme.

Master's theses in general and specialized professional programmes should be strongly oriented towards practical problems and either be applied research or demonstrate comprehension of knowledge and its implementation in a specialized field. However, in some of the specialized programmes, training internships or extensive field experience should be considered as constituting more appropriate training than the thesis requirement.

### Recommendation C4

It is recommended that the universities give serious consideration to the consultants' recommendation that not all titles of graduate degrees in this area include the phrase "physical education" but that the title reflect the character of the programme. (See pages A-1, [Recommendation 5] and Appendix H)

The designation physical education, because of historical overtones does not seem appropriate for people trained in many of the specialities - such as exercise physiology or cardiac rehabilitation. Neither the Discipline Group nor the consultants have been successful in proposing a suitable alternative although kinanthropology, kinesiology and human kinetics are currently in use in some universities. Using the designation MPE or DPE would only extend the misconceptions that appear to stem from the use of the label "physical education" for the undergraduate degree. While the specialized



professional programmes would have a fairly specific career orientation, it can be expected that the total programme will be broad enough to be applied to at least some cognate activities. Thus to identify the degree with a particular field, e.g. cardiac rehabilitation would be unnecessarily restrictive. Since no professional doctorates are proposed, the PhD is appropriate for the research degree.

#### Recommendation C5

It is recommended that there be no programmes specifically designed for part-time study for specialized professional master's degrees or doctoral degrees. (See pages A-3 (Recommendation 20) and Appendix H).

While recognizing the general importance of part-time study for master's degrees, it is recommended that there be no programmes specifically designed for part-time study for specialized professional master's degrees or doctoral degrees. This recommendation is not intended to preclude individual arrangements whereby some students do some of their work for these degrees on a part-time basis, but it is important that the fraction of part-time students be small, particularly during the next few years during which the Ontario universities will be establishing the kind of quality standard which is considered to justify these new undertakings.

#### Recommendation C6

It is recommended that a specialized master's programme in the theory of coaching should be planned for future implementation. (See pages A-2 (Recommendation 17) A-40 - A-41 and A-43 - A-44).

No coaching programme is included in the present recommendations. The consultants suggest that the most likely prospects are Lakehead and Western Ontario. York has also indicated an interest in this field.

#### Recommendation C7

It is recommended that planning for the future at the doctoral level could include an additional programme in exercise physiology and one in social science of sport in addition to those recommended later in this report for specific universities. (See pages A-1 (Recommendation 7) and A-2 (Recommendation 10), A-40 - A-42 and Appendix H).

The consultants recommend that an additional doctoral programme in exercise physiology should be planned for the future. They suggest a joint programme at Ottawa and Queen's as a possibility. They also recommend a doctoral programme in the social science of sport. This is distinct from a programme in sociology of sport in that it includes other social sciences, such as psychology, as well as sociology. The Universities of Western Ontario and Windsor have proposals for such a programme but the consultants recommend substantial improvements and faculty additions before the programmes could be implemented. In Appendix H the consultants note three options for doctoral work in sociology of sport - (1) a programme at Western but not at Windsor, (2) a programme at Windsor but not at Western, or (3) a joint programme.

They recommended the last option because they felt the two programmes would complement each other and since neither programme is very strong. However, even with a joint programme new appointments are needed at both universities. Also there are many obstacles in the way of this joint programme - organizationally, operationally and geographically. At this time ACAP does not recommend the inclusion of a doctoral programme in the social science of sport in the plan for the development of physical education. If at a future time either university or the two jointly make a definite proposal for a doctoral programme in the social science of sport, it would be examined in the context of being a revision to the accepted plan.

#### Recommendation C8

It is recommended that those universities offering graduate programmes maintain close contacts with a view to sharing limited resources and to developing joint programmes, as well as to planning specific areas in which to develop strength to avoid duplication. (See page A-3 [Recommendation 21])

The Discipline Group will play an important part in facilitating these contacts. The continuing role of the Discipline Group is described in Appendix F.

While physical resources and equipment are adequate in most cases, personnel and library resources are currently inadequate or barely adequate for nearly all proposals. Library holdings are limited in number especially serial holdings of international journals. This could be corrected through a coordinated effort. The PhD programme proposals reveal deficiencies in personnel, particularly with regard to senior faculty. Possibilities for cross-appointments of faculty between universities or joint programmes should be carefully explored. Specific fields of study currently appropriate for each university will be outlined in this report, but planning is an ongoing process and the precise fields should be kept under review. Also there could be specialization of a specific area of study within a field by a university. Planning at this level among universities should be encouraged.

UNIVERSITY RECOMMENDATIONS

Recommendation C9

It is recommended that the University of Guelph proceed with its plan to offer a generalized approach to the disciplinary master's programme in human kinetics. (See pages A-2 (Recommendation 15) and A-42 - A-43).

The faculty appears adequately staffed for a master's programme which would include motor learning and development, biomechanics and work physiology. Additional appointments in child psychology and sociology would be desirable. Library holdings appear quite adequate and laboratories for the sub-fields of biomechanics, psychology and biology are well organized and equipped.

ACAP notes that the programme has already obtained successful appraisal. Although the consultants' Table on page A-56 shows "general professional" as the recommended nature of the Guelph programme, they agree that this is misleading terminology and they have suggested the above alternative."

Recommendation C10

It is recommended that Lakehead University, after strengthening its staff, proceed with its plan to offer a specialized professional master's programme in motor behaviour and play of exceptional children. (See pages A-2 (Recommendation 14) and A-43 - A-44).

Before this programme is initiated, one additional faculty member with appropriate graduate credentials should be appointed. This could be done in conjunction with the Department of Psychology or the Faculty of Education. The Department of Psychology and the School of Physical and Health Education have been working jointly in this field of study and it is essential for the master's programme that the support of the Department of Psychology continue.

The library should make a special and immediate effort to enlarge its holdings in physical education and adjacent fields. Special attention should also be paid to ensuring that the well developed undergraduate programme does not suffer from the implementation of the graduate programme. This development is included in the approved Lakehead five-year plan for graduate work.

Recommendation C11

It is recommended that Laurentian University proceed with its plan to introduce a master's programme in child development studies, to be offered by the Department of Psychology and the School of Physical Education subject to favourable appraisal and not before 1976. Other plans for graduate study in physical education should not be pursued. (See pages A-2 (Recommendation 15) and A-44 - A-46).

Two additional graduate faculty should be hired perhaps as joint appointments, and one should be a specialist in developmental psychology. Also library holdings, especially of research-oriented serials, need to be substantially enlarged before the programme is implemented.

This recommendation is in accord with the Laurentian five-year plan currently before ACAP.

### Recommendation C12

It is recommended that McMaster University, after strengthening its staff (perhaps by cross-appointment), proceed with its plan to initiate a specialized professional master's programme in applied human biodynamics offered by the Department of Physical Education in cooperation with the Faculty of Medicine subject to favourable appraisal. (See pages A-2 (Recommendation 14) and A-46 - A-47)

The University plans to focus its master's programme on research and training in aspects of the problems of the handicapped, particularly the coronary patients, and secondarily mentally retarded and other psychopathological cases as well. To further strengthen its faculty, the Department of Physical Education may want to appoint a senior faculty member jointly with the Medical School. Other plans for graduate work (the history and comparative aspects of physical education, motor learning and sociology of sport) should not be encouraged at this time, given the scarcity of resources in equipment, personnel and library holdings.

### Recommendation C13

It is recommended that the University of Ottawa continue its discipline-oriented and general professional master's programmes and proceed with its plan to offer a specialized professional master's programme in exercise rehabilitation subject to favourable appraisal where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches. (See pages A-2 (Recommendations 12 and 14), and A-37 - A-38).

The School of Physical Education at the University of Ottawa is organized in three departments: Kinanthropology, Physical Education and Recreology. It offers a master's degree in Physical Education with specialization in the area of administrative theory and a master's degree in Kinanthropology with specialities in exercise physiology and motor learning. The faculty is well qualified to handle the master's programmes especially since other departments support them. The general professional programme of the Department of Physical Education, with the option to include a thesis, should be retained in light of student interest and growing demand from teachers for advanced degrees.

The specialized programme in cardiac rehabilitation requires the continuing support of the Faculty of Medicine.

The expansion into a PhD programme is not justified at the present time. The faculty looks promising but has not yet demonstrated the scientific capabilities necessary for advising PhD students. With a very few exceptions, publications in refereed journals and research grants are at present lacking. Given the support of cognate departments, the School of Physical Education should be able to implement its plan for a PhD programme eventually, perhaps in five years or so. The buildings and research facilities are exceptionally good and library holdings are being expanded. ACAP notes that the University of Ottawa agrees with the recommendation regarding its PhD programme.

#### Recommendation C14

It is recommended that Queen's University, after strengthening its staff, proceed with its plan to initiate a general professional master's programme, a specialized professional master's programme in exercise rehabilitation, and a small discipline-oriented master's programme in exercise physiology, all subject to favourable appraisal where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches. (See pages A-2 (Recommendations 14 and 15) and A-47 - A-48).

The School of Physical and Health Education has adequate laboratory facilities and equipment for exercise physiology and biomechanics and space for the social science of sport as well. Relationships with other departments are encouraging. The specialized programme in cardiac rehabilitation requires the support of the Faculty of Medicine and the Department of Physiology. Although a discipline-oriented programme was not mentioned by the consultants, it is included in this recommendation on the basis of comments from the University which stressed, amongst other things, that the consultants recommended Queen's along with Ottawa to move towards a PhD in exercise physiology. The master's programmes should be implemented by 1976 and one faculty appointment should be made in exercise physiology and one in biomechanics or social science of sport. These appointments should preferably be senior.

#### Recommendation C15

It is recommended that the University of Toronto not implement a master's programme in physical education within the planning period. (See pages A-3. (Recommendation 18) and A-48 - A-49).

Before initiation of a master's programme, it would be necessary to improve the support of the university and cognate departments and to hire additional senior faculty.

ACAP notes that the University accepts this recommendation of the consultants. If the University changes its intentions, the provincial plan of course could be modified, as contemplated in the last paragraph of the General Introduction (page 3) and in the seventh of the principles adopted by COU.

#### Recommendation C16

It is recommended that the University of Waterloo, after strengthening its staff, proceed with its plan to initiate a PhD programme initially in the area of sociology of sport and later in psychomotor behaviour subject to favourable appraisal and that it continue to offer a discipline-oriented master's programme. (See pages A-1 (Recommendations 7 and 8), A-2 (Recommendation 13), and A-38 - A-40).

The extension into a PhD programme is recommended with the suggestions that two additional faculty members (one senior, one junior) in sociology of sport are appointed and that the Department of Sociology provide continued support. The sociology of sport programme has the potential to attain international status. The area of psychomotor behaviour, in addition to the good work of its own faculty, can draw on the support of the Department of Psychology and should be developed as an additional area in the PhD programme. The consultants feel that it is unlikely that this can be achieved before 1977.

The faculty is actively engaged in research and has attracted a number of grants in sociology, work physiology, and biomechanics with the majority for applied and practical problems of sport and physical activity. Although library holdings in sociology of sport appear to be adequate, holdings in the general area of physical education are substandard and should be improved.

Recommendation C17

It is recommended that the University of Western Ontario, after strengthening its staff, proceed with its plan to initiate a PhD programme in the area of exercise physiology subject to favourable appraisal and that it continue to offer both a discipline-oriented and a general professional master's programme. Further it would not be inconsistent with overall provincial planning, if after considering the consultants' views expressed on pages H-5 and H-6, the University should decide that it can develop the PhD in exercise physiology simultaneously with one or both of a specialized professional master's programme in exercise rehabilitation where exercise rehabilitation is interpreted to include rehabilitation in a physiological sense only, excluding psychomotor learning and other psychological approaches, and a specialized professional master's programme in motor behaviour of exceptional children, both subject to favourable appraisal. (See pages A-1 (Recommendation 7), A-2 (Recommendation 12) and A-40 - A-41).

Master's work is offered in the areas of exercise physiology, psychomotor behaviour and social science of sport. Amongst other areas, the discipline-oriented master's programme in exercise physiology includes research on cardiac patients. The consultants recommend that before the PhD programme in exercise physiology is initiated, two additional faculty members, one senior, should be appointed. The Faculty of Physical Education should also secure the cooperation of the Department of Physiology. Other areas provided at the master's level should not expand into a PhD programme at this time. In a few cases professors with research interest in other areas might act as research supervisors of students enrolled for PhD degrees in other departments such as psychology.

Library holdings need to be improved but it appears they will reach minimum standards in the near future. The faculty has a limited number of publications in refereed journals but has been able to attract research grants in a number of areas. The area of practice and theory of coaching may be developed into a specialized master's programme in the future. At this time the faculty should concentrate on the implementation of a PhD programme in exercise physiology.

In regard to doctoral work in social science of sport see Recommendation C7.

Recommendation C18

It is recommended that the University of Windsor continue to offer both a discipline-oriented and a general professional master's programme. (See pages A-2 (Recommendation 12) and A-41 - A-42).

According to the consultants, Windsor is not at the present time in a position to offer a PhD programme since it does not have the necessary faculty strength even with support from adjacent departments.

The Faculty of Physical and Health Education provides an adequate master's programme in bio-dynamics which covers the areas of exercise physiology, motor behaviour and biomechanics. At this time this area should not be expanded into a PhD.

Physical facilities with regard to laboratory space and equipment are fully sufficient. Library holdings are marginally adequate for a master's programme but need substantial improvement for a PhD programme. Major publications by the faculty are lacking and articles in refereed journals and research grants are sparse for a department offering the PhD.

In regard to doctoral work in social science of sport, see Recommendation C7.

#### Recommendation C19

It is recommended that York University, after strengthening its staff (possibly by cross-appointment), proceed with its plan to offer master's programmes in the area of (1) sport administration, (2) adaptive physical education, and (3) psychology of sport all subject to favourable appraisal. (See pages A-2 (Recommendations 14 and 16) and A-49 - A-50).

Before the Department of Physical Education offers a specialized master's programme in sport administration, it should either cross-appoint one or two senior faculty members of the Faculty of Administrative Studies for teaching, research and graduate student supervision or itself appoint a senior faculty member in administrative theory. If the second option is chosen a liaison relationship on committees and in research should be established with the Faculty of Administrative Studies. Also master's students should undertake research in this area as a requirement for the degree.

The programme in adaptive physical education is intended to include two research areas: one focussing on exceptional children and the other on the effects of stress. The Department should strengthen the programme with an additional senior faculty member and continue the contacts with the Department of Biology and the Defence and Civil Institute of Environmental Medicine.

The Department also shows potential in history and comparative aspects of physical education. At this time it is recommended that the Department of History be the basis for research and possibly for a limited number of candidates who wish to pursue a degree with this specialty.

#### Recommendation For COU Action

#### Recommendation C20

It is recommended that COU adopt the recommendations of this report, and, in the expectation that its members will act in accordance with them, COU inform CUA that it has adopted these recommendations and request that the embargo on physical education, kinesiology and related areas be now removed, in accordance with the original announcement of the Minister that new graduate programmes would be embargoed until, for each discipline, a planning study had been conducted.

A P P E N D I X A

CONSULTANTS' REPORT

ON

GRADUATE PROGRAMMES

IN

PHYSICAL EDUCATION, KINESIOLOGY

AND RELATED AREAS

J. A. FAULKNER, G. LUESCHEN, A. W. MATTHEWS

SUBMITTED TO THE ADVISORY COMMITTEE ON ACADEMIC PLANNING

DECEMBER 5, 1973



## FORWARD

After the consultants accepted the invitation of the Advisory Committee on Academic Planning (ACAP) to participate in the assessment of the departments, schools and faculties of physical education, kinesiology and related disciplines, a meeting was held with the Executive Vice-Chairman of ACAP. The responsibilities of Planning Consultants and the role of the Advisory Committee were outlined. The consultants then met with the members of the Physical Education Discipline Group. The Discipline Group informed them that physical education was becoming more discipline oriented and of the growing need for Canadian based graduate programmes. Subsequently the consultants received an Interim Report from the Discipline Group

Following these briefings the Planning Consultants held a two day organizational meeting. They then visited each of the eleven universities that proposed graduate programmes in physical education. Two consultants visited each of the universities that were contemplating master's programmes and all three consultants visited the four universities that plan to offer doctoral programmes. Prior to each visit the consultants made extensive use of the written materials supplied by each physical education unit. During each visit, an attempt was made to obtain as complete a picture as possible of the current state of the discipline and projected plans through interviews and discussions with faculty and graduate students from the discipline, with faculty from related disciplines, and with selected administrative officers.

During the course of their activities, the consultants also visited officials in the following provincial departments: Ministry of Colleges and Universities, Ministry of Community and Social Services, Ministry of Correctional Services, Ministry of Education, Ministry of Health. There also were discussions with some Faculty members of the Ontario Institute for Studies in Education and with the Chairman of the Department of Rehabilitation Medicine, University of Toronto.

While changes have been highly visible in each of the institutions we have visited, no uniform pattern of departure from the traditional and singular mission of physical education has emerged. Furthermore, very little statistical information with regard to employment of graduates from existing master's programmes, or with regard to future employment prospects, appears to have been compiled. Another aspect that has caused some concern is the exclusion from the specific terms of our study of the related fields of recreation and health studies. There is not a consistent pattern in the manner and extent to which these areas are linked up with physical education in the Ontario universities. Several physical education units expressed the concern that it will be difficult to see the picture as a coherent whole without including recreation and health.

In undertaking the planning assessment in physical education, kinesiology and related areas, the consultants faced problems unlike those found in other fields where the field has formed well established roots and its scope is well defined and well understood. Physical education is a young discipline and its struggle for acceptance by the university community has been hindered by a

general lack of understanding of its scope and by the varied connotations of the term itself.

In this respect, the situation in which physical education finds itself is not unique. Other professional programmes such as engineering, nursing, pharmacy, were initially designed to prepare graduates for the delivery of certain skills, but eventually found it necessary to delve more deeply into the nature of these skills and to expand the body of knowledge upon which they rest. Certainly, physical education is in a state of change, both in an institutional and in an extra-institutional sense. The rapidly expanding enrolments in the post-war years, which physical education shared with other divisions of the universities, have resulted in greater numbers of highly motivated young graduates who sense the potential that exists for the development of the field and who have the capacity for following up the new avenues they discern. At the extra-institutional level, modern developments in sports and an apparent increasing government awareness not only of the significance of these developments but, also, of fitness programmes in general appear to be exerting pressures likely to further accelerate the rate of change within the field.

Throughout the Planning Assessment great difficulty was encountered with regard to terminology. Terminology is not consistent within the field and much of the terminology is vague if not misleading. The inconsistencies are an indication of the grave boundary problems in the field and of the rapid period of transition through which the field is progressing with great difficulty. The term field will be used to denote physical education, kinesiology, and related disciplines. It is imperative for the long term growth and development and understanding of the field that new terminology be developed but this is neither the charge nor within the purview of the consultants. The term discipline will be used in reference to the academic aspects of the field and specifically to the aspects concerned with research and the development of a body of knowledge for the field. For the more applied and career-oriented aspects, the term professional programme will be used.

In attempting to make projections for a ten year period the consultants were handicapped by the lack of basic manpower estimates for the field. There is only limited data on manpower estimates for physical education available through ACAP, from the Ministry of Education, or from other sources. Therefore, projections of future manpower requirements must be viewed with some appreciation of the limitations of the factual data.

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## A. SUMMARY OF MAJOR RECOMMENDATIONS

- (1) A limited number of discipline-oriented PhD programmes should be implemented for the generation of the body of knowledge in three of the four subdivisions of the field: sociology of sport, exercise physiology, and psycho-motor behaviour. This should be given the highest priority.
- (2) A limited number of discipline-oriented master's programmes should be implemented and these should be at universities that offer PhD programmes.
- (3) There should be an expansion of professionally-oriented terminal master's programmes.
- (4) Terminal master's programmes should be either general programmes, or special programmes that provide specific career training.
- (5) Professional designations (such as M.P.E. and D.P.E.) should not be used in the titles of graduate degrees in this field.
- (6) The province and the universities should provide the necessary support to enable the discipline to attain, by 1980, a level of standards considered acceptable in other leading disciplines providing graduate education in Ontario.

PhD DEGREE PROGRAMMES

- (7) First priority should be given to implementation of the following PhD programmes:
  - Exercise physiology - at University of Western Ontario.\*
  - Sociology of sport - at University of Waterloo.\*
  - Social science of sport - jointly at the Universities of Western Ontario\* and Windsor.\* This latter programme should be arranged in a manner requiring an interchange of participating faculty.
- (8) The programme in motor behaviour at University of Waterloo\* shows considerable promise but its implementation would not be advisable before 1977.
- (9) A programme in sociology of sport at the University of Ottawa\* should be implemented in the event it is considered to be desirable to have a programme in this sub-division available to Francophones.
- (10) One additional PhD programme in exercise physiology should be planned for implementation in the future. The most likely prospect of this development is for a joint programme at the University of Ottawa and Queen's University.

- (11) No PhD programme in biomechanics should be implemented at this time.

\* Implemented after minimum conditions have been met (see Standards for Graduate Programmes, pA21, and individual university evaluations).

#### MASTER'S DEGREE PROGRAMMES

- (12) The existing programmes at the Universities of Ottawa, Western Ontario, and Windsor should be retained.

- (13) The programme currently being offered at the University of Waterloo should be freed from the embargo on new programmes.

- (14) A first priority should be given to the implementing of the following specialized programmes:

Motor behaviour and play of exceptional children - at Lakehead University;\* York University.

Cardiac rehabilitation - at McMaster University;\* University of Ottawa; Queen's University.\*

- (15) A second priority should be given to the implementing of a General professional programme at the University of Guelph, and at Queen's University.\*

- (16) A third priority should be given to the implementing of the following specialized programmes:

Child Development studies - at Laurentian University.\*

Sports Administration - at York University.\*

- (17) A specialized master's programme in the Theory of coaching should be planned for future implementation. At the present time, the most likely prospects for this development are Lakehead University and/or University of Western Ontario.

- (18) Efforts to develop a graduate faculty should continue and should be encouraged but the programme proposed at the University of Toronto should not be approved at this time.

\* Implemented after minimum conditions have been met (see Standards for Graduate Programmes, pA22, and individual university evaluations).

#### MISCELLANEOUS

- (19) The University of Ottawa, in its planning, should give consideration to abandoning its departmental structure beyond the master's level in the interest of facilitating future implementation of PhD programmes.

- (20) There should be no part-time programmes offered for specialized master's degrees or for PhD degrees.
- (21) Those universities offering graduate programmes, particularly those in geographic proximity, should maintain close contacts with a view to sharing limited resources and to developing joint programmes, as well as to planning specific areas in which to develop strength so as to avoid duplication.
- (22) The Discipline Group should continue its regular meetings in the interest of a further exchange of information on graduate admissions, the maintenance of standards, and other matters pertaining to graduate programmes.
- (23) Health education should not be included in this field and ACAP should identify an appropriate discipline area.

B. INTRODUCTIONI. Objectives

## (a) Terms of Reference of Consultants

The consultants received the following charges from ACAP:

1. Consider the materials prepared by the discipline group and the universities and obtain other data they may require to carry out the tasks detailed below. They may obtain data and views from any relevant source, such as, for example, employers of holders of graduate degrees, professional and learned societies, federal agencies. The campus of each interested university shall be visited by at least two consultants. Consultants shall arrange their schedule of visits to the universities in consultation with ACAP to ensure uniformity. Previous reports of appraisal consultants are privileged documents and are not to be made available to ACAP consultants. Consultants shall liaise with the discipline group near the beginning of the work, during the work as they consider necessary, and immediately before preparing their final report in order to provide an opportunity to receive oral comment on a draft report.

2. Report on the adequacy of the present state of graduate work in physical education in the province in general and in each university where applicable, discussing the following:

- (i) coverage of divisions and specialities, and extent of activity in each.
- (ii) faculty quality and quantity.
- (iii) nature of programmes offered.
- (iv) enrolment size and distribution amongst universities.
- (v) quality of student body; admission requirements.
- (vi) relationship to related disciplines.
- (vii) physical facilities.
- (viii) other matters considered by the consultants to be significant.

3. Make recommendations for the development of graduate work in physical education in Ontario between 1973 and 1984, but in more detail for 1974 through 1979, and, without limiting the generality of the foregoing, dealing with the following points:

- (i) Academic trends in this field in the next decade, paying attention to the desirable programmes to be offered in the province in university graduate schools and considering both possible limitations or reductions of existing programmes and creation of new programmes and new kinds of programmes including the appropriateness of part-time programmes. In particular, consider any new areas of physical education in which graduate work should be developed and any application-oriented and interdisciplinary work in which physical education should be involved.



(ii) Desirable provincial enrolments, year by year, in the various levels of graduate study and the various subject divisions. One should consider both the need for highly trained manpower and for educated people, i.e. the general cultural and societal factors which may lead students to pursue graduate work in physical education. In considering manpower needs one should take account of the "market" available to graduates (at least all of Canada) and of other sources of supply for that market. Results of forecasts of high level manpower employment should be treated with due caution and only in a clearly balanced relationship with cultural and societal needs.

(iii) Distribution amongst the universities of responsibility for programmes and for specialities where appropriate, including consideration of the need for any increase or decrease in the number of universities offering doctoral work and including consideration of areas of collaboration and sharing of facilities at regional level and across the province.

(iv) Distribution of enrolment amongst the universities, showing desirable ranges of enrolment.

(v) Desirable extent of involvement with related disciplines.

In all cases, it is important that the rationale for the recommendations be clear; this is especially important for items (iii) and (iv). Consultants are asked to comment on advantages and disadvantages of various techniques for arranging that their recommendations become effective.

4. It is permissible for consultants to recommend appraisals of individual programmes. This would arise if consultants were to suspect that a programme would be found to be wholly or in part below minimum acceptable standards; an appraisal by the Appraisals Committee is the means of settling the question. It is recognized that this action would be infrequent. Perhaps more likely, in planning assessments in some disciplines, consultants may find an excess of programmes in the same area of study, all of which could pass an appraisal; they would then have to make their own judgements of relative quality (a task outside the terms of reference of the Appraisals Committee), and guided by this judgement and other factors, the ACAP consultants would have to recommend where enrolment should be curtailed or eliminated.

In addition to the formal terms, the consultants were aware of the charge by ACAP "that the emphasis is on forward planning". Although the consultants should critique the current stage of graduate work, such critique is rather to be seen "as a description of the initial position from which planning takes off". (M. A. Preston Report to the COU meeting of September 14, 1972).

(b) Interim Report of and Discussions with Discipline Group

Subsequent to our discussion with the Discipline Group in April, we were presented with an Interim Report compiled by this Group. The report provided information on the historical development of physical education

in Ontario and of significant developments in other provinces. The problems of defining the discipline were discussed, culminating in the generalization that in Canada there is general consensus regarding a discipline definition of physical education as "the art and science of human motor performance in such purposeful activities as sport, dance and exercise". The difference in the conceptual frames of reference of professionally-oriented compared to discipline-oriented programmes were outlined and the implications for judging graduate programmes were raised.

Reference was also made to the need in Canada, and specifically Ontario, for more graduate programmes at the master's level and the establishment of programmes at the doctoral level. Reasons cited for the specific need for Canadian and Ontario graduate programmes were that taking graduate programmes in United States universities contributes to the permanent loss of promising young Canadians to the United States; that American programmes do not meet the special needs of Canadian students; and the subservience of many American programmes to the field of education and to intercollegiate athletics results in an overemphasis on education and athletics. The demand for and the supply of positions in graduate programmes was interpreted to indicate a serious lack of opportunities for Canadians to undertake graduate work in physical education in Canada. Future needs in Ontario were projected as requiring 150 additional faculty with the PhD by 1980. A number of generalizations were presented relating to higher education and to physical education in both Canada and the province of Ontario. The Interim Report concludes with guidelines and minimum criteria for graduate programmes and plans for present and future programmes.

From our discussions with the Discipline Group and from the content of the Interim Report it was obvious that the Discipline Group had interacted to a considerable degree on the subject of graduate programmes. There was general enthusiasm expressed for a much stronger discipline-oriented approach which would necessitate considerable expansion into doctoral programmes. To facilitate highly specialized graduate offerings, the field was divided into 10 subdivisions. Attention was also directed towards the need to provide an opportunity for Franco-Ontarians to pursue graduate work in the French language and for the far northern universities to make use of their unique geographical surroundings and resources in special graduate offerings.

(c) Comments of the Consultants on the Interim Report and Discussions with the Discipline Group

The consultants undertook the Planning Assessment on the premise that physical education, kinesiology, and related disciplines constitute a viable field for graduate study in Ontario universities and that the Discipline Group and their graduate faculties would wish to develop quality graduate programmes that would be innovative and challenging. Through discussions with faculty during our visits to each university we became convinced that the graduate faculties of the various universities really do desire to offer innovative quality programmes. We conclude that we are in

agreement with the Discipline Group and their faculties in terms of the goal, but that we have a different opinion as to what constitutes an innovative, high quality graduate programme in physical education, kinesiology, and related disciplines and the number and quality of the faculty required to initiate such a programme. These differences of opinion are evidenced in our reaction to a number of points in the Interim Report.

Our major concern regarding the Interim Report was that although the Discipline Group had interacted to a considerable degree on the subject of graduate programmes, the final proposal for present and future programmes was a summation of eleven individual proposals rather than a synthesis arrived at in terms of the overall needs for the province. If the Discipline Group is to effectively carry out its role of "continuing monitoring responsibility to ensure that the guidelines and criteria are adhered to", they must achieve an unbiased objectivity that has not been evidenced thus far.

From the initial discussion with the Discipline Group a lack of consensus regarding the proposed 10 subdivisions was evident. The large number of sub-divisions appeared to have arisen from an attempt of the Discipline Group to include every option proposed to them. The consultants concluded from the outset that provision of 10 subdivisions was both excessive and ill advised, and that we must reduce the subdivisions to a more manageable number.

The desire of each of the 11 university physical education units to greatly increase the magnitude of their graduate effort also concerned us. The major graduate commitment was to be initiated in each case with a very junior faculty that were already heavily committed in teaching and service and who consequently had shown very little research productivity. There also appeared to be a considerable overemphasis on a purely discipline-oriented approach that would merely replicate the training of the existing faculty rather than an emphasis on the training of professionally oriented graduates who would seek other than university based occupations.

We agree with the Discipline Group that Canadians interested in graduate work in physical education should have an opportunity to study in Canadian universities. It is also clear that a programme in a single Canadian university (Alberta) is insufficient to meet the requirements adequately and that physical education faculties in Ontario universities should play their rightful role in the graduate preparation of personnel in this field. A rather unique feature of graduate education, as it develops in Ontario, is the special need to make adequate provision for Franco-Ontarians. In its 1972 report, the Commission on Post-Secondary Education in Ontario indicated acceptance of the principle that Franco-Ontarians, if they are to participate fully in the province's economic, trade and professional life, must have access to a full range of educational opportunities at the post-secondary level. Canada's oldest bilingual university, the University of Ottawa, specifically undertakes in its Charter the commitment to further bilingualism and biculturalism and to

preserve and develop French culture in Ontario. A similar orientation appears to be developing at Laurentian University.

The guidelines proposed in the Interim Report are certainly an excellent beginning toward legislating minimum criteria. Such guidelines are necessary because of the excessive work loads generally born by physical education faculties. For most, very little time remains for research, writing and other scholarly activities. This is evidenced by the dearth of research publications in most physical education faculties. Therefore, our minimum criteria include provision for a greater number of senior research faculty for each programme. We feel that it would be a disservice to the current programmes and existing faculties to further overburden them with additional programmes. In fact, the current popularity of physical education programmes with university administrators is no doubt due to its ability to attract large numbers of students and educate them with fairly large student-faculty ratios. Service activities also involve a substantial effort on the part of physical education faculties.

Physical education, kinesiology, and related disciplines is an emerging field on most university campuses. Programmes, facilities, and faculties have all grown rapidly in the past few years. Such growth has created problems in identity and in programme goals.

Our assessments of the need for PhD's in Canada and in Ontario are in general agreement with the figures reported in the Interim Report. However, we do not see any possibility of Ontario universities meeting the need with their own graduates much before 1985 nor do we consider it very desirable that the universities of the province provide all of the faculty needs either from within the discipline or from cognate areas. We do concur with the Physical Education Discipline Group on the pressing need for the implementation of some additional master's programmes and some doctoral programmes in Ontario universities. We hasten to add that these programmes should be innovative, quality programmes offered by an adequate number of acknowledged research scholars and that programmes should not be initiated prematurely simply because of the need.

## II. Assumptions

In undertaking the task of carrying out a planning assessment of physical education, kinesiology, and related disciplines, the consultants realized that they would be facing difficulties due to the recent emergence of the field as an academic discipline, the boundary problems in the field, the many changes that have occurred in orientation, and the rapid growth in undergraduate and graduate programmes. To give ourselves a frame of reference to work from, we attempted to take an overview of the changing scene in the field and identify the salient assumptions from which we might proceed with the planning assessment. We organized these with respect to the responsibilities of the field to the various communities in which it functions and also the responsibility of the university community to the field.

## (a) Responsibility of the Field to the University Community

Physical education, as an academic discipline, is a comparatively recent addition to the university community in Canada. Although handicapped by the image of traditional public school physical education, the present undergraduate programmes are generally recognized as having worthwhile educational merit and there is considerable evidence that the graduates are being well-accepted into teaching programmes and in other professional capacities.

The high quality of undergraduate programmes at universities that do not have graduate programmes supports our contention that a programme can be provided even though the faculty is not involved in graduate teaching and in the direction of graduate student research. We propose that good research can be conducted by faculty in departments which do not offer graduate programmes. Furthermore, we postulate that the introduction of a graduate programme, particularly if initiated prematurely, may have a deleterious effect on the undergraduate programme and faculty. Physical education is particularly vulnerable in this respect at the present time. Student-faculty ratios and work loads are excessively high in most departments and research productivity is low. Furthermore, there is a preponderance of young staff who might over-react to the opportunity to become involved with directing graduate students. We also support the assumption that good undergraduate teaching requires a somewhat different kind and a different balance of knowledge than graduate teaching.

A primary responsibility of a field to the university community is that in the initiation of new graduate programmes or expansion of existing programmes, the field must adhere to a recognizable standard of quality. After having some difficulty in achieving a respected place in the university community the field should be extremely cautious about maintaining academic credibility with the other fields in planning and implementing programmes for advanced study.

Finally, we view as desirable the concept in the programme of ACAP that some degree of specialization within universities is desirable, that universities should co-operate in a rational planning to provide for specialization that is complementary across universities. However, such co-operative effort in specialization should not go so far as to exclude competition between universities which appears vital to assure system efficiency. We assume the members of the Discipline Group support this orientation and recognize that, if it is going to work, each faculty must stand ready to give up, or defer, some ambitions for the betterment of the province-wide picture.

## (b) Responsibility within the Field

Our primary assumption is that the members of a field who reside in a university setting have a primary responsibility to the field-at-large to strive to broaden the field in terms of its professionalization, to

increase the body of knowledge, to maintain the ethics, and sustain high standards of excellence. We expect that a doctoral programme would be initiated from a power base, which would include a strong core graduate faculty in physical education, a strong related department, good co-operative arrangements in teaching, research and service.

Physical education is a diverse field with both professional and discipline orientations. Because of the wide range of interest within each orientation subdivisions are required. Such subdivisions of the field are only acceptable if they are related directly to cognate research methodology and provide identifiable research foci that are relevant to the field. Within the several subdivisions, it is assumed the projects in which there is applied or professional emphasis may only be developed to the master's level, whereas where the primary emphasis is on the research the doctorate will be the goal.

(c) Responsibility of the Field to Society-at-Large

It is expected and essential that the academic community will remain responsive to society's needs and that, in planning, it will be both forward-looking and future-oriented not only with regard to its own specific interests but also to general universal interests. A vital graduate faculty, in its research and teaching, must be responsible to society and provide leadership that will generate the potential for social change.

Ontario universities have an important role to fulfill toward society both on a national and an international scale. Physical education has a strong tradition in societal responsiveness, although too often associated with the forces of preservation rather than with those of change. In line with the societal charge of Ontario universities in general, and that of physical education in particular, the field must be open to the structural needs of Canadian society as well as those of the international community. Physical education here and abroad is highly in need of excellence and innovativeness. Ontario universities should not merely duplicate the traditional graduate programmes offered in most United States universities. Plans for graduate study in Ontario universities should be responsive to a much larger international scene plus the unique situation of Canadian society.

Within Canadian society, a graduate programme should be responsive to the problems and should develop forces of integration and change that cater to three levels of needs through physical activity games and sport.

1. The promotion of health.
2. The individual's need for self-expression and development.
3. The societal need for integration and identity.

The promotion of health is a very complex charge for the field. This involves the development of new roles as sports and fitness consultants, and the interaction with medical and para-medical personnel in rehabilitative programmes for handicapped children and patients. The need for self-

expression and development should foster the engagement of the modern individual on his own terms, within his own capabilities, in physical activities of his own choosing, regardless of his health status which may range from the fit and skilled to the sick, deprived, or physically handicapped. With regard to integration and promotion of identity in society, the field might resolve, among others, the special needs of Franco-Ontarians or of persons in the remote areas be they in the lower classes of the larger metropolises or in the northern areas of the province.

Graduate programmes can make a viable contribution to the charge for the promotion of health and/or self-expression and development through research, through the application of research findings in action programmes, and in the preparation of professionals who are sensitive to individual and societal needs and competent to act upon them.

(d) Responsibility of the University to the Field

It is assumed that a university, once it has been willing to accept a field of study into the academic community, has the responsibility for its adequate development. This means that a university assures the observation of standards in scientific method and excellence. To support a new field in its development, the university must lend its collective expertise and the expertise of adjacent fields together with adequate material and financial resources. Although the support role of cognate departments is especially important, the discipline must ultimately be responsible for its own programme. Physical education should preserve its own identity and not be an appendage to any cognate department.

The increased democratization of the academic institution implies the recognition of the equality of rights regardless of the field of study. A dogmatic interpretation of such principle with regard to material resources would be irresponsible, because there are fields which are very vital for human survival and need more costly resources. However, the neglect of such equality would be detrimental to the interests of the academic community. In the allocation of personnel and material resources the field of physical education should be accepted on the basis of equal rights within certain justifiable limits. For a certain period of time during the early period of academic implementation, it may even require a somewhat higher allocation. It is then the charge of the discipline to respond adequately to the thrust that has been provided to it.

## C. STRUCTURAL OUTLINE OF THE FIELD

### I. Ontario Physical Education in Perspective

#### a. Historical Perspective

Among the fourteen provincially supported Ontario universities, twelve offer physical education undergraduate degree programmes and four now have a graduate programme to the master's level. The antecedent of the university programmes was the Margaret Eaton School of Literature and Expression, founded in Toronto in 1901 to provide training for young ladies planning to enter the teaching profession. In the early 1940's this School was merged with a newly created department in the University of Toronto to form the School of Physical and Health Education.

In the immediate post-war years the need for secondary school teachers stimulated a rapid expansion in the field and one Ontario university after another introduced an undergraduate physical education degree programme. By 1950, the number had grown to four and two more were added in the next decade. A strong demand for physical recreation and intramural services within the university community and the development of more sophisticated intercollegiate sport programmes were other factors promoting the continued expansion of formal academic programmes in physical education.

The fact that the great majority of graduates from these early undergraduate programmes entered the teaching profession greatly influenced their nature. In recent years other factors and other influences have become increasingly significant in determining their character. The term physical education, traditionally, has been understood to apply to the study of physical activity associated with sport, games, dance and exercise. In Ontario, in recent years a significant number of workers in the field are less interested in the preparation of people who teach fitness and sport skills and more interested in the preparation of people who study the nature of these skills. It is only recently that discussion among physical educators has reached the more rational stage of profession and discipline. The graduate programmes now being proposed in the several universities reflect this new direction.

The undergraduate programmes in physical education, quite a few of which are run as honours programmes, have undergone rather rapid development and apparently have a good measure of administrative support from their universities. Graduates from these programmes are highly regarded when they go on for graduate study in the United States. Although normal growth patterns normally should give rise to proposals for graduate physical education in Ontario, these proposals encountered a considerable degree of administrative caution, even prior to the general embargo on the implementing of new graduate programmes. The first master's programme was initiated at the University of Western Ontario in 1963. Subsequently, the universities of Ottawa, Windsor and Waterloo also introduced master's degree programmes. A few master's programmes are offered in other provinces, but only the



University of Alberta accepts candidates for the PhD, a programme introduced in the late 1960's. Thus, of more than fifty doctorates held by physical education faculty in Ontario over 90% have been obtained through study in the United States.

#### b. National Perspective

While it is accepted policy that places should be available in Ontario universities for all those Ontario citizens who possess the qualifications and who seek an undergraduate education, the approach seems to be quite conservative for graduate education. Ontario, as one of the wealthy provinces, occupies a special position and has some obligation to share its riches with the rest of Canada. Thus, the Ontario higher education system, particularly at the graduate level, should provide an avenue for study to exceptional students from Ontario, the rest of Canada, and, from less fortunate countries. This is already the case in areas other than physical education.

Prominent among the reasons given for seeking "Canadianization" in graduate physical education is the belief that there has been an over-emphasis on competitive athletics in the universities of the United States, and that the development of physical education programmes per se has been adversely affected by association with this development. Canadian physical educators encounter a degree of bias among their colleagues in other university divisions which appears to stem from their aversion to the notoriety associated with competitive sports in universities south of the border. For this end for other reasons there has been an effort made in Canada to maintain a sense of balance in the development of intercollegiate athletic programmes. However, the influence of athletics has had a much greater impact on the undergraduate than on the graduate programme.

In physical education graduate programmes special attention should be given to bilingualism, outdoor activities in northern areas, and the changing patterns of sport. Graduate programmes could make the natural resources of Ontario available for special study. On the background of the structure of the province and of Canada as a pluralistic modern society with rich natural and ethnic resources, with remote areas of wilderness and the most rapidly growing metropolises, sport and physical activity take on unique features that make this area worthy of academic study and full professionalization.

#### c. International Perspective

In Ontario, and in Canada generally, physical education developments have lagged behind developments in other countries. Indeed, the comparatively late development of training programmes in physical education and the almost complete absence of graduate programmes and research, up to very recently, have very few parallels in the international community of academic studies. It appears that in this area more than in others Canadian society

and Ontario have relied on the supply of qualified manpower from universities in the United States. The absence of graduate programmes, specifically for the PhD, may also be a result of the fact that the British situation was taken as a model for university organization. Although substantial efforts were made in the last decade, including the implementation of a PhD, British physical education is probably the least progressive among developed nations in the scientific study of sport, movement and exercise. Models for the development of academic departments should rather have been the Scandinavian countries, where a clear understanding of research in the field has been in existence for over 100 years; Germany, where representatives of the medical sciences (Du Bois-Reymond, Bier) have long supported research in sport; Japan and the countries of Eastern Europe where, even before communistic rule, substantial scientific endeavours could be observed. Florian Znaniecki in Poland (1930) as well as Max Scheler in Germany (1927) pointed to the superb role of this field for the future of modern man, and so did Herber Spencer in England (1896).\*

In the United States programmes were introduced into universities and colleges around the turn of the century and, at present, major academic institutions have graduate programmes that lead to the PhD (or the equivalent), with Columbia and New York University being the first in 1924. However, graduate programmes in the United States are not very innovative and in international comparison should be used as models to only a limited degree.

On an international scale, physical education, physical culture, or sport science shows these general features: An increased awareness for interdisciplinary research not only in the traditional field of sports-medicine but in such disciplines as psychology, sociology and history of sport as well. Furthermore, a definite feature, unlike that of physical education on the North American continent, is the development of education theories and the scientific study and promotion of competitive athletics. There is also considerable concern for the development of programmes for the handicapped and disabled.

With regard to the level of study, most countries offer PhD programmes in their universities or graduate colleges and basic disciplinary research is widely developed. This research has been useful not only for professional training within the field, but it has given insights for the functioning of the human body. Sport scientists in Denmark, Finland, Germany and Sweden rank among the best in such disciplines as physiology and sociology. Research facilities such as those in Jyväskylä (Finland), Leipzig (East Germany), Cologne (West Germany) are, in material and financial support, better supplied than comparable institutions in the United States. Universities in Ontario appear to be in the unique position to attain the very highest level in international comparison, which would enable them to

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\* F. Znaniecki. *Socjologia wychowani*, 2 vol. Warsaw 1930.  
 M. Scheler. *Foreword to A. Peters, Psychologie des Sports*. Leipzig 1927  
 H. Spencer. *Education*, resp. chapter "Physical Education", London 1896

substantially provide a much needed reform of the field on this continent. The consultants are of the opinion that considerations for the implementation of graduate programmes should be advanced only on such level, or the expenses and efforts should better be saved. In such context "Canadianization" can take on a much desired and more positive meaning.

## II. Definition of the Field

At the present time it is more difficult than ever to define "physical education". As applied to a department, school or faculty in Ontario universities, the term is clearly a misnomer that creates an erroneous image in the minds of both university colleagues and the population at large. Physical education is associated historically and as a popular stereotype with the teaching of sports skills in public and elementary school gymnasias. It is difficult for academicians and lay persons who have been exposed to most public school physical education programmes, as everyone in Ontario has, to perceive of graduate work in "physical education".

Some departments, schools and faculties in Ontario have attempted to meet the challenge of a new definition with such designations as "kinesiology, kinanthropology, and human kinetics". Such attempts reflect the concern over a clearly identifiable area for scientific study. Each of these terms has severe limitations in scope, interpretation, or both.

The consultants see the necessity that units which do more than merely prepare physical education teachers for public schools adopt a name broad enough to include diverse fields and comprehensive enough to secure integration and professional and scientific identity. Sport science is such a term that has been accepted internationally and within Canada as well. The term sport is certainly not without problems but it designates a clearly and increasingly recognized institutional construct in modern society such as law, medicine and religion.

We realize that because of the emphasis on human movement, or dance, or on both activities, and their lack of emphasis on sports and rehabilitation, some units will not wish to adopt such a broader term. We accept the need for diverse approaches in a field that is undergoing rapid change, but the diversity of terms currently in use in Ontario is confusing to the various university faculties, to the undergraduates and graduates in the field, and to the public at large. It signals a situation in which the discipline is unable, up to this time, to really find its mission and identity. Such situation is not uncommon to other fields in academia although it appears as strong in this one as in any. While the consultants are reluctant to impose their own best solution at this time, they would nevertheless urge the Discipline Group to take this problem seriously and to settle for a unifying term and then to define and promote it in line with their own philosophy.

### III. Scope and Subdivisions of the Discipline

#### (a) Scope

The discipline is delimited by its focus on a social institution that, in its core, sees man in motion within the context of groups engaged in a non-utilitarian physical activity. The activity and personal and social context may be analyzed in terms of either its acute or chronic aspects. Studies may be undertaken using one of the methodological subdivisions outlined below or by a comprehensive professional approach.

The exclusive focus of the discipline on man clearly differentiates the primary interest in the field from that of biology or physiology. Such focus requires that scientists in the field pose and investigate their problems within the constraint of human activity. Concentration should be on human subjects and animal research should be undertaken only in extenuating circumstances. This is particularly true because of the difficulty of extrapolating data collected on animals to man. Meaningful data on the effect of man of interval vs. continuous training and strength vs. endurance training are not likely to be obtained from investigations on rats, guinea pigs, or dogs.

Animal research in selected biology, anatomy, physiology, and physical education laboratories has contributed a great deal to the body of knowledge in the field regarding the morphology of muscle and the biochemistry and physiology of muscular contraction. This information must be integrated into the current practices and future research in the field. Additional information on biochemistry and physiology of exercise must also be forthcoming. However, it is not in the best interests of most departments and schools of physical education to support faculty, equipment and facilities involved in animal research. Any attempt to duplicate the faculty and facilities that already exist and are productive in animal research would be erroneous. First class junior scientists in biochemistry and physiology should take post-doctoral training and compete for positions in existing laboratories or in cognate departments.

The point of view to not focus on animal research but rather on humans is relevant and of interest beyond the physiological level. Many insights concerning human behaviour have been projected by ethiologists from their observations of animals. Such theories have the deficiency, that they can ultimately hardly account for social structures and not at all for the level of culture. Here the study of sport and interaction of humans in game encounters can provide insights by means of social science methods for such problems as the control of aggression and the regulations of conflict, that the physio-psychologist or ethiologist with their data and concepts cannot account for. In this regard, the field of sport not only provides valuable information about the human body under extreme stress but it also provides insights into social phenomena that are easily observable in the sports situation with, at times, quasi-experimental character. A research-

oriented discipline on the PhD level can thus be expected to not only generate knowledge for its own field but for such disciplines as physiology, psychology, sociology as well. Also the area known as biomechanics signals an approach, where the science of sport and movement can explore a field, that has considerable practical and therapeutical applications.

In implementing the traditional charges of the university of research, teaching and service, two principles become paramount for the field: the general creation of a body of knowledge (the discipline approach), and the career training of professionals (the professional approach). A considerable part of the service charge can be delivered through the training of professionals. The field of physical education faces a situation that can formally be compared to such other areas as law, medicine, religion. All these institutions are supported by a high level of rationality and competence, mostly provided by extensive academic disciplines. As with law and medicine, physical education has responsibilities to a discipline as well as a professional approach. To resolve the diversity of practical problems it must respond to the need for training professionals for a wide variety of careers.

The discipline has not been very responsive to such needs, neither in the training of professionals nor in the provision of knowledge about the emergence or need for such roles. It has failed considerably in its service discharge by promoting, primarily, careers for teachers, and to a lesser extent for coaches. In this way it has rather reacted to the stimuli of its own organizational and the educational status quo than to respond to the unfolding structure of future society and the needs of modern man.

The emphasis on the discipline aspect and on the generation of knowledge is absolutely necessary in a broad field in which the body of scientific knowledge is spotty and thus hinders the adequate discharge of professionalization of the field. At the same time, there is the danger that physical education may try to define its academic role only in terms of the traditional aspects of natural science or as a pure science, while its charge is as much professional, humanistic and social as it is disciplinary and scientific. The attempt to define the field solely on the basis of an object that can be clearly observed and measured has to be seen on this background. The field should have an orientation similar to law and medicine rather than a delimited approach, as that of physics. In this context, movement is an important, but not the only defining element, for the field. A single department might concentrate exclusively on the study of movement but it would be an impoverishment of the field and an inadequate discharge of professional, societal and academic responsibilities for physical education throughout the province to restrict itself this narrowly. As in medicine, law, and pharmacy, the professional and applied aspects of the field should be considered or at least equal importance to the disciplinary aspects. While departmental resources and expertise may be strongly keyed

toward research and the discipline approach, study programmes should allow training a much higher number of advanced professionals than researchers and new faculty.

(b) The Subdivisions of the Discipline

While the subject area of the field can be approached in scientific study and theory from quite a few related disciplines, the principle of parsimony and scarcity in theory building suggests cutting such approaches to an absolute limit. The Physical Education Discipline Group has adopted 10 subdivisions for graduate work, with the stated intention of adding additional subdivisions as need arises. These subdivisions mix professional as well as disciplinary aspects. They also invite caution from a practical or organizational viewpoint. From a practical viewpoint, the proposed subdivisions include considerable overlap conceptually and also in terms of faculty participation, since many faculty are cited as being expert in more than one subdivision. Specifically, for Ontario, the listing of 10 subdivisions is much too extensive in terms of the: 1. scope of physical education; 2. qualifications of the existing graduate faculties or of the potential graduate faculties; 3. the resources in physical education departments and in cognate departments; 4. needs of graduate students; 5. economic and cultural requirements for physical educators; 6. expected financial support of physical education.

From an organizational viewpoint, 10 subdivisions of physical education, with a broad range and much overlap, appear to fragment further an already fragmented discipline. Graduate programmes in physical education need not, and should not, be offered to cover each individual aspect of movement, physical activity and sport. The unique concern of the field is the effect of sport and physical activity, in its broadest context, on man. Sound arguments can be marshalled for graduate programmes in: 1) Sociology of Sport which, in method, will include philosophical and historical aspects; 2) Psycho-motor behaviour; 3) Physiology of Exercise; and 4) Biomechanics. Each of the subdivisions has aspects that are crucial and unique to the field, yet has the added advantage of strong cognate disciplines on most campuses in departments of 1) Sociology; 2) Psychology; 3) Physiology; and 4) Anatomy and/or Engineering.

While the consultants propose that a discipline of physical education be subdivided into four subdivisions, it might be advisable to reduce the number of subdivisions to only three. Biomechanics and psycho-motor behaviour then could be subsumed under the concept of motor behaviour or movement study.

At the master's level such subdivisions may prevail, yet the major orientation of programmes should be more professional in order to train for specific careers. The professional training in master's programmes need not be career specific under all circumstances. The professional orientation may also prevail through the substitution of extensive internship in place of a thesis.

The PhD programme, in its curriculum, should not only provide courses and research opportunities in the subdivisions, it should also provide for competence in epistemology (philosophy of science). A most crucial aspect of such a curriculum would be the development of comprehensive knowledge in a general theory of the discipline. Appropriate consideration also needs to be given to the integration of research findings into planning; action programmes, methods of instruction. Aspects of the humanities would be involved in such integrative activities as well as under the subdivision of sociology of sport. In this latter context, the historical and philosophical methods might, on occasion, be relevant to the solution of specific research problems.

(c) Major Role Complexes for Graduates

The discipline at large, and the professional programmes in particular, may be seen as catering to three major role complexes: 1. Education, 2. Sport, 3. Rehabilitation.

1. Educational roles include the traditional role of the teacher in physical education, but one may incorporate here the sport scientist as well. On the teacher's level one may project a more sophisticated approach to teaching and a body of knowledge that is better geared to the child, its growth and development, as well as to the educational values that it is exposed to by sport. One may also foresee that the physical educator of the future is capable of developing every child according to his needs including the correction of physical weaknesses.

In the future, the scientist in this field should be well trained to conduct research in his discipline; at the same time should be able to provide expertise for related disciplines as well. In this regard graduate programmes, under all circumstances should avoid the common error of providing only replications of their own faculty. Graduates should be qualified to find employment in other disciplines, and outside of higher education as well.

2. Sport roles are those of the coach and sport administrator, but one may introduce the idea of the professional performer as well. With regard to the latter it appears feasible that the athlete of the future may be a true professional, who has undergone differentiated training on a scientific basis and has not been an apprentice in an occupation, as is presently the case. Whether such models, as they appear marginally in East Europe at this time, will become at all a reality will have to be seen in the future.

A more likely possibility is the immediate increased professionalization of coaches. While coaching has so far relied mainly on the practical experiences of former athletes, there is ample evidence, that the coach of the future needs to be adequately trained in exercise physiology, psychology, and sociology in order to understand the complex structure of athletes and teams in a sport contest.

The institution of sport has produced another feature, an increased

bureaucratization in sports governing bodies and organizations that are engaged in sport. This will definitely require professionals with adequate training, and a few undergraduate programmes in business administration are ample witness for the existence of such needs.

Fitness and outdoor activity leaders comprise two roles that are not well defined at this time but seem to respond to an increasing need. Private institutes for fitness are witness to this and urban planners see a definite demand for fitness leaders in communities in the future. Outdoor activity leaders are, to a certain degree, synonymous with recreation leaders. A degree on the master's level would promote the competence of such leaders beyond mere activities into outdoor planning and organization.

3. Rehabilitation This whole complex is not adequately explored, but a number of definite professional roles stand out at this time. Cardiac rehabilitation is of increasing importance and requires a level of competence well above that of the traditional physiotherapist yet below that of a regular physician.

Social rehabilitation by means of sport is being practiced in penal institutions, but little expertise seems to prevail at that level. In this broad complex one may also see programmes in inner cities for adolescents and youth.

Games and sports are important tools for psychological therapy and rehabilitation of retarded children and other psycho-therapeutic cases. While these are not clearly defined roles at this time personnel in mental hospitals or child-care centers may well require an expertise in physical activities and thus allow for considerable employment.

The latter holds as well for the treatment of movement deficiencies either of spastic cases or of the increasing number of people involved in accidents. As "sport service leaders" a role complex may be identified that ranges from outdoor sports for all age groups over the fitness needs of middle-age urbanites to special programmes to be provided for the aged or industrial workers.

While a certain amount of training in the above careers could be provided now on an undergraduate level, their relatively high specialization and considerably deeper insight for such roles would rather require a training on the master's level.

There are two areas that could be identified as further role complexes: Health Education and Recreation. Both may well require graduate training as well. While recreational programmes can be seen as closely related to sport service programmes in outdoor sports, health education programmes have a considerably different focus and probably relate more closely to public health, although through sports substantial contributions may be made to personal hygiene and health care.



## (d) Standards for Graduate Programmes

If graduate programmes are to be innovative, of high quality, and be oriented toward academic excellence, minimum standards must be applied for faculty, research, laboratories, libraries, cognate departments, supplementary personnel, and graduate students. Graduate programmes should not be implemented nor maintained except in so far as these minimum criteria are met fully.

## (i) Faculty

Faculty should have adequate career training up to the PhD level either within a subdivision of their own field or within a cognate discipline. They should have demonstrated their ability to undertake independent research by presentations at national and international meetings and such work should culminate in the publication of research articles in refereed professional journals. The role of review articles and generalized statements in non-refereed journals is recognized in an emerging field in which scholars are attempting to communicate with practitioners. However, the number of refereed articles published is the best indicator of the standing and productivity of a scientist in his own field.

Faculty who advise and teach in master's programmes only should have scholarly recognition within their own discipline and should have a minimum of three research publications in professional journals in their own field. Faculty who advise and teach in doctoral programmes should have acknowledged interdisciplinary recognition as scholars and should have research publications in refereed journals. A senior research scholar should fulfill the latter requirement and in addition be senior author of more than five refereed papers and have the rank of Associate Professor or Professor.

In order to provide adequate teaching, advising and supervision of research for graduate students and the necessary interplay of different theoretical and methodological approaches to concepts and research problems in a given area, a critical mass of research scholars is necessary. For doctoral programmes in a specific subdivision we propose a minimum of two senior research scholars and two junior research scholars in that subdivision. For master's programmes two junior research scholars would be adequate.

## (ii) Research

Faculty who are advisors and research supervisors in graduate programmes should have ongoing personal research projects. Graduate student research should not constitute their only involvement in research. Faculty at the PhD level should be expected to support their own research and the research of their graduate students through grants. Such outside support should also support some of the research at the master's level. Universities should, however, make research funds available directly to the unit and on a university wide competitive basis for graduate student and junior faculty

research. Units that do not display research productivity should not be involved in the conduct of graduate programmes. We strongly subscribe to the concept of the PhD as a research degree and faculty responsible for the doctoral programmes must be established research scholars.

(iii) Laboratories

Adequate laboratory facilities must be provided for each subdivision in which a graduate degree is to be offered. The requirements of the laboratory facilities will vary greatly amongst the various subdivisions, on the type of research within the subdivision, on the number of faculty, and on the number of students. In biological science subdivisions in which research requires laboratory space, each faculty member should have a personal laboratory for ongoing research. The trend toward department laboratories presents a serious curtailment to the individual research of faculty members. Space should be available on a transient basis for graduate students to set up their individual research projects.

(iv) Library

In general, library holdings in the field and in adjacent areas need to be adequate. Typically libraries backing PhD programmes should have 50 specialized national and international journals (non-technical) and 15,000 volumes in the discipline, while standards for master's programmes should be 25 journals and 5,000 volumes. Examples of journals that qualify would include *Arbeitsphysiologie*, *Journal of Motor Behaviour*, *International Review of Sport Sociology*, *Journal of Leisure Research*, *Sportwissenschaft*. Journals not qualifying, for being too technical for the graduate level, would be, e.g. *Swim Coach*, *Physical Educator*, *Track and Field News*.

(v) Cognate Departments and Schools

The cooperation and exchange of faculty and students with other Departments should be sought. PhD programmes should be implemented only in those sub-disciplines where a cognate Department (e.g., anatomy, sociology, psychology, physiology) can provide adequate support within the same university.

(vi) Supplementary Personnel

Technicians for laboratory work as well as typists and secretaries should be provided for both faculty and graduate student research, and for teaching and field work. The number of support personnel will depend on the number of faculty and graduate students who are involved in research.

D. FUTURE PROSPECTS AND MANPOWER NEEDS

The need for a graduate study programme and the type of programme to be offered will be determined by factors such as the future prospects of the field and its manpower needs as well as by the standards and qualitative considerations described above. While figures concerning manpower needs are used for programme organization in many fields, the needs of physical education have, in addition, to be determined by such considerations as professionalization of a so-far only marginally professionalized field, or by experiences in other academic fields and graduate programmes in general. The application of the latter considerations are based on the assumption that this discipline should, in principle, have the same privileges as other areas of study. Standards of other fields and professional careers such as those of engineering, education, or pharmacy, may well be the basis for considering suitable criteria for graduate programme implementation.

This evaluation will consider the following conditions as a frame of reference for future prospects:

1. That adequate professionalization should be allowed as in other academic fields. Experience and figures for Ontario and Canada on size and resources of other fields that are adequately professionalized could be applied.
2. That a limited disciplinary approach for the sake of knowledge in the field is essential for professionalization and future planning; this justifies the implementation of a few high-level PhD programmes.
3. That a cautious estimate of future career prospects in the field will be the basis for forecasting manpower needs in other than the traditional area of teaching in the educational institutions.
4. That the level of competence of all faculty in the discipline, graduate and undergraduate, be increased. Faculty on the undergraduate level should preferably hold PhD's and should be involved in research.

I. The Present Situation in Physical Education Graduate Programmes

Figures concerning physical education graduate programmes and degrees are low for Canada in general and include a certain number of recreation and health education students as well. The latter will be neglected in the statistics throughout since they do not substantially alter the picture. The ratio of undergraduate to graduate students is reliable for the total number of students, but figures for individual disciplines are unreliable in almost all areas due to differences of definition of fields on the undergraduate and graduate level. Such ratios, although highly desirable as indicated above, cannot be reported.

Table 1 - Canadian figures for the total number of graduate students in physical education, the number of physical education students as a percentage of the total number of graduate students, and the total number of graduate degrees in physical education 1971-72 (1969-70 in brackets).

	Total No. P.E. Grad. Students	P.E. as % of total (all fields)	PhD's	Master's
Maritime Provinces	33 (-)	1.3	- (-)	- (-)
Quebec	37 (3)	.3	- (-)	- (-)
Western Provinces	120 (90)	1.2	7 (2)	34 (43)
Ontario	91 (76)	.5	- (-)	23 (5)

From: Canadian Association of Graduate Schools, 1972

The figures in Table 1 which include part-time students, reflect the fairly recent establishment of graduate programmes in physical education across Canada with the exception of Master's programmes in the Western Provinces and Ontario. In comparison to over-all enrolment figures, Ontario and Quebec lag behind the Maritimes and Western provinces; in the Western provinces, only one institution (Alberta) provides a PhD in the field. Alberta has a very high output of doctorates and, among Canadian universities, is the only source of new graduate faculty for Ontario. While Ontario universities account, in general, for 45% of Canadian graduate enrolments, they account for only 30% in physical education (1971-72).

## II. Graduate enrolments and degree projections in comparison to other fields and to undergraduate base

Over-all actual enrolment figures in Ontario show a steady increase of graduate vs. undergraduate students and while standing at 17% for 1967 were estimated to be 20% for 1973, with a projected figure of 24% in 1980. This has to be seen on the background of a steady population increase in the province and increased general professionalization of the labour force. This has resulted in higher over-all enrolment figures

for graduate students. Watson and Butorac (1968) do not include any data on physical education in their predictions of manpower needs for the years 1961 to 1986. Therefore, they do not list physical education among the fields for which they expect increased professionalization. However, we would expect it will be one of the fields which will experience more professionalization than the average.

Enrolment projections that graduate students will number approximately 25% of the undergraduate enrolments cannot be used as a guideline for projecting enrolments in physical education because these figures are inflated by fields such as physics and chemistry that are heavily graduate study-oriented. A safe and conservative forecast for physical education would be 10% graduate students as compared to the total undergraduate base, which would mean that about one third of undergraduates take up graduate work.

Unlike the slightly downward trend for student enrolments in 1971 and 1972, the actual enrolments in physical education for these years, and in 1973, have been higher than expected. For 1970-71, 2130 were projected by Watson and Quazi, 1969, whereas in the spring of 1971, 2425 were reported by the Discipline Group - a difference of + 14%.

Table 2 - Undergraduate Enrolment Projections in Health and Physical Education in 1975, 1980, 1985, and Graduate Enrolment Projections

Year	Undergraduate Projection	Graduate Projection (10%)
1975	3030	303
1980	3750	375
1985*	4000	400

1975 and 1980 figures after Watson and Quazi, 1969, p 37.

\* Figures for 1985 assume a levelling-off in enrolments.

With regard to graduate enrolment predictions (Table 2), it can also be assumed that members of previous graduating classes, now on the job, would seek admission to new graduate programmes in significant numbers, if only as part-time students. A figure of 350 might thus indicate the demand for 1975, based on a general projection of 10% from the undergraduate base. The present over-supply of high school teachers, specifically among males, in the field of physical education may also lead to increased demands for graduate study. By 1980, the demand

resulting from the existing back-log of candidates for graduate study can be expected to decline, if prior to this new programmes are in operation. Thus, 375 for 1980 and 400 for 1985 can be assumed as graduate enrolment projections on the basis of what, somewhat incorrectly, may be called student demand (Table 2).

If one assumes similar trends as are indicated in other PhD-granting departments of the academic subjects listed in the Canadian Association of Graduate Schools report, under Divisions A and B, for 1971-72, then 11% of all graduate students would be expected to be enrolled in PhD and 89% in master's programmes. A slight increase in the percentage of PhD's can be anticipated for physical education as well as for other fields in the period to come, which leads us to a projection of 12% for 1975, 16% for 1980, and 20% for 1985 for PhD enrolments in graduate programmes over-all. In addition, the figures have to be corrected for drop-outs, which are predicted as 20% for master's and 10% for PhD candidates. On this basis the following degree output prediction can be made.

Table 3 - Expected student enrolments and degree outputs each year for Physical Education in Ontario, corrected for drop-outs and with increasing percentage of PhD degrees compared to the number of master's degrees (see text).

Year	Expected Enrolment as of previous year	Master's	PhD
1976	350	246	13 (1978)
1981	375	252	18 (1983)
1986	400	256	24 (1988)

It is assumed that a PhD study will require 3 years, in the average, after the Master's degree.

Experience in other fields and student demand cannot be the only guidelines for enrolment and degree predictions in physical education. Furthermore, the existing programmes and the newly implemented programmes in Ontario cannot possibly absorb the 350 graduate students predicted nor produce 246 master's or 13 PhD's by 1976 (Table 3). Considerations of manpower demand and of the academic standards provided by the degree-granting departments and universities have to be considered as well. Demands for academic excellence and quality will not allow an expansion up to the above figures for 1975-76. Therefore, these projected figures will not be reached by 1980-81. A more realistic projection for 1980 would be a

graduate programme size of 200.

### III. Manpower Needs as a Determinant of Programme Size and Demand

As mentioned earlier, the field of physical education has severe boundary problems as compared to well established fields that have clearly institutionalized careers for their graduates. This poses considerable difficulties for manpower projections in addition to the substantial problems that are present normally in such projections. However, the exercise of manpower predictions is a crucial and necessary operation in any type of planning.

Although potentialities for new careers and expansion of the discipline of physical education are fairly obvious, up to now the potentialities have not been appropriately researched. Consequently, actual employment demands are unknown. Also, career predictions for physical education are absent from all manpower predictions (Watson and Butorac, 1968, Holland et al., 1972). This may reflect a general neglect of the field as well as avoidance because of the boundary problems.

Upon completing an advanced degree in physical education, the graduate may assume a professional role in any one of the following fields: university faculty, school teaching, coaching, sports administration, rehabilitation of the handicapped (physical as well as social and psychological), fitness and preventative health programmes, and community sport gerontology. Some of these careers in educational organizations are well institutionalized and thus can lead to comparatively easy projection. Others are neither institutionalized nor are they well defined, although in long-range projections, or by political fiat in shorter terms, they may become increasingly important (e.g. as in sport organizations or in rehabilitation).

(a) The need for personnel with advanced degrees in schools, colleges and universities

1. Schools and Community Colleges. It can be assumed that the schools will need a limited number of teachers with master's degrees. Although, at this time, the demand for teachers of physical education is low, particularly for males, there is need for more competence in the substance area of the field. One also can assume a general interest in advanced study amongst teachers as part of their professional aspirations and as a result of increased competition for job openings. Community colleges should employ faculty with master's degrees, with possibly a few PhD's. Some of the demand will be supplied from programmes in other provinces and in the United States, however, Ontario's general reputation in graduate education will result, in turn, in some loss of graduates to other provinces and to the United States. Thus, it is assumed that projections for manpower needs can be made on the basis of demand in Ontario along, as inflow and outflow may well balance out.

As of 1968, in Ontario 10% of male and 6% of female secondary teachers held master's degrees, while 0.3% and 0.2% respectively held PhD's. This proportion was slowly on the increase at that time (Watson, Quazi, Poyntz, 1972), a trend that appears to be holding. Figures for elementary school teachers are not available. Over-all, if one adjusts for a stronger trend toward advanced degrees among younger teachers, one may predict a demand of 10% for advanced degrees. However, a certain portion now have, or will seek, advanced training not in their substantive area but in education, educational administration or counselling. Thus, a more conservative prediction for physical education could assume 5% would seek a master's degree in their substantive area. Based on the data of Watson et al. (1972), a net intake of 600 elementary and secondary teachers, would account for 30 master's degrees and possible 1 PhD per year. It can be assumed that in the first years of implementation of master's programmes a certain number of teachers on the job would seek an advanced degree, which would suggest putting the actual demand at 35 master's degrees and 1 PhD. While this increased demand in the early period may level off, it will be countered by a slow increase in the total percentage who seek advanced degrees. Therefore, the prediction may be kept standard over the period 1975 to 1985.

The demand for the 30 community colleges and other post-secondary institutions in Ontario is estimated at no more than 6 master's degrees and one-half PhD per year; this also would satisfy any demand for coaches with advanced degrees in these colleges.

To estimate the necessary programme size from the above considerations, it is necessary to account for drop-outs from master's programmes. We predict the drop-out rate to be approximately 20%. Thus, in Ontario there is need for the training of 50 master's students for elementary and secondary schools and community colleges. The projection for PhD's need not be higher than 1.5. Not all of these graduates need to be in general programmes but may well specialize in an applied area. From such backgrounds they will bring a special competence to their schools and a possibility of implementing special programmes.

2. Universities. Generally, and in physical education departments in particular, universities make a distinction between the degree qualification of graduate and undergraduate faculty. This is only justified for technical instruction, which typically is provided in the lower-level courses of the undergraduate programme. Even these faculty should involve themselves in research and graduate study. Under these conditions, the master's degree would be a minimum requirement for the undergraduate faculty and a PhD the requirement for the graduate faculty. Ontario universities have a ratio of 60% PhD's in the humanities and substantially more in all other fields (COU Brief. 71-14). In line with this, the projected demand for PhD's in the hiring of new faculty after 1980 may be put at 75%, with only 25% of new faculty having the master's degree. In this way, physical education faculties would by 1985 meet the present standard in the humanities.



Table 4 - Number of faculty in Ontario physical education departments and their advanced degrees, total undergraduate and graduate enrolments, and faculty-student ratios.

	Total Faculty	Master's No. %	PhD's No. %	Total Enrolment Under- graduate	Graduate	Faculty/ Student ratio
1966-67	117	52 45	6 5	943	n.a.	1:8+graduate
1970-71	246	110 45	56 23	2425	85	1:10+graduate
1975-76(proj.)	303	150 49	106 35	3030	100	1:10+graduate
1980-81(proj.)	375	185 49	175 47	3750	200	1:10+graduate
1985-86(proj.)	400	150 38	250 62	4000	200	1:10+graduate

To upgrade physical education faculties to the status outlined in Table 4, will require the addition of approximately 80 PhD's between 1974 and 1980. A forecast of 200 graduate students (p.A27) for 1980 would require that an additional 25 PhD's be hired during these years. This would mean a net intake of 105 PhD's and approximately 70 master's. A substantial number of these may come from foreign countries and other Provinces and some Canadians at U.S. universities may wish to return to their native land. Some appointments may and should be made from cognate fields; this appears to be particularly advisable with regard to senior faculty and well established scholars. The rest would have to be produced by PhD programmes in Ontario itself.

Table 5 - Projected PhD hirings in physical education, Ontario 1974-1985.

	Total Demand	Source of Supply		
		Ontario Programme	U. S., Other Provinces and Other Countries	Cognate Discipline
1974	15	-	10	5
1975	15	-	10	5
1976	15	2	8	5
1977	15	4	6	5
1978	15	6	4	5
1979	15	8	4	3
1980	15	10	2	3
1981	15	10	2	3
1982	15	10	2	3
1983	15	10	2	3
1984	15	10	2	3
1985	15	10	2	3

The figures in Table 5 will have to be increased slightly for attrition rates due to death and retirement, generally estimated at 3.5% per year. Because of the comparatively lower age of the present physical education faculty it may be set at only 2.5%, with a general increase to 3.0% by 1985. The above figures do not account for out-of-province and inter-disciplinary migration of potential and present faculty.

For master's degrees it can be assumed that the greater part of the demand will be supplied by Ontario graduate departments. Attrition rates and migration would put manpower demands for master's degrees in physical education at slightly higher than 10 up to 1980, and 5 thereafter (Table 6).

Table 6 - Projected master's degree hirings in physical education - Ontario, 1974-1985

	Total Demand	Source of Supply		
		Ontario Programme	U.S., Other Provinces and Other Countries	Cognate Discipline
1974	10	6	2	2
1975	10	8	2	-
1976	10	8	2	-
1977	10	8	2	-
1978	10	8	2	-
1979	10	8	2	-
1980	10	8	2	-
1981	5	4	1	-
1982	5	4	1	-
1983	5	4	1	-
1984	5	4	1	-
1985	5	4	1	-

(b) The needs for advanced degrees in non-educational professions

It is difficult to estimate the manpower needs for the less institutionalized professional careers in the field. Career definitions will have to be worked out as well with disciplines that are substantially in conflict with physical education, e.g. rehabilitation medicine and other para-medical fields. By and large, one may distinguish activities such as coaching, sports administration, fitness and outdoor activities from rehabilitative activities.

## 1. Sport Careers

Sport coaches are needed on an advanced level for regional and national sport organizations as well as for individual teams, clubs and universities. At this time, no clear requirements are set but increased professionalization would justify special master's programmes for coaching, with a projected degree output of 10 per year up to 1980. Thereafter, demands for such personnel may well go up. In order to effectively apply new knowledge in the field, leading coaches also want to advance their qualification through study at the PhD level; but one should not predict more than .5 per year.

Sport administrators, with a special master's degree, are needed in the newly emerging sport bureaucracy. Such programmes are already in existence in undergraduate business administration, where very good career opportunities are reported. Conservative estimates may put the demand for such graduates at 3 per year and possibly .5 to proceed to the PhD.

Fitness and outdoor activity leaders are emerging roles and it is difficult to forecast manpower demands for them. The development of private fitness clubs and community demands indicate such needs. On a limited level one may estimate a manpower need of 6 for the province. However, this may be an area of substantial growth in careers after such professional interests have been provided for through a master's programme.

## 2. Rehabilitative sport professions

Physical rehabilitation may be provided by an exercise leader for cardiac cases, and for those that need physical rehabilitation and corrections of body impairments in childhood or after accidents. Corrective exercise programmes are widely known and are provided for in European physical education, and accident rehabilitation is receiving increasing attention on this continent as well. In manpower need, cardiac rehabilitation can be put as high as 10 per year and sport rehabilitation and corrective exercise may easily need 10 master's degrees as well. At the same time, it should be stressed that there is little or no provision at present for remuneration for such services. However, this situation may drastically change in the light of trends to supply more trained personnel in this para-medical field.

Psychological rehabilitation through sport and movement exercise can be provided for retarded and abnormal children. Mental institutions and care centres have indicated interest in employing professionals from the field of physical education or kinesiology. One may project a demand of 5 master's degrees per year. Such graduates may be employed in special schools as well.

Social rehabilitation may cater to the needs of special underprivileged groups in cities as well as inmates in penal institutions. For the time being, an estimate for such needs should not be put higher than 5 master's

per year for the province. In the latter two fields a few PhD's estimated at .5 per year, also may be absorbed.

(c) In addition to the fairly obvious careers that are now emerging, there also is a group of careers that can be designated as sports service leaders and that would cater to such groups as pre-school children, community groups, senior citizens, as well as industrial sport and physical exercise groups. These are unexplored areas for which no special programmes are planned. However, a limited number of master's graduates may find employment in such areas. No estimate can be put forward at this time.

(d) A certain number of master's degrees should be calculated for other less obvious fields that might find such physical education graduates helpful, e.g. industry, commerce, and tourism. A certain number also should be assigned to those students en-route to a PhD and a university career.

#### IV. SUMMARY of Manpower Needs, Degrees and Programme Size

Based on the projected manpower needs per year, the figures for PhD candidates have to be adjusted for the fact that the period of study, after a master's degree, is estimated to be an additional 3 years on average. For an estimate of programme sizes, adjustments have to be made for drop-outs and for graduates who leave Canada. Emigration could be particularly high if Ontario universities succeed in establishing, in content and excellence, a type of graduate programme not found elsewhere. While one may reason that the above estimates are low and below the earlier figures estimated from student demands, they are, in the absence of specific data, our best forecast for needed programme sizes.

The overall size of graduate programmes would thus be projected for 1980 as 200, which is in line with the earlier estimate of a programme size of only 5% of the undergraduate base. The number of PhD students is higher than suggested on page A27 in line with student demands and experiences in other fields. The discrepancy is in part a result of the fact that manpower demands were easier to predict within the educational context, and also of the immediate needs of physical education departments for upgrading this faculty. The rather low projections for professional degrees as compared to the relative high projections for discipline degrees reflects the probability that the field would just perpetuate its own experience within the institution of education, specifically in institutions of higher learning. Ultimately, an applied discipline can only be justified if it delivers adequate services to society and modern man. At this time, in physical education this is only the case within the realm of teaching, and a stronger professional orientation toward other areas of society is necessary.

Table 7 - Manpower needs for master's and PhD degrees in physical education in Ontario in 1980 and size of graduate programmes for the field (normal and rehabilitative)

	Master's	PhD	Predictions after 1980
<u>Education</u>			
Schools	35	1	
Colleges	6	.5	
Universities	10	12	Master's to decrease
<u>Sport professions</u>			
Coaching	10	.5	may increase
Sport administration	3	.5	
Fitness, outdoor activity	6	-	
<u>Rehabilitative Sport Professions</u>			
Physical rehabilitation			
cardiac rehabilitation	10	-	may increase
physical, corrective	10	-	may increase
Psychological rehabilitation	5	.25	may increase
Social rehabilitation	5	.25	may increase
<u>Sport Service Leaders</u>	-	-	
<u>Unspecified other</u>	10	-	
<u>Discipline tw. PhD</u>	12	-	
<hr/>			
Total	122	15	
adjustments for drop-outs, and outside migration			
20% Master's PhD	25	3	may increase
<hr/>			
Programme Size	147	18 x 3	= 54

The projection needs are conservative and treat the situation of professional careers on the basis of linear projections, past experiences and the status quo. As with all manpower projections, our projections are highly suspect, since they do not accommodate behaviour modifications of the populace or of graduate candidates themselves nor do they leave room for policy decisions to be instigated at a higher political level of administration or as a result of socio-political process. With regard to the latter, considerations which have recently been brought forward in Ontario for the promotion of health, preventative medicine and rehabilitation may well assign an increased role to the field of physical education in providing a level of professional competence that is well advanced, yet, in competence and costs, well below the medical field. Also, increased concern for the level of excellence in athletics may, on the basis of national or college interests, generate high demands for better theory and practice in coaching. Only manpower estimates for school teachers, community college and university faculty are included within the above estimate.

While educational institutions should have no higher needs than estimated above, all other professional areas may have an increase of manpower needs after 1980. This would require an enlargement of existing professional master's programmes or the establishment of future ones at other places. With regard to the non-educational areas, an immediate over-supply of professionals because of limited established needs will lead to a situation where those professionals will have to create their own positions, since at this time very few private and public employers may be willing to hire and pay them.

If one were to compare the above standards for programmes with the projected manpower needs (Table 7), it appears that 3 PhD programmes, assuming that 4 faculty members in each handle 15 PhD candidates exclusively, and 13 master's programmes, assuming that 2 full-time faculty members in each handle 12 master's candidates exclusively, would be the minimum number of programmes. It is understood that any one university may well have more than one programme, as is already the case in the master's programme in four universities. Furthermore, faculty members will have other responsibilities than the exclusive advisement of graduate students.

Although our estimates of manpower needs must be treated with caution, they should provide a safe basis for such policy decisions.

## E. EVALUATION OF PROGRAMMES AND PLANS

### I. General Observations

Eleven universities proposed the implementation of four PhD programmes and seven new master's programmes. In general, the departments in most of the universities enjoy strong support by the Administrations and the Graduate Schools, although the latter, in some instances, indicated concern over the standards to be demanded for new programmes. However, such concerns were evidenced only to a limited degree with regard to plans for master's programmes, which Administrations, in particular, appear eager to implement and support. The consultants found that such support is granted in general recognition of the contribution that can be made in this field. If high standards and strong support do not evolve it appears that, with few exceptions, it will not be due to unwillingness on the part of Presidents and Graduate Deans, at this time, but more likely to limits that representatives in the discipline have imposed on themselves, or on the inability to change a structure environment that has provided only a limited status to this field.

With regard to the plans of the Discipline Group and individual units, the consultants are concerned that instead of bold and innovative programmes, as well as an emphasis in depth on one or two areas, the motivation is rather to implement programmes in a broad range of areas at the lowest possible cost and with minimal acceptable standards. This, in part, may well be an outgrowth of the continued acceptance of a somewhat subdued role that physical education units have traditionally played in earlier periods.

While physical resources and equipment are totally adequate in almost all cases, or can easily be arranged and expanded, personnel and library resources were found to be inadequate for nearly all planned programmes. Library holdings are limited in number\*. Serial holdings are fair in those of the English language. While there are a few French journals, the important journals in other languages, which PhD programmes would certainly need, are almost all absent and are an indication of limited international orientation. On the background of the substantial and innovative research activities in the field in such countries as Finland, Denmark, East and West Germany, Japan, Poland, Sweden, and the USSR, this deficiency needs to be corrected, possibly through a

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\* The evaluation of library holdings in physical education, kinesiology and related disciplines is difficult because of the boundary problems in the field. The assessments of library holdings obtained from ACAP are restricted to the limited field of physical education itself rather than to the associated disciplines of anatomy, physiology, psychology and sociology.

a coordinated effort.

The personnel resources are good in the existing master's programmes and for a few of those planned, although mostly on the basis of minimum standards. The PhD programmes have deficiencies at this time, particularly with regard to senior faculty. However, the consultants are of the opinion that some faculties can be upgraded to acceptable standards within a reasonable amount of time, and without unduly delaying the implementation of the planned programme. A minimum standard of 4 advisors for PhD programmes in one of three specialities may be lowered to 3 per department in case of joint university programmes; yet even under such circumstances there is no sufficient basis for programme implementation on the basis of faculty resources at this time.

The necessary cooperation and support from other disciplines, particularly for PhD programmes, in quite a few universities is very commendable; in others it is not well developed and needs general improvement, since PhD programmes, in their specific methodological approaches, require a strong interdisciplinary relation for research, teaching and the advising of students.

It would be desirable if departments, particularly those planning for a PhD programme, would be given basic financial support for research projects. Such resources appear to be absent with a few exceptions, and then under conditions that do not actually label such funds for research. In this connection, the consultants are also concerned about released time for research by the faculty. Such a pattern is in existence to a limited degree in only a few of the universities.

While the foregoing critical evaluations sum up the deficiencies the consultants would also like to point to the following: The discipline, in its present status, is fairly young in the universities of the province; on this background most of the departments have established a sound record in teaching and some through individual faculty have made a contribution in research as well. For the further development of the field, a research-oriented PhD programme and a wider professionally-oriented master's programme are needed and the discipline group needs to be commended for its efforts for such implementation. Such plans are justified academically, as well as on the background of the previous record of departments in the province. The existing deficiencies should be no surprise for the obvious reason, among others, that material resources and good faculty will often not be attracted without a graduate and/or research programme. Also the higher goals put forward at this time by the Discipline Group for the PhD definitely need more effort for the hiring of the very best personnel from within and outside the discipline.



The consultants have reasonable assurance that universities, with coordinated planning of ACAP, COU, and the Discipline Group will be able to deliver graduate programmes that are highly responsive to societal and individual needs, as well as in line with high standards of academic excellence. The consultants are also of the opinion that graduate programmes in Ontario, given the general support of the field and a potentially fresh approach, cannot only be innovative on this continent and internationally, but they may be one of the areas where Canadian universities, and those of the Province of Ontario in particular, could be placed ahead of many other countries. This is to be seen in light of a situation where European and Asian universities in the last decade have embarked on a broader scientific as well as more socially responsive approach, while universities in the U.S. appear still too much oriented toward education and a traditional concept of measurement techniques with emphasis on fitness problems.

## II. PHD PROGRAMME PLANS

### (a) University of Ottawa

The School of Physical Education, organized in three departments (Kinanthropology, Physical Education, Recreology), offers a master's degree in Kinanthropology and Physical Education, with specialities in exercise physiology and motor learning in the former and administrative theory in the latter. The School through its programmes provides an opportunity for graduate study in English and French and, thus, an important interchange between the two cultures. The faculty is young and, from its training, well qualified to handle the programme in its present stage, the more so since other departments in the university have lent their expertise and facilities to the support of the programme (cardiac rehabilitation, physiology, biology, psychology). The Department of Physical Education offers a professional non-thesis MPE, which should be changed to an MA. In light of student interest and growing demand from teachers for advanced degrees the master's programme should be retained in its present form with the option to include a thesis. This degree also has the potentiality to be adapted to meet the administrative needs of sport associations.

The expansion into a PhD programme that is suggested for the Department of Physical Education in administrative theory, and for the Department of Kinanthropology in physiology of exercise (plus cardiac rehabilitation), biomechanics, psychology of sport (including motor learning), in subsequent stages from 1975 on, appears, at this time and with the suggested dates of implementation, not justified. The consultants are of the opinion that the faculty looks promising but has not yet proven its scientific capabilities necessary for advising on the PhD level.

Publications in refereed journals and research grants are absent with a very few exceptions. Prospective younger faculty are also engaged in administrative duties, thus sacrificing their research potentialities to other duties.

Given the support of cognate departments, representatives of the Administration and Graduate School, the School of Physical Education should be able to implement its plan for a PhD programme on a delayed basis with major administrative and advising responsibility to be provided by adjacent PhD-granting departments in the first period. Also more support should be given to researchers on the faculty in order to allow them to expand their competence; as a secondary support for research in the school a post-doctoral research fellowship might be implemented. On the material side, the buildings and research facilities are exceptionally good and the support from the administration in general and that of the school itself is available. Library holdings in serials and monographs are more than adequate for master's standards and, at the present rate of expansion, should reach the minimum standards for the PhD programme in about three years.

At this time, in light of present potentialities of the faculty and general programme needs and prospects, it is suggested:

That the School of Physical Education pool its resources on the projected PhD-level from all three existing departments in order to allow the future implementation of PhD programmes in areas such as exercise physiology and social science whereby, specifically in the latter area, research and theory courses of recreology also would be supported. A late expansion into psychology of sport would be a subsequent addition. The support of adjacent departments should be sought through the possibility of cross-appointments.

Other programme plans should be pursued on the master's level only and those such as cardiac rehabilitation and administration should have a professional orientation. With regard to cardiac rehabilitation, the University of Ottawa could perform a most important and unique service for the training of rehabilitation personnel; students of exceptional capability could pursue a further degree within exercise physiology. Administration, as offered at this time by the Department of Physical Education, may develop into or extend into sport-pedagogy as well. This programme, in particular, should also continue to serve part-time graduate students.

(b) University of Waterloo

The Department of Kinesiology appears to be well supported by the academic and general administration. The Department is part of the Faculty of Human Kinetics and Leisure Studies and with a staff of 24 full time faculty caters to 600 undergraduate and 11 graduate students. The latter

are engaged in master's studies in the following fields: work physiology, biomechanics, psycho-motor behaviour, sociology of sport. In these programme offerings the department is supported by the Departments of Biology, Engineering, Psychology, Sociology. The faculty although young is by and large, actively engaged in research and has been able to attract a number of grants in sociology, work physiology and biomechanics with the majority keyed toward applied and practical problems of sport and physical activity. Although only one senior faculty has a list of more than 10 refereed articles, 6 younger faculty in the above sub-disciplines have been able to publish from 1 to 3 refereed articles. It can be expected that this latter group will continue to produce quality work in the future.

The consultants are of the opinion that the programmes on the master's level are by and large carried out in line with general academic standards and should be retained. The area of psycho-motor behaviour, in addition to the potentially good work of its own faculty, also can draw on a thorough support and competence in the Department of Psychology and may develop into a PhD programme, but not before 1977.

The extension into a PhD programme is suggested, at this time, in the area of sociology of sport and only under the following conditions:

1. That one additional faculty member each on the senior and junior level in sociology of sport be appointed.
2. That the Department of Sociology provide continued support.

It is understood that sociology of sport should include, in substance, aspects of leisure and, in methodology, social anthropology and social psychology. It is suggested, also, that the University of Waterloo extend and strengthen this area before committing itself to another PhD programme. The sociology of sport programme has the potential to attain an international status and every effort should be made to realize this potential.

The University of Waterloo has established a widely-recognized information retrieval system for sociology of sport and leisure. Although library holdings in sociology of sport appear to be adequate, the holdings in the general area of physical education are substandard. Funds for new allocations need to be increased substantially.

The consultants concur with the discipline, non-professional approach of the department and find the employment opportunities for degree-candidates from the department encouraging. They also noted favourably the research co-operation and service-exchange with cognate areas such as civil and general engineering and biology. The undogmatic interpretation of departmental and faculty labels is agreeable although a certain amount of identity should be kept in mind.

The consultants were presented with a proposal for a master's programme in Health Studies. The consultants do not consider this area to be within their terms of reference.

(c) University of Western Ontario

The Faculty of Physical Education at the University of Western Ontario has had a master's programme for 10 years, in which, at present, 28 students are enrolled in the areas of exercise physiology, psychomotor-learning, biomechanics and social science. There are 17 (21 as of January 1, 1974) faculty members who are in one way or the other oriented to the graduate programme with 8.5 FTE. Research provision and equipment in 6 research laboratories are adequate to further develop the programme, and time for research appears to be available. Library holdings need to be improved, although it appears that they will reach minimum standards in the near future. Serial holdings are about adequate at this time.

The Faculty, consisting of younger PhD's and a few senior members, has been able to attract research grants in such areas as cardiac rehabilitation, educational administration and retrieval of social science material. Publications in refereed journals, although limited in number in all but one case, indicate an involvement in publishable research.

Although the faculty, in general, wishes to direct itself to a disciplinary approach, two professional areas deserve specific attention and a possible expansion in the future programme:

1. exceptional children and handicapped;
2. practice and theory of coaching.

Overall the consultants find the master's programme well developed in all specialities and would recommend its retention and a possible extension into the above areas. The faculty is well qualified to handle this level of graduate study. There is, however, a problem of unfinished master's degrees, predominantly among candidates working on the one-year degree, who have taken up employment. However, the expansion into quite a number of sub-disciplines (projections are 9 for 1977), which is, in part, already reflected in the variety of competencies of faculty serving on the Master's level, cannot be supported.

The consultants find 4 of the faculty in two areas qualified to advise PhD candidates - namely in exercise physiology and the social science of sport. Yet the limited number of faculty and their quality in general does not justify the implementation of these programmes unless the following conditions are met:

1. Appointing one additional senior scholar and one additional junior scholar in exercise physiology.

2. Appointing one additional senior scholar and possibly one junior scholar in the social sciences. With the suggested expansion into formal organization theory and research specifically, that aspect should be strengthened and one of the present junior faculty could develop into a potential advisor in a period of 2-3 years. A joint programme with the University of Windsor would give some additional support to this area.
3. Secure the co-operation of the cognate departments of physiology for exercise physiology, and of administration (organizational behaviour) as well as sociology for the social science programme.

The programme in social science of sport could well accommodate, in a specialization of organizational aspects of physical education, the substantive area of comparative physical education. Other areas at this time provided at the master's level should not expand into a PhD programme and, in exceptional cases, should try to accommodate research and potential PhD candidates through the Departments of Philosophy, Psychology, etc.

In general, it is understood that the PhD programme would be strictly research-oriented, where Western Ontario could make a real contribution to the discipline. In the master's programme discipline interests may prevail as well in such areas as psychomotor behaviour or biomechanics. This level should rather provide professional training and the transfer and integration of knowledge generated predominantly on the PhD level, and from research in general.

While the support for the present Master's programme and a PhD programme on the basis of 2 sub-areas from the university administrators is strong, the support from corresponding departments (e.g. Physiology) needs to be improved.

(d) University of Windsor

The Faculty of Health and Physical Education at the University of Windsor has had a graduate programme with a master's degree in physical education since 1969 and has graduated 15 students, while 19 students are in the programme at present. The Faculty, on the undergraduate level, is subdivided into "streams" of Kinesiology, Physical Education, Applied Kinesiology and Health Science. A graduate programme that would grant the PhD is proposed for two divisions, namely, Socio-cultural; Bio-dynamics.

Both programmes, although strictly research oriented, desire to cater to a strong integration of knowledge and practical application. While on the master's level a thesis is optional, on the PhD level theses should be written in the above two areas of specialization and in close

contact with other disciplines. Support from other departments and of the Administration and Graduate Faculty is strong and it appears that particularly the areas of psychology and sociology would be willing to give their assistance in the advising of students, in courses, and in research.

Physical facilities with regard to lab-space and equipment are fully sufficient. Library holdings are marginally adequate for a master's programme but need substantial improvement for any PhD programme plans. However, existing comparatively high funds need further expansion in order to allow Windsor to develop from below average holdings to a minimum level for the PhD. Although Windsor, in recent years, has been able to hire strong young faculty, the consultants are of the opinion that only a few can be expected to be able to function as PhD advisors in the near future. Major publications are lacking, and articles in refereed journals are sparse, as are research grants.

The consultants find that the Faculty provides an adequate master's programme in bio-dynamics, which besides problems of exercise physiology also covers those of motor-behaviour and biomechanics. It is in the social science area that the consultants find, in light of faculty competence and support from adjacent departments, that Windsor should be encouraged to strengthen its programme and resources, which after addition of at least two senior faculty could then lead to a PhD programme in the social science of sport. This programme should be implemented in conjunction with the programme at the University of Western Ontario. The consultants find themselves highly in agreement with the professional, applied orientation of such a programme, which will make a definite attempt to integrate the knowledge provided through disciplinary social science research and to provide for its implementation. The consultants are concerned over the plans to leave the programme almost completely unstructured and over the lack of integration, for which the planned joint seminar is not considered to be sufficient.

### III. MASTER'S - PROGRAMME PLANS

#### (a) University of Guelph

The Department of Human Kinetics is a Department in the Faculty of Biological Science. The Department understands its academic mission as the study of man in motion, with a strong consideration of practical application to children with behavioural problems. In its plan for a master's programme, the department desires to follow an approach that, although disciplinary and general in nature, caters to the specific needs of both normal and pathological clientele. The department, in this respect, is oriented toward the study of movement from the point of view of biomechanics, motor learning and work physiology. Sociological as well as psychological aspects are also considered. The major focus is on the child.

The department has excellent rapport with the administration and with the adjacent field of anatomy, psychology, physiology and zoology. Laboratories for the sub-fields of biomechanics, psychology, and biology are well organized and equipped. Library holdings appear quite adequate in the light of programme plans.

The faculty appears adequately staffed for a general master's programme which would include such aspects as motor learning and development, biomechanics and work physiology. Additional appointments in child psychology and sociology would be desirable. Although the members of the faculty only have a limited publication record in refereed journals, they have recently attracted a number of smaller, and one major, grants which are expected to result in communications in appropriate journals.

The consultants recommend that the department, in the light of its personnel and material resources and its careful planning, be allowed to proceed with a general master's programme in human kinetics.

(b) Lakehead University

The School of Health and Physical Education is one of the professional schools at Lakehead University and in the course of four years has developed a full 4-year undergraduate programme that leads to an Honours BA in Physical Education. There has been a steady increase in the number of students, and, given the environment of the University, there is a strong interest by teachers, outdoor planners and agencies to provide for a programme in outdoor activities as well.

The facilities, e.g. laboratories, appear appropriate for a service oriented programme with some research potential sufficient for a professional master's programme. A special interest and adequate clientele prevails in the area of exceptional children. The School of Health and Physical Education through its faculty and students is also involved in coaching on an elite-athlete, as well as a community level, where the response to an open-door policy has been very encouraging.

The School would like to implement a professionally-oriented graduate programme leading to a master's degree in three areas:

1. Exceptional children;
2. Outdoor activities;
3. Theory of coaching.

It was stated that in each of these areas there is a strong need for advanced training and that students tend to favour applied programmes.

The Administration, the President and Deans gave full support to these plans and assign a master's degree in physical education high internal priority.

The consultants recognize the work that the School has done in recent years with the undergraduate programme and are fully aware of the high motivation and potential of the faculty as well as the internal

support from the University. The involvement of the faculty in research, higher level teaching programmes and publications, however, is only marginal with one exception.

In light of the existing resources, specifically on the breadth of personnel, it is suggested:

1. A priority be given to the implementation of a professional master's with a speciality in exceptional children, under the condition that one additional faculty member with appropriate graduate credentials be appointed in this field. This may be done in connection either with the Department of Psychology or the Faculty of Education. It is also considered to be essential that the Department of Psychology give support to such a programme in general, as it has done thus far to this joint field of interest.
2. No priority, although encouragement should be given to a master's programme in theory of coaching. In this field, it would be suggested to offer sub-specialities in only a limited number of additional fields beyond swimming, wrestling, hockey, which already are well represented, on the practical side. However, an additional two members would be needed on the faculty, providing for comprehensive theory and research on aspects of physiology, psychology, sociology, etc., in order to provide for an adequate graduate programme. For the time being, the School would be advised to offer special workshops on coaching.
3. The consultants see no basis in existing undergraduate programmes and graduate level personnel to recommend a graduate programme in outdoor activities. Instead it is strongly suggested to establish such programme first on an undergraduate level and possibly offer course and summer workshops beyond a regular undergraduate programme. It is also suggested that the interested faculty engage itself more in research and planning in this field in order to lay the ground for the future implementation of a graduate programme in this speciality.

While the physical facilities, such as laboratories, related schools and hospitals, appear adequate, the library needs to make a special and immediate effort to enlarge its holdings in physical education (at this time with a meagre 600, the lowest in the province) and adjacent fields. Special attention should also be paid to ensuring that the well developed undergraduate programme would not suffer from graduate programme implementation.

#### (c) Laurentian University

The School of Physical Education is one of 6 schools and with a faculty of 17 provides undergraduate instruction to 210 students. The School proposed, originally, a master's programme in Maximum Human Performance, Youth Specialization and Outdoor Education. At their visit



the consultants were presented with a new proposal, that had received high internal priority by the University, for a master's programme to be co-operatively supported by both the School of Physical Education and the Department of Psychology. This programme would, in child development studies, focus on normal as well as abnormal children. With regard to the latter, a working relationship exists with the Crippled Children's Treatment Centre. Laboratory space is adequate and for observation of children is also available in the Department of Psychology. This programme also has the support of the Department of Sociology.

Although the teaching load in the School appears not to be excessive, the engagement of the faculty in research resulting in publications is very limited although the consultants recognize some research activities that are undertaken with students and with other institutions as mentioned above. The faculty at this time appears, with a few exceptions, only marginally qualified to provide a research-based applied programme. Only three on the staff have any publishing record and only one of these has two articles in a refereed journal. There is, furthermore, only one small research grant being held by another faculty member.

The consultants were not able to evaluate the faculty in the Department of Psychology. In general, the consultants are favourably disposed toward the proposed joint plans.

The consultants suggest:

1. That the proposed master's degree programme in child development studies, jointly supported by both the Department of Psychology and the School of Physical Education, be implemented after due planning and not before 1976 with the condition that one or, if possible two, further graduate faculty members be hired in physical education and that this be, possibly in one case, a specialist in developmental psychology. In this regard it appears quite feasible to the consultants that such a hiring be a joint appointment across departments.
2. That, at this time, other plans for graduate study be not pursued for implementation in the near future, although the faculty should be encouraged and be given released time in individual cases to engage in publishable research.

Although Laurentian has made efforts for adequate holdings in the Library, they are substandard at this time and need to be substantially enlarged before the programme should be established. This holds for more research-oriented serials as well.

In the above suggestions and the time of implementation the consultants have, to a limited degree, considered the bilingual and regional location of the University. They are reasonably assured that with a necessary

delay in time the weak resources in personnel and the library will be adequately strengthened.

(d) McMaster University

McMaster has at this time an undergraduate programme only, and the department finds itself in a traditional atmosphere that will most certainly support a quality graduate programme, although the Humanities are, supposedly, only favourable to a lesser degree. The department is at this time part of the Faculty of Social Sciences, although in faculty resources, and building additions recently completed, the orientation appears more toward the medical sciences. McMaster has a unique, practice-oriented Medical School, that appears to be favourably inclined toward close co-operation with adaptive physical education and exercise physiology. Also in the field of pediatrics a clear willingness for co-operation was expressed. On this background the implementation of a graduate programme leading to a master's degree seems to be justified and should be given high priority under the following conditions:

1. That a programme of adaptive physical education focus in research and training on aspects of the physically handicapped, with consideration given to mentally retarded and other psychopathological cases as well.
2. That an adaptive exercise physiology programme may be part of this speciality, whereby clinical as well as normal cases may be included. For the latter an applied stance toward research and training of top athletics may be considered as well, although with lower priority than the above adaptive orientation.
3. That the Medical School, beyond its present co-operation, on a personal basis, provides such co-operation as an institution in the future.
4. That, in order to further strengthen the present potentially strong junior faculty, the Department of Physical Education be enabled to appoint one further senior faculty member, if possible jointly with the Medical School, and with qualifications to satisfy such cross-appointment.
5. That the Department be encouraged to seek further contacts with private institutions working in the field of rehabilitation and mentally retarded in order to provide appropriate field experience and to strengthen the contacts with professions working in areas to which an applied (or adaptive) physical education programme should be oriented.
6. That the Department be encouraged to use its resources for a focused graduate programme, that may provide leadership to the field in the long run and, not necessarily outrule the establishment, after due time, of a PhD programme. The University

should be encouraged to lend its material and ideal support to the establishment of such graduate programme.

Library holdings in physical education are marginal, serials are predominantly oriented toward technical aspects of sport and need improvement toward more research journals. In the light of the foregoing, and given the fact that overall resources in money, equipment and personnel are scarce, a low priority is suggested for other plans for a graduate programme. The prevailing interest in biomechanics may well be pursued within a programme of adaptive physical education catering to clinical cases or it may be pursued within other departments. A programme in history and comparative aspects of physical education should not be encouraged at this time. This holds as well for motor learning and sociology. Further expansion of physical education on the graduate level should rather be provided for the adaptive approach than for opening yet another programme in general physical education.

(e) Queen's University

The School of Health and Physical Education caters to physical education as well as athletics and supports, through teaching, a minor in Health. Laboratory facilities and equipment for exercise physiology and biomechanics are more than adequate, while there is space and accommodation for the social sciences as well. With regard to the latter, the School has established a relationship for fieldwork with the penal institutions in Kingston. Relationships to other Departments (Anatomy, Physiology, Sociology) and the support from the Graduate Faculty as well as the Faculty of Arts and Science are encouraging.

In line with suggestions put forward in proposal 3 with the plans of the School, the consultants are of the opinion that the School should rather opt for a professional than a discipline approach and in line with faculty interests and competence, as well as the prevailing support from other Departments, develop the two following master's programmes:

1. Cardiac rehabilitation. A non-thesis 2-year degree with substantial professional training for service to be provided for cardiac cases. The support from the Medical Faculty and the Department of Physiology appear to be essential although the degree itself should be administered in the School.
2. General master's programme with emphasis in an optional thesis/non-thesis 1-year programme in three of the major subdivisions. This degree would emphasize professional and substance specialities that are useful for teachers or social rehabilitationists (penal institutions) in requiring a basic competence in two of the four

major subdivisions of sport science and a major orientation with thesis-work or an internship in a third of the four areas.

The implementation of the programmes should be exercised by 1976 and it is recommended that in the necessary future-hiring one exercise-physiologist and one faculty member in either social science or biomechanics be appointed. Given the situation that the present faculty is, in only a few cases, scholarly well-established these additions should preferably be senior and be willing to further the development of an applied professional programme.

(f) University of Toronto

The consultants found the School of Physical Education and Health Education of the University of Toronto in an unfavourable position within the University insofar as faculty, facilities and general support from the system at large is concerned. The student/teacher ratio is the poorest of any departments in the province and it appears that the department overall does not get its fair share from the income that it provides for the university. The question raised as to point number 10 of the Winegard-report of 1966, whether to abolish the department altogether still stands in light of the fact that most of the other 9 recommendations of that non-partisan internal commission to upgrade the department have not been acted upon adequately. Furthermore, unresolved organizational problems seem to linger around such as the separation of non-athletic operations within three different units: the School, a Department of Physical Education in the Education Faculty, and a special unit for women's sport and athletics.

The departmental faculty of 11 catering to 400 undergraduate students should not be burdened by additional responsibilities but rather, through additional hirings, should be relieved of part of the administrative and teaching duties of the undergraduate programmes. The supplementing of the departmental faculty by 6 FTE's from other divisions of the university does little to alleviate this situation. Furthermore, assuming that faculty will be given appropriate time and a means to develop into graduate faculty, the consultants believe that only some of the 11 can be expected to attain the general standards of the graduate faculty at the University of Toronto, which implies involvement in publishable research.

At this time the school has a good relationship with the School of Hygiene whose faculty and facilities are available to provide an outlet for a few physical education students for graduate work in exercise physiology. This can possibly be expanded by hiring of an additional faculty member within the School of Physical Education who, properly qualified, might be cross-appointed with Hygiene.

Other liaison relationships with cognate Departments and Schools do not exist at this time, although there is a definite interest on the part of Rehabilitation.

The number of library holdings are about adequate for a master's programme, since scientific serials are fairly well represented. However, the present budget for additional allocations is clearly substandard, even for an undergraduate programme.

The present emerging plans to focus in a possible graduate master's programme on the humanities and social sciences, need further refinement and discussion. The discussed programme in leisure studies may be more narrowly defined as a professional programme in outdoor sport studies. The proposed second orientation toward a more disciplinary aspect of the "act of moving" may possibly be subsumed under sport and movement studies allowing for that specific methodological approach. However, it appears that at this time the consultants cannot recommend the implementation of either type of programme before the overall support of the school by the university and cognate departments and the academic work of the present potential graduate faculty have improved and additional new faculty, if possible senior, have been hired. Overall, the consultants are of the opinion that, in line with the Winegard-report and the allocation of planned new facilities (including lab-space), Toronto should have a graduate department in order to make the rich academic resources of the university available to the field of physical education and to support the legitimate aspirations of the School for providing an advanced degree.

(g) York University

York University appears to be very open for all types of interdisciplinary contacts, and the Department of Physical Education, as well as its faculty, through cross-appointments, has benefited from this in the present undergraduate programme and in on-going research. This is also evident in a dual BA and BSc that the Department offers and the possibility to pursue a combined Honours degree with a minor in a number of other subjects.

Library holdings appear to be sufficient. Laboratory facilities are adequate within and outside the Department itself. The Department in personnel and general orientation is at this time able to provide a graduate programme leading to a master's in adaptive physical education with a specialized programme incorporating psychology as well as exercise physiology. Given the limited overall resources elsewhere in the province, the Department should be encouraged to expand into psychology of sport in general, as well. The Department should in its programme, through research and training, remain oriented to focus on pathological and developmental aspects of physical activity. It would be desirable to strengthen the programme with another senior member,

and to continue the cross-programming and contacts as a necessary condition for the future development. This programme, which may be entitled a specialized master's programme in psychology and exercise physiology of exceptional children, should receive high priority. The interest in stress research should continue in collaboration with the Department of Biology and the Downsview Laboratory facilities. The development of this research work into a discipline-oriented master's programme is not recommended.

The Department has, at this time, qualified plans to establish a master's programme of a more professional orientation in what might be called sport administration. The need for such a programme seems to be justified and the Department should be allowed to go ahead with such a programme under the following conditions:

1. That either a qualified senior faculty member in administrative theory be appointed and a liaison relationship on committees and in research be provided with the Faculty of Business Studies, or that one or two senior members of the Faculty of Business Studies accept a cross-appointment with the Department for teaching, research, and graduate student advisement.
2. That research in this area be a condition for graduate study.

In **personnel**, the Department shows also potentialities in history and comparative aspects of physical education. At this time only modest priority can be given toward the implementation of such a programme on the graduate level. It is recommended that the Department of History be, at this time, the basis for research and possibly for a very limited number of candidates that wish to pursue a degree with this speciality. A combined Honours degree on the undergraduate level in this respect should be a training basis for such cases.

F. RECOMMENDATIONS AND RATIONALE

At this stage in the development of physical education, kinesiology, and related disciplines an expansion of graduate programmes is a logical and necessary outcome. It is also reasonable that the expansion, particularly into doctoral programmes, occur in the universities of Ontario. Expansion of the graduate programmes, at both the master's and doctoral levels, is necessary for the increased professionalization of the field.

The field in Ontario has an opportunity to initiate bold and imaginative programmes if constraint is exercised in the rate of expansion and if adequate support is provided by the province and by the universities. At the present time physical education faculties are badly understaffed particularly with regard to senior scholars. The development of many junior scholars is greatly curtailed by the excessive workload in teaching, administrative and service activities. A major requirement is for a reduction in workloads and a reorientation of university faculties to more scientific and scholarly activities.

A great opportunity exists in Ontario universities to break from the traditional pattern of graduate programmes offered in most American universities. Ontario physical education faculties are young and malleable and are less influenced by education and athletics. Unfortunately, to date, most proposals for graduate programmes have been quite traditional. A break from traditional programmes may be accomplished most effectively by closer interaction with faculty members from the cognate departments and by recruitment of some faculty at different professional levels from cognate disciplines. If chosen wisely, this infusion of professional personnel from other disciplines into young and enthusiastic graduate faculties might provide the appropriate mixture for the development of creative and innovative programmes.

To attract personnel from cognate disciplines both physical education faculties and universities must set much higher aspiration levels for the field than are currently the case. This is also necessary to keep and attract the best scholars from their own field. The major challenge facing physical education in its development of viable graduate programmes is the creation of an attractive intellectual environment for scientists and scholars. Only in such an intellectual environment will a new understanding of the field and of its mission evolve. Such a new understanding is a prerequisite for the conceptualization of bold and imaginative graduate programmes that are responsive to individual and societal needs as well as to the challenge of the academic community. The realization of such an ambitious goal for the field will require a vigorous and coordinated effort on the part of the province and the universities as well as the discipline itself.

## I. PhD PROGRAMMES

Only a limited number of PhD programmes should be implemented and those with depth in only one or two subdivisions at any one university. These programmes should be discipline oriented. These programmes would allow for PhD work in three of the four identified subdivisions by 1980: exercise physiology, psycho-motor behaviour, sociology of sport. It is not to be expected that biomechanics will develop to a level in the foreseeable future that would allow for PhD implementation. Any immediate PhD aspirations for biomechanics may be incorporated within the subdivision of motor behaviour.

Research and thesis work for the PhD should be pursued with the highest methodological rigor in each of the three subdivisions. However, PhD students should develop competence in the one subdivision and have some limited understanding of the other two subdivisions as well as methodological knowledge. Only academic excellence can justify the implementation of PhD programmes. Thus, the consultants recommend implementation of no more than three programmes and these three only after the existing faculty base has been improved.

The consultants strongly support the Discipline Group in their claim of the necessity for PhD programmes in Ontario and in their efforts to develop effective programmes. We feel very strongly, however, that PhD programmes in physical education must be initiated from a power base. This means a strong nucleus of productive senior scholars in physical education who have time to devote to their own research and to the research and scholarly needs of PhD students. In addition, there is the need for good liaison and enthusiastic support from the appropriate cognate departments.

Excellent laboratory facilities exist in each of the universities that propose PhD programmes. With adequate research faculty this should facilitate the development of programmes with a strong research orientation. The research should be primarily problem-oriented and should focus on humans. Research might focus on planning, development, and implementation, as well. The generation of a body of knowledge appears to be a critical need at this time for integration and identity within the field and for the development of a much needed general theory.

## II. MASTER'S PROGRAMMES

The master's programmes should be predominantly professionally oriented and strictly applied in research and thesis work. Some discipline orientation in the PhD granting departments may prevail, but the major emphasis is toward comprehension of the overall body of knowledge. For the master's programmes two types are proposed:

- 1) special programmes and
- 2) general programmes.



The typical programme on this level should be a specialized one providing for the training of professionals that have developed a high level of competence in one problem area. These may be candidates who, after graduation, qualify for advanced positions in preventive health care, corrective exercise for the handicapped and disabled, rehabilitation or sport administration. However, the number of such special professional careers in sport and other activities is limited at this time. There should be specialized professional training in such areas as sport in penal institutions, inner urban city recreation, gerontology, pre-school sport, and industrial sport. At this time, these areas do not justify an exclusive programme development but should be incorporated into a more general master's programme. General professional programmes should also accommodate the career aspirations of teachers and the problems they face. Such general programmes need not develop all four subdivisions of the field. As on the PhD level, integration should be provided by general theory of physical education, which would include a comprehension of the body of knowledge in the field. Practical aspects of planning, administration and methodology should be given particularly strong consideration.

In general, master's programmes should allow for variety, but with effort towards coordination. Departments should in their special programmes also give consideration to replacing the requirement of a thesis with that of a training internship or extensive field experience.

Master's theses in general, as well as in specialized programmes, should be strongly oriented toward practical problems and typically should take an applied stance in research or provide comprehension of knowledge and its implementation in a special field.

### III FACULTY STUDENT RATIO

Although we are aware of the need to expand the master's programme offerings and to initiate doctoral programmes in Ontario universities, we believe, nevertheless, the programmes that are initiated should be strong, viable programmes. We are concerned with the excessive growth of some of the existing programmes and the consequent high faculty - student ratio that has resulted. We are concerned that the very enthusiasm of students for graduate programmes in this field and the financial advantages in terms of Basic Income Units may make it difficult to hold numbers down. Ultimately, individual faculties and the Discipline Group will have to bear the responsibility of supervising the number of graduate students and the quality of specific programmes. Clearly, the long term effectiveness of the graduate programmes will depend on how resolutely this responsibility is met.

The consultants are aware of the fact that the size of the PhD programmes is lower than student demand as estimations in Table 3

would suggest. The size of the PhD programmes we recommend is also smaller than that necessary to meet the current recruitment needs of Ontario physical education faculties. Provincial authorities may respond to such recruitment pressures and initiate a more rapid development of PhD programmes. This would require excessive faculty hiring at a time when suitable, highly qualified graduate faculty are hard to recruit. The alternative is to further overload current physical education faculties who already have heavy work loads. Our current recommendations require the recruitment of some faculty and even these requirements might be difficult to meet.

Our immediate recommendations for PhD programmes allow for current development of only two methodological subdivisions (sociology of sport and exercise physiology). Any additional special efforts that are directed toward an expansion of the programme size should then be keyed toward psycho-motor behaviour. It may be good policy to take up our earlier suggestion that only three subdivisions incorporate any PhD and that aspirations for biomechanics be incorporated into a subdivision of motor behaviour. Further expansions may be provided for PhD programmes in exercise physiology and sociology of sport. It is suggested, also, that on the PhD level, programmes need not be absolutely balanced. The notion of balance in programme offerings appears much more basic for the master's level. Here increased cooperation between universities is quite essential so that all areas are covered adequately and unnecessary duplication is kept to a minimum. The programme size projections, while falling considerably below estimated student demand, are in fairly good agreement with the figures for projected manpower needs. There may be an overproduction for master's with a speciality in cardiac rehabilitation. The consultants see no major problem in this possibility, since job offerings may increase rapidly. Also a length of training beyond the normal course of one year, as is being considered in this speciality, would result in many fewer master's as estimated from programme sizes. There should be a sufficient number of students going into teaching, sport administration, psychological rehabilitation, social rehabilitation. There will not be enough specialists as expected from manpower demands for coaching, physical rehabilitation/corrective exercise and outdoor activities. The Discipline Group should observe development carefully, provide adequate research for this area and in due time try to correct inadequacies.

In our Standards for Graduate Programmes, there is a general statement and in the Summary of Recommendations there are specific statements regarding the number and type of graduate faculty required for various graduate programmes. We emphasize that these are the minimum requirements. If only these minimum requirements are met, as will be likely in most cases, the maximum number of students estimated for the programme must be considerably less than the number estimated from a consideration of these faculty as Full Time Equivalents. The reduction

is required because these faculty will undoubtedly be involved in other activities than the supervision of graduate students. We are working on the basis of 4 PhD students per Full Time Equivalent and 8 Master's students per Full Time Equivalent. If each qualified faculty member devoted one-third of his time to graduate student supervision, then each member would have  $4/3$  of a PhD student or  $8/3$  of a Master's student. We assume Master's students will spend one year and PhD students will spend 3 years after their Master's programme.

We have made some arbitrary, although not unreasonable, assumptions regarding the amount of time the average faculty member might devote solely to his responsibilities in graduate advisement at either the PhD or Master's level. We realize that some faculty will advise both master's and doctoral students and that this will further complicate the allocations of time. Our major concern is that physical education faculties recognize clearly the time commitments necessary for graduate student advisement and that programmes be maintained within reasonable bounds. We advocate that the Discipline Group immediately take up the responsibility for controlled growth or maintenance of programme size.

Table 8. Approximate Graduate Faculty and Programme Size up to 1977† on the basis of minimum requirements (Corrected by consultants from initial version. [See Appendix H.] )

Ph.D. Programmes\*

<u>Programme</u>	<u>University</u>	<u>Faculty (FTE)</u>	<u>Grad. Students (Full Time)</u>
Exercise Physiology	Univ. Western Ontario	4	6
*Sociology of Sport	Waterloo	4	6
Social Science of Sport	Univ. Western Ontario	3	3
Joint Programme	Windsor	3	3

\*Assumption is made that faculty will work on Ph.D. Programme 1/3 time. Reduction is made of the load in the Joint Programme because of need for faculty travel.

Master's Programmes\*\*

<u>Programme</u>	<u>University</u>	<u>Faculty (FTE)</u>	<u>Grad. Students (Full Time)</u>
Discipline Oriented	Univ. Western Ontario	4	8
General Professional	Univ. Western Ontario	8	16
Discipline Oriented	Waterloo	6	12
Discipline Oriented	Ottawa	4	8
Cardiac Rehabilitation	Ottawa	4	8
General Professional	Ottawa	6	12
Discipline Oriented	Windsor	2	4
General Professional	Windsor	8	16
Cardiac Rehabilitation	McMaster	3	6
Cardiac Rehabilitation	Queen's	3	6
General Professional	Queen's	5	10
Motor Behavior & Play	York	4	8
Sport Administration	York	2	3
Motor Behavior & Play	Lakehead	4	6
Motor Behavior & Play	Laurentian	4	6
General Professional	Guelph	6	12
		73	141

\*\* Assumption is made that faculty will work on Master's programme 1/4 time. If graduate faculty are released for more time or have curtailments in time these figures for graduate students would change. We have arbitrarily counted 11 faculty who have a doctorate to obtain these estimates of programme size.

Note: Some programmes at the Master's level have already attained these figures.

## REFERENCES

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A P P E N D I X B

PHYSICAL EDUCATION, KINESIOLOGY  
AND RELATED AREAS

DISCIPLINE GROUP RESPONSE  
TO  
CONSULTANTS' REPORT

13 February 1974

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\* Appendix I consisting of 100 pages is not reproduced. Anyone wishing to consult the Discipline Group's Report on Graduate Studies in Ontario Universities should contact the COU office.

## INTRODUCTION

The Ontario Physical Education Discipline Group welcomes the opportunity to respond to the consultants' report on graduate programs in physical education, kinesiology and related areas in the province of Ontario. The Discipline Group wishes to express its appreciation for the sincere and enthusiastic efforts of the consultants in undertaking this assignment. The interest and the objectivity with which they approached this task motivated us individually and collectively to reassess our plans. The Discipline Group believes that the limitation of time imposed upon the submission of their report did not enable the consultants to ascertain a complete and accurate picture of the state of the discipline in Ontario, with the result that their report fails to give full consideration to the specific needs and development of the field in the province.

The Ontario Council of University Directors of Physical Education has been co-operating in the exchange of information and ideas about graduate programs in the province for more than six years. During the past two years the Ontario Physical Education Discipline Group set itself a task to rationalize graduate study in a more comprehensive manner than most other disciplines. Efforts were made to identify the viable sub-fields, to establish minimum standards necessary for the development of graduate programs, and to entertain the aspirations of individual universities.

The results of these efforts may be seen in the accompanying Report on Graduate Studies in Ontario Universities by the Physical Education Discipline Group. This report serves as a background against which ACAP may understand and evaluate the response of the Discipline Group to the consultants' report. The Discipline Group's report represents a consensus of all the participating universities and therefore, in some ways, necessarily must represent a compromise of views. The



results achieved to date appear as a report which is appended to this response. This is considered as an on-going exercise and ACAP will recognize that to this date no qualitative assessment of the individual program submissions from each institution has been made. Nevertheless, it is the conviction of the Discipline Group that its report constitutes a valuable document in relation to the evolution of graduate programs in physical education, kinesiology, and related areas in the province, and it will be referred to in our response to the consultant's report.

The Discipline Group wishes to point out that although we will identify major differences of opinion and fact between our report and that of the consultants, the goals as recognized by the consultants do not differ greatly from those of our group. The Discipline Group sees no irreconcilable differences between the proposals in our report and those of the consultants which would prevent ACAP from preparing a rational and forward-looking plan for the evolution of our discipline for presentation to the Council of Ontario Universities.

COMMENTS ON THE CONSULTANTS' REPORT

The Discipline Group of Physical Education, Kinesiology and related fields makes the following comments on the report of the consultants:

1. The report contains many ambiguities related to the identification and definition of basic terms and concepts.
2. The scope of the plan contained in the report fails to make adequate provisions for the needs of the discipline and the Ontario community at large.
3. The sub-divisions of the discipline proposed by the consultants do not cover the field in scope as it is generally recognized, nor is their limited rationale acceptable.
4. The basis for library assessment prepared for the libraries was inadequate, thereby rendering this phase of the assessment valueless.
5. The basic enrolment statistical information in the report is inaccurate and the manpower information is incomplete and reflects a lack of knowledge by the consultants of the current trends in Ontario and Canada.

### Ambiguities Contained in the Report

1. a) Ambiguities related to the definition of "discipline" and "profession".

What is not clear at all, throughout the whole document, is what is truly meant by "discipline" and/or "profession".

- See:     i.   A-9    5th paragraph  
           ii.   A-10   7th line  
           iii.  A-13   4th paragraph, last word

Furthermore, on page A-17 (2nd paragraph) is clearly stated "...two principles become paramount for the field: the general creation of a body of knowledge (the discipline approach), and the career training of professionals (the professional approach)". On page A-13 (4th paragraph), "the professional training in master's programs need not be career specific...". Then on page A-19, "Graduates should be qualified to find employment in other disciplines, and outside of higher education as well". Yet page A-18 (4th paragraph) indicates that "at the master's level...the major orientation of programs should be more professional in order to train for specific careers". This latter view is persisted with, as evidenced by referring to page A-56 where, at the master's level, even though philosophically, or by faculty intent, programs have been planned far differently. They have been labelled either specific or professional. To add further confusion, page A-18 (end of 4th paragraph), states: "The professional orientation may also prevail through the substitution of extensive internship in place of a thesis", but on the other hand, page A-52, under II, Master's Programs", the first sentence states "The Master's Programs should be predominantly professionally-oriented and strictly applied in research and thesis work".

Refer to pp. 4-12 of the Discipline Group's report for a clarification of the distinction between these two terms.

1. b) Ambiguities in defining the scope and central defining element of the field:

The scope of the study of "human movement" is sufficiently broad, ranging from the humanities through the sciences; yet the consultants persist in considering this expression as narrow. See A-15, 5th paragraph and A-16 1st paragraph, and 4th paragraph, 5th and 6th sentences - page A-17. Movement is the central defining element for the field, at whatever level from cell-splitting to elite performance.

Note also 4th paragraph, 5th sentence on page A-17 implies that the study of movement is narrow; this attitude to movement (the essence of our field of endeavour) needs clarification. The narrow term "Sport Science", recommended by the consultants (4th para. bottom page A-15), ignores both the humanities and the vast non-sport areas concerned with physical activity. The Discipline Group rejects this as a suitable substitute for the terms presently in use in the province.

1. c) Ambiguity of the use of the terms "Social Science of Sport" and "Sociology of Sport"

Members of the Discipline Group note with concern the ambiguity inherent in the consultants' use of the terms "social science of sport" and "sociology of sport". For example, one university, taking a multi-disciplinary approach, requires the student to acquire considerable competence in social psychology and to some extent in social anthropology, as well as sociology. However, the short label "sociology of sport" is used to designate work in this area. Therefore, the Discipline Group recommends that the social science of sport not be the term used to describe proposals at those universities where programs are unlike those defined as sociology of sport above. Rather, terms more descriptive of a particular university's intentions would be more appropriate.

## 2. Failure of the Consultants' Plan in its Scope

### a) Lack of Provision for Franco-Ontarians:

The plan of the consultants has failed to make an adequate provision for an opportunity for Franco-Ontarians to pursue their graduate work in their first language and therefore their plan is incomplete. This leaves a large number of master's and doctor's students demanding varied programs in the French language with no opportunity to undertake graduate work in Ontario.

Although this was brought to the notice of the consultants and acknowledged by them, "...attention (of the Discipline Group) was also directed toward the need to provide an opportunity for Franco-Ontarians to pursue graduate work in the French language ... (A-6)". And in spite of the fact that they referred to "a rather unique feature ... is the special need to make adequate provision for Franco-Ontarians", (A-7), and "the special needs of the Franco-Ontarians..." (A-11), and notwithstanding their reference to "...in physical education graduate programs, special attention should be given to bilingualism..." (A-13), the only provision that they were able to make is "... in the event it is considered to be desirable to have a program in this subdivision available to francophones" (page A-1 No. 9 recommendation).

It would have been hoped that some direction and consideration would have been given to provide an immediate opportunity for additional master's and Ph.D. programs for the increasing number of Franco-Ontarians graduating in physical education and related fields.

### b) Failure to recognize the trend in Ontario and the demand for part-time programs at the graduate level:

The consultants present an impracticable and inconsistent position when they suggest there should be no

part-time programs offered for specialized master's degrees. These programs include the following:

- Motor Behaviour and Play of Exceptional Children- at Lakehead and Western Universities.
- Cardiac Rehabilitation- at McMaster, Queen's, Western and Ottawa Universities.
- Child and Developmental Studies- at Laurentian University.
- Sports Administration- at York University.
- Theory of Coaching as a future possibility.

The impracticability of the consultants' suggestions is self-evident in terms of student interest and demand; these master's degree programs should be attractive to and demanded by groups including teachers, married women, francophones, coaches, the regionally deprived and isolated, and business and health delivery personnel looking to a new professional and/or disciplinary emphasis. Many such people would not be able to fulfil their university aspirations if they were deprived study on a part-time basis.

These programs, categorized by the consultants as specialized, were devised in many instances with the part-time student in mind. It would be unreasonable to initiate such programs only for full-time students when the nature of the planning and the situation of the individual universities are prepared for part-time involvement.

This plan is also inconsistent with the Commission on Post-Secondary Education report and with the total planning within individual universities. It would be

inconsistent to reverse this direction in Ontario. Part-time studies should be made available in physical education through as extensive a series of offerings as possible.

c) Failure to provide for programs in biomechanics:

The consultants have recommended that no Ph.D. program in biomechanics be implemented in the Province of Ontario at this time (recommendation 11, page A-2), and that any immediate Ph.D. aspirations for biomechanics be incorporated within the sub-division of psycho-motor behaviour (A-52). If this possibility remains, Ph.D. programs in biomechanics in fact will develop in the very near future under the sub-division of psycho-motor behaviour. Such an evolution may not result in the appropriate focus and scope of study in the field of biomechanics.

It is the conviction of the Discipline Group that biomechanics is fundamental to the study of man in movement and that it is imperative that it develop on its own merit in the province of Ontario. The consultants should have planned for its development in a more realistic fashion. It is also evident that whereas at the present time a number of schools across Canada, including the four in Ontario, have a master's program in biomechanics, a Canadian program has yet to be established at the Ph.D. level.

3. A disregard of the evolution of the discipline in Ontario.

a) Sub-divisions of the discipline:

The Discipline Planning Group in Physical Education, Kinesiology, and Related Areas feels very strongly that

it cannot accept the consultants' limited categorization of the fields' disciplinary sub-divisions. While recognizing the somewhat arbitrary nature of sub-divisions established in any disciplines, the cursory treatment accorded bio-mechanics, history, philosophy, etc., by the consultants, based on the acknowledged seeming biases and lack of adequate consideration, precipitated the above conclusion.

This matter has been considered quite carefully over a period of three years within the province of Ontario by the universities concerned. It is our feeling that such a decision - the division of the discipline into sub-disciplinary areas - must in the final analysis be made by those primarily concerned and based on the history of the field in Ontario and Canada.

With this in mind, and appreciating the development that was taking place, the Ontario Council of Deans and Directors of University Schools of Physical Education began preliminary planning early in 1971. Subsequently, a provincial conference to recommend distinct areas of research was convened in Toronto in October 1971. Sub-committees were appointed at that time, and each sub-committee prepared a final report on each of the areas recommended. These reports were then distributed to each of the universities involved for a final reaction.

Thus, it was this listing of the research areas that the Physical Education Planning Group had on hand when it began its deliberations in 1972. At this level, further deliberations were carried out with an eye to the establishment of both sub-disciplinary and "professional" specializations within the field. The areas listed are now therefore deemed to be the viable ones for the field:

History of Sport and Physical Activity

Philosophy of Sport and Physical Activity



Sociology of Physical Activity and Sport  
 Social Psychology of Physical Activity and Sport  
 Psychology and Psychomotor Learning  
 Administration Theory  
 Exercise Physiology  
 Growth and Development  
 Biomechanics  
 Professional Studies (Table 17, Appendix p. iv)

b) Treatment of Humanities (History and Philosophy):

A matter of serious concern to the Discipline Group is the lack of full recognition given to these two sub-divisions of our field by the consultants. This was brought to their attention at the November meeting and in discussions with them afterwards. They indicated at that time that if a Ph.D. student were to do his/her dissertation in "pure" History of Sport or Philosophy of Sport that this should be done in either the History or the Philosophy Department, and that some arrangement should be made whereby the advisor in the Physical Education Faculty would also operate as advisor through the cognate department. Even though an attempt was made to pursue this issue further, no rationale was given for this treatment of the Humanities aspect of our field in differentiating it from the other sub-divisions.

Research is being done, articles are being written, and courses are being taught in these two areas by faculty members within Physical Education administrative units in universities across this country. The location of these specific bodies of knowledge within the administrative framework of universities has already been decided by Canadian university senates. Therefore, this leads the

Discipline Group to conclude that History and Philosophy of Sport should be given status equal to the other sub-divisions in a Physical Education assessment, and that dissertations in these sub-divisions should be administered within the framework of Physical Education Faculties.

#### 4. Inadequacy of the Library Assessment

The Library of Congress listings supplied by ACAP to the university libraries for assessment of the holdings were inadequate. Unfortunately, due to the time contingency, this matter could not be rectified. An attempt was made at the meeting with the consultants in November 1973, at the time their preliminary report was discussed, to explain the background to the Library of Congress Listings. However, we feel they misinterpreted our explanation based on a footnote on page A-35 of their final report in which they stated: "The assessment of library holdings obtained from ACAP are restricted to the limited field of physical education itself rather than to the associated disciplines of anatomy, physiology, psychology and sociology." This is not the case. In every instance, these related or cognate areas are referred to, but inadequately so, in the Library of Congress Listings generated by ACAP. We believe the listings are inadequate because a Ph.D. student in Physical Education would require the support of a much more extensive part of the library holdings in a given cognate discipline than was envisaged by the library listings generated by ACAP.

In view of the inadequacy of the ACAP Library of Congress Listings of the field, the Discipline Group is of the opinion that it was not possible for the

consultants to make a valid judgment about library holdings at individual institutions. Our recommendation for future assessments is that the generation of Library of Congress listings, particularly dealing with such multi-faceted fields as Physical Education, involve the Discipline Committee directly.

5. Inaccuracies and Incompleteness of Statistical Information

It appears to us, based on the careful analysis of all available statistics from at least three different sources that the consultants have:

1. Significantly miscalculated by 53% the historic Physical Education undergraduate enrolment in Ontario. They state that the enrolment in 1970-71 was 2425 (p. A-25) when in fact it was 3709 (Table 6, col. 6, p. 37). The 3904 figure found in the table includes the recreation-recreology student enrolment estimated to be 5% of the total.
2. Significantly under-forecast by 75% the physical education undergraduate enrolment for 1983. The consultants' forecast is 3900 (Table 2, p. A-25), while the Discipline Group's forecast is 6234 (Table 6, col. 6, p. 37) which is considered to be conservative.
3. Significantly under-forecast by 63% the physical education graduate student demand (enrolment). We believe that the consultants' statement that "A safe and conservative forecast for physical education would be 10% graduate students as compared to the total undergraduate base". (p. A-25). Using the corrected forecast of the undergraduate enrolment (Table 6, col. 6, p. 37) for 1980, this produces a

graduate enrolment of 595, as compared to the consultants' forecast of 375 (Table 2, P. A-25).

Taking into account the consultants' assessment and the increasing annual rate of student and manpower opportunities, the Discipline Group believes that its forecast of 265 (Table 8, col. 4, p. 39) for graduate student demand (enrolment) warrants a significant upward revision.

4. Significantly under-forecast by 100% the manpower demands for Ph.D's in 1980. The consultants' estimate that the market for Ph.D's in 1980 will number 15 (Table 7, p. A-33) as compared to the Discipline Group's forecast of 30 Ph.D's required in 1980 (Table II, p. 45). It should be noted that the forecast of 15 for 1980 made by the consultants was surpassed in 1973 and that all available evidence indicates an increased annual manpower demand rate. (Sec. f, p. 32, and pp 42-45)

COLLECTIVE RESPONSE TO THE RECOMMENDATIONS OF THE CONSULTANTS

Recommendations:

1. a) AGREE that "a limited number of discipline-oriented Ph.D. programs should be implemented." (Table 18, Appendix A)
- b) DISAGREE with the sub-divisions and the terminology employed by the consultants to describe this discipline-oriented approach to the field. These are inadequate and do not reflect the situation as it exists in Ontario today. (pp. B-4 and B-5; sec. 3, p. B-8, and pp. 4-9)
2. DISAGREE - Although the Discipline Group agrees on the matter of the inauguration of discipline-oriented master's programs, a "limited number" of such programs has already been implemented (Table 17, Appendix A). It is the contention of the Group that there will be a sufficient demand for each of the universities concerned to offer a master's program of either a discipline-oriented or so-called professional nature (Table 17, Appendix A). Furthermore, the Group cannot agree that only those institutions approved for Ph.D. programs should be allowed to offer the discipline-oriented master's program. Moreover, this recommendation is inconsistent with content which the consultants present in Table 8, p. A-56.
3. AGREE - The Discipline Group agrees that there should be an expansion of professionally-oriented master's programs, but a certain number of these programs should soon be expanded in scope so that a professional

doctorate will become available (Table 18, Appendix A).

4. NO COMMENT

5. DISAGREE - Nomenclature of degrees has a complex history and the Discipline Group regards this as an institutional prerogative.

6. AGREE - There is every reason to believe that the field is already receiving such support in some of the universities concerned.

7. to 18. inclusive

- a) AGREE with the priorities given to the implementation of Ph.D. programs, but
- b) DISAGREE on the priorities given to the number and type of new programs and particularly to the exclusion of any consideration to provide programs in the sub-divisions of humanities and biomechanics.

The reason for this disagreement is related to our information on manpower demands. It does not appear that the Ontario Ph.D. out-put will balance the demands before 1983 (Table 12, p. 51) even if the number of new programs proposed by the Discipline Group was implemented on the dates suggested. Moreover, since the statistics of the Group and the consultants are in agreement in this regard, a limitation of the number of programs, because of the danger of over-supply, is not warranted.

Furthermore, the Group is of the opinion that the consultants' recommendations of programs related to the sub-divisions are based on inadequate and incomplete information. We believe, therefore, that the suggested programs

by the Discipline Group are more valid than those recommended by the consultants.

For these reasons, therefore, the Discipline Group recommends:

- a) that the Discipline Group's proposals for Ph.D. programs (Table 18, Appendix A) be accepted in order that an opportunity be provided for those institutions who desire to do so, to have their programs appraised, and if the standards are met, to implement them; and
  - b) that the student and manpower sub-division demand study be continued to determine the trends of the out-put needs. Similarly, to ensure quantity and quality control, an annual review of the Ph.D. yield and market demand should be conducted by the Discipline Group.
19. NO COMMENT - There is no comment other than that it is the opinion of the members of the Discipline Group that the consultants should not be concerned with matter of internal institutional organizational structure.
20. a) AGREE - That there should be a minimum but substantive residence requirement for the Ph.D. degree
- b) DISAGREE - That the idea that master's students should not be allowed to pursue specialized degree programs on a part-time basis is contrary to recent educational trends and reports in the Province. (Sec. 2c, p. B-5)
21. AGREE - That the idea of inter-institutional co-operation on the regional level at least is highly desirable, and has been explored by the Discipline Planning Group for several years. (p. 56)

22. AGREE - The Final Report of the Discipline Planning Group has included a recommendation for a Monitoring Plan which would meet regularly (p. 60)
  
23. AGREE - Health Studies (rather than "education") should not be included in this field as a discipline area. This does not exclude, however, the inclusion within physical education of the "health aspects" of sport, exercise, play, and dance. (p. 33)  
Furthermore, the Discipline Group urges that ACAP in appointing a discipline group in health studies, ensures that administrative units which presently offer programs in Health Studies be adequately represented.



SUMMARY AND CONCLUSIONS

We respect the consciousness and sincerity of the consultants' efforts and we were stimulated by their work. We believe that they were confronted with a difficult task inherent in an emerging field.

The consultants' report is found wanting in accuracy of information and precision of definitions. More specifically, the consultants have defined incompletely the field of physical education, kinesiology and its related areas. Furthermore, there are significant errors in their historical statistics which cast serious doubt on their forecasts.

In the opinion of the Discipline Group, the programs proposed by the Ontario universities with interest in the field, will go a long way to meet the needs of the province and are within the capacities of these institutions, individually and collectively.

Despite our reservations about the consultants' report, we trust that ACAP will utilize our comments and the consultants' report to allow us to initiate the necessary programs to meet the provincial demands.

A P P E N D I X C

UNIVERSITY COMMENTS

Comments appear from Guelph, Lakehead, Laurentian, McMaster,  
Queen's, Toronto, Waterloo, Western Ontario, Windsor and York.

## COMMENTS OF UNIVERSITY OF GUELPH

ON

## CONSULTANTS' REPORT

## PHYSICAL EDUCATION, KINESIOLOGY AND RELATED AREAS

## PLANNING ASSESSMENT

It is gratifying to observe that, with regard to the University of Guelph, the consultants recommend (page A-43) "that the department, in the light of its personnel and material resources and its careful planning, be allowed to proceed with a general master's programme in human kinetics". The assessment of these consultants is, therefore, in accord with the opinion of the Appraisal consultants, received some months ago. We note with satisfaction that our program appears to be unique in not having had some kind of condition attached by the consultants (cf. pages A-1, 2 and 3).

There is, in recommendation (15) on page A-2, some indication that our program might be regarded as "professional" rather than "discipline" oriented. Lest there be in the future any possible confusion in this matter we draw attention to the general tenor of the consultants' comments on page A-62. With the exception of a misapprehension that our program is children-oriented, these comments are generally consistent with our own clearly stated intention to provide an academic program in Human Kinetics at the University of Guelph. Our Appraisal Brief indicated

.....

our intentions with regard to such a general program at the Master's level. Our decision in that regard reflects our long-term plan to offer a Ph.D. program in Human Kinetics in ten years. We shall continue to plan accordingly.

We express concern about recommendation (20) on page A-3, which proposes certain restrictions on part-time programs. We consider the recommendation to be regrettable if it implies that there is no place for part-time students other than in non-specialized Master's programs. As public interest in part-time studies continues to increase, it would be a curious denial of the responsibilities set out by the consultants (pages A-8 to 11) if this recommendation were accepted.

We are grateful to the consultants for a report which will be a useful basis for the universities to consider their plans in this field.

\*\*\*\*\*

January 25, 1974



# Lakehead University

THUNDER BAY, ONTARIO, CANADA. POSTAL CODE P7B 5E1

OFFICE OF THE PRESIDENT

January 28th, 1974.

Dr. M. A. Preston,  
Executive Vice-Chairman,  
Advisory Committee on Academic Planning,  
Ontario Council of Graduate Studies,  
Council of Ontario Universities,  
130 St. George Street,  
Suite 8039,  
TORONTO, Ontario. M5S 2T4

Dear Dr. Preston:

Re: Comments on the Consultants' Report for  
Physical and Health Education Planning  
Assessment

By and large, we are satisfied with the consultants' report on Physical and Health Education. We are particularly pleased to note that they recommend that

"A first priority should be given to the implementing of the following specialized programmes:

Motor behavior and play of exceptional children  
- at Lakehead University."

[ (14) p. A-2 ]

This coincides with our own assessment of the situation and of a definite local need for this programme.

Yours sincerely,

ANDREW D. BOOTH,

President.

/lp

LAURENTIAN UNIVERSITY

SCHOOL OF GRADUATE STUDIES



SUDBURY, ONTARIO

UNIVERSITÉ LAURENTIENNE

ÉCOLE DES ÉTUDES GRADUÉES

February 13, 1974

Dr. M.A. Preston,  
Executive Vice-Chairman,  
Advisory Committee on Academic Planning,  
Ontario Council on Graduate Studies,  
Council of Ontario Universities,  
102 Bloor St. W.  
Toronto 181, Ontario.

Dear Dr. Preston,

It is the feeling of those concerned that the A.C.A.P. Discipline, Assessment for Physical Education does little justice to the graduate programme which is being considered at Laurentian. It is apparent from the report that the consultants were attempting to examine was a discipline programme within the School of Physical and Health Education. What is in fact being proposed is a multidisciplinary programme combining three or more areas of the university in Child and Developmental Studies.

In all fairness to the consultants, it is probable that they were not prepared to consider a programme of this sort. Nor is the programme ready for detailed scrutiny. The decision to move from a discipline to a multidiscipline programme was in the process of being made during the Spring of 1973. Therefore, during their visits, the consultants could be little more than apprised of the possibility. Even now those plans are not completely formulated.

For these reasons, Laurentian University feels that the decisions reached and the recommendations made by the consultants about this university, are unfortunate and do not apply to the programme being considered. When consultants next visit the campus, perhaps during a Psychology assessment, we will be prepared to show them the details of a multidisciplinary programme in Child and Developmental Studies.

Yours sincerely,

W.Y. Watson  
Director

c.c. Dr. E.J. Monahan  
Dr. R. Jensen  
Dr. R.H. Farrant  
Dr. B. Gelin

RESPONSE OF McMASTER UNIVERSITY  
TO  
PHYSICAL EDUCATION PLANNING ASSESSMENT

We do not wish to comment at length on this Report since we believe that the consultants have presented a very sound Assessment which will provide a valuable basis for the planning of graduate work in Physical Education in the Province. We are satisfied that their particular assessment of the situation here at McMaster is a reasonably fair one and we have no quarrel with the major thrust of their comments on our programme. As we indicated in our report to the Ministry last Fall on our Three-Year Plan for the development of graduate work, we are deeply involved in the planning of a Master's degree programme in Physical Education in which the emphasis will be placed on the uses of physical activity and recreation in the prevention, habilitation and rehabilitation of certain human physical conditions by way of, for example, activity therapy, reactivation therapy, cardiac activity programmes and so on. Those faculty members involved in designing this graduate programme with these particular emphases prefer that it be called Applied Human Biodynamics rather than "Adaptive Physical Education" as is suggested in the report. We would emphasize that the planning of this programme is fairly well advanced and we anticipate that it will be submitted for appraisal later in the Spring or Summer of this year.

Given our plans for graduate work, there are one or two details in the report on which we would like to comment. First, as has been noted above, the Department here has suggested that our programme focus on Applied Human Biodynamics rather than on Adaptive Physical Education, and given this possibility they feel that some of the statements on page A-47 of the report appear

to be overly restrictive. For example, they would like to keep open the possibility that the department might indeed develop and pursue some graduate work in the motor learning area as being supportive of the area of Applied Human Biodynamics.

We note that recommendation #14 on page A-2 of the report suggests a top priority for this University for a Master's degree programme on Cardiac Rehabilitation. We are not unhappy with this particular emphasis and we are satisfied that it can be achieved within the framework of the proposed programme on Applied Human Biodynamics. We would prefer, therefore, that condition #1 on page A-46 be stated as follows: "That a programme of Applied Human Biodynamics focus in research and training on aspects of the physically handicapped, particularly the coronary patient, with consideration given to mentally retarded and other psychopathological cases as well".

The suggestion made under item 4 on page A-46 concerning the desirability of a new senior appointment is one that will receive consideration in the University as we move towards the submission of our programme for appraisal. We are not prepared at this time to accept the suggestion that such an appointment must be made as a necessary condition for offering a successful Master's degree programme and we would suggest that this is a question that is more appropriately reserved for consideration by the Appraisals Committee at the time that it reviews our proposal.

We are concerned that the comments made under item 5 on page A-46 do not correctly represent the existing situation. It should be noted that our Department of Physical Education already has working relationships with a number of institutions in the rehabilitation field in the Hamilton area, specifically, Rygiel's Home for Children, St. Peter's Hospital, The Cerebral Palsy Centre, The Association for Children with Learning Disabilities, and The McMaster



University Medical Centre. There is also a good working relationship in the area of special education with educational institutions such as the Hamilton Board of Education, the Hamilton-Wentworth Separate School Board and the Milton School for the Deaf.

Finally, we wish to comment on the consultants' assessment of our library holdings as being "marginal". In our statement on library support for the discipline assessment we did note that "the varied subfields of physical education use the three McMaster libraries, Mills Memorial Library, which houses the collections in the Humanities and Social Sciences, the Science and Engineering Library and the Health Sciences Library". We are disappointed by the fact that the consultants' assessment appears to be a narrow one focusing on the Mills Library holdings exclusively and without proper acknowledgement of the excellent holdings of research journals that exist in the other two library centers on campus.

UNIVERSITÉ D'OTTAWA  
550, RUE CUMBERLAND



OTTAWA, ONTARIO  
Canada K1N 6N5

UNIVERSITY OF OTTAWA  
550 CUMBERLAND STREET

CABINET DU RECTEUR

OFFICE OF THE RECTOR

February 11, 1974

Dr. M.A. Preston,  
Executive Vice-Chairman,  
Advisory Committee on Academic Planning,  
Ontario Council on Graduate Studies,  
Council of Ontario Universities,  
130 St. George Street, Suite 8039,  
TORONTO, Ontario. M5S 2T4.

Dear Dr. Preston,

This is a reply to your request for a statement from the University on the ACAP Consultants' Report on Physical Education.

In the first place we would like to note that the interaction of members of the discipline group and consultants and the assessment process generally have stimulated the University and the School particularly to reexamine its structure and its resources for graduate programmes in Physical Education and related fields, and have led us to revise the implementation dates of our Ph.D. programme.

We agree with recommendation 19 (A-2) and the School is presently in the process of implementing the change suggested.

We are also pleased with the Consultants' recognition that the buildings and research facilities of the School are "exceptionally good", while our library holdings are presently "more than adequate for Master's standard and at the present rate of expansion should reach the minimum standards for Ph.D. programme in about three years".

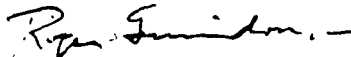
We are in agreement with the recommendation that a Ph.D. programme be implemented on a delayed basis, and pleased to note that the ACAP Consultants have thereby recognized the capability for a Ph.D. programme in Physical Education at Ottawa. We are confident also that during the next three years the numerous well trained staff who have been recruited over the past few years,

.../2

and who, as the report notes, look very promising, will demonstrate the scientific productivity essential for a sound Ph.D. programme. It should be clear that during this interval we are laying the foundations of a most effective Ph.D. programme based on demonstrable strength and recognized research productivity.

We hope that the initiation of any other new Ph.D. programmes in Ontario will likewise be subject to the same prudent examination of research output as evidenced by publications in refereed journals and research grant support. We also believe that before the initiation of any Ph.D. programme in which the collaboration of cognate departments is an important consideration, the participation of the cognate departments should be clearly demonstrated to be much more than mere token or paper collaboration.

Yours sincerely,

  
Roger Guindon, O.M.I.,  
Rector.

QUEEN'S UNIVERSITY RESPONSE  
to the  
CONSULTANTS' REPORT ON THE PHYSICAL EDUCATION PLANNING  
ASSESSMENT

Queen's University welcomes the opportunity to respond to the consultants' report on the Physical Education Discipline Assessment in the province of Ontario. The consultants' report gives ample evidence of the conscientious and dedicated manner in which they undertook this assignment. Queen's University is of the opinion that this report can well serve as a basic guideline for the development of graduate studies in physical education, kinesiology, and related fields in the province of Ontario for the next five years. It is the opinion of Queen's University that the allocation of graduate programs, both in number and scope, and in placement, provides a workable plan for the evolution of graduate work in physical education. There are a number of points in the report however, upon which Queen's University would like to comment. Some of these are errors of omission which have arisen through no fault of the consultants.

1. Recommendation 23 (page A-3) states that health education should not be included in this field and ACAP should identify an appropriate discipline area. The term "health education" is ambiguous in that it implies the preparation of health education teachers and therefore, the term "health studies" will be used subsequently to describe this area. On page 10 of their report, the consultants point out the great importance of health to the field of physical education in that it is in this area that much of the new thrust in the field is likely to develop. The federal and provincial governments' increased concern and interest in exercise as an antidote to disease, and the growing role of exercise in sport and rehabilitation programs for handicapped children and patients are only two indications of this trend. There are in existence in a number of Ontario universities, health courses, health majors, and degree programs in health under the jurisdiction of faculties, schools and departments of physical education.

Health courses in such programs often are offered for credit towards degrees in other faculties and schools, particularly in Arts and Science. It is pertinent to note in this regard that the consultants were presented with a proposal for a Master's program in Health Studies at the University of Waterloo but did not consider this to be within their terms of reference. It is the opinion of Queen's University that plans for Master's programs in health studies should be developed by the physical education discipline in conjunction with Faculties of Medicine, Schools of Nursing and other related paramedical schools and departments.

2. Although proposals were advanced by a number of universities for doctoral programs in the philosophy and history of sport and physical activity, the issue of the desirability, extent and manner in which these sub disciplines should be studied at the graduate level in the province of Ontario was avoided by the consultants. These areas have been lumped in the sub-division Sociology of Sport (see page A-18, "Sociology of Sport which, in method, will include philosophical and historical aspects"). It is the opinion of Queen's University that the study of philosophical and historical aspects of sport and physical activity is not conducive to the methodology of sociology of sport and that by grouping such sub-divisions in this manner, the philosophical-historical area may develop in an inappropriate manner. It is the conviction of Queen's University that the question of the desirability of such studies at the graduate level should be faced clearly before philosophical-historical programs are expanded in the province and that the methods and manner in which they are studied should be

delineated clearly before expansion at the doctoral level. Such a procedure will ensure that the quality of work to be done in this field in Ontario will be of a standard that will reflect well on Ontario universities. In addition, although the consultants make reference to the obligation of the physical education discipline to give attention to the humanistic aspects of the field, again no provision is made for the development of graduate programs in this area. A philosophical-humanistic approach to the study of man in sport and physical activity is essential if the Ontario university physical education discipline is to play a role in the ethical and aesthetic direction of the field.

3. On page A-13 of the report, the consultants state that physical education graduate programs should give special attention to outdoor activities in northern areas. Their recommendation on proposals for such programs from certain Ontario universities however, was that they should not be instituted because of inadequate undergraduate base and lack of qualified faculty. It is probable that outdoor education is an area of study which will develop at the graduate level in the province of Ontario, if not by the physical education discipline then by Departments or Schools of Recreation and/or by Faculties of Education. Queen's University is of the opinion that the physical education discipline has a major role to play in the development of such programs and therefore, a rationale for the evolution of graduate programs in outdoor education should be developed by physical education discipline with other interested related disciplines. Because the great bulk of the population in Ontario is in the southern part of the province, it is obvious that some such programs need to be developed in an environment close to those population centres.

4. The consultants are critical of the lack of innovation in programs which were proposed throughout the province in physical education, kinesiology and related disciplines. Queen's University wishes to point out that the proposed programs recommended by the consultants do not show any particular innovative aspects as well. There are a number of reasons for lack of innovation in the field of physical education. A major one is that it is a new discipline seeking academic recognition within Ontario universities. Queen's University is of the conviction that both ACAP and individual universities should consider and foster innovative approaches to the study of physical education and related fields at the graduate level and notes that traditional graduate programs will not always be the appropriate pattern on which to base this new and developing field. For instance, Queen's University sees merit in structuring graduate programs around specific problems and in tailoring programs for specific student needs and interests. The philosophical and humanistic sub-disciplines particularly are conducive to this inter-disciplinary, less structured approach to graduate study.
5. The consultants have recommended that no Ph.D. programs in biomechanics be implemented in the province of Ontario at this time (see recommendation 11 on page A-2) and that any immediate Ph.D. aspirations for biomechanics may be incorporated within the sub-division of psycho-motor behaviour (see page A-52). If this possibility remains, Ph.D. programs in biomechanics in fact will develop in the very near future under the sub-division of psycho-motor behaviour. Such an evolution may not result in appropriate focus and scope of study in the field of biomechanics. It is the conviction of Queen's University that biomechanics is fundamental to the study of man in movement and that it is imperative that it develop on its own merit in the province of Ontario. Queen's University recommends strongly that ACAP, in conjunction with the physical education discipline group, establish guidelines and proposals for the development of a specific Ph.D. program in biomechanics in the province of Ontario.

Queen's University at present has under study the recommendations of the consultants in regard to the development of graduate studies at Queen's University. Indications are that the University will wish to go forward with proposals for Master's degree programs in exercise rehabilitation with the initial focus on cardiac rehabilitation as recommended by the consultants. Such a program might expand or change in the next few years depending upon the market for graduates of such programs. In particular, Queen's would like to study further the suggestion of the consultants that professionally oriented programs in social-penal rehabilitation be instituted. Unique opportunities also exist at Queen's University in other exercise rehabilitation programs because of the large number of hospitals and institutions in the Kingston area and the number and strength of related medical and paramedical departments at Queen's University. Queen's University also is inclined to go forward with the General Master's program as proposed by the consultants with three sub-divisions as follows: Biomechanics, Exercise Physiology, and Sociology of Sport. Queen's University wishes to reserve the right for a small number of students to elect to take a Master's thesis program in one of these sub-divisions by integrating courses within the General Master's program with appropriate courses in the cognate departments, that is, the Departments of Anatomy, Physiology, and Sociology. The matter of a small number of students undertaking discipline oriented studies within the General Master's program was discussed with the consultants when they visited the Queen's campus, and the consultants stated they had no objection to this proposal. Indeed, such a focus in exercise physiology is essential if Queen's is to fulfill the consultants' proposal (recommendation 10) that an additional Ph.D. program in Exercise Physiology should be planned for the province, with the most likely prospect for this development being a joint program at the University of Ottawa and Queen's University. Queen's University already unofficially has indicated to the University of Ottawa that it is interested in such a development and wishes to indicate that it will have the development of such a joint program under consideration in the next few years.



In conclusion, Queen's University would like to reiterate its support for the consultants' proposals for the short term development of graduate work in physical education, kinesiology, and related fields, and with the preceding reservations notwithstanding, expresses the hope that plans for the implementation of such graduate programs will go forward rapidly so that the province of Ontario may start to catch up on the shortfall of production of post baccalaureate graduates in physical education, kinesiology, and related fields in this province.



R.L. McIntosh  
Dean

School of Graduate Studies and Research.

February 1974.



UNIVERSITY OF TORONTO  
*School of Graduate Studies*

OFFICE OF THE DEAN

Toronto 5, Canada

January 23, 1974.

Dr. M. A. Preston,  
Executive Vice-Chairman,  
Advisory Committee on Academic Planning,  
Council of Ontario Universities,  
130 St. George Street, Suite 8039,  
Toronto, Ontario,  
M5S 2T4.

Dear Dr. Preston,

The University of Toronto agrees in general with the major recommendations of the consultants' report to ACAP on graduate programs in Physical Education, Kinesiology and Related Areas. We recognize that within the Ontario university system this discipline has suffered from some neglect and we support the thrust of the report to encourage its development.

The general recommendations

1. We agree with this recommendation and presume that, in delineating the subdivisions, the consultants were aware of possible overlaps with existing programs in other fields. We presume, too, that the interpretation of the subdivision 'sociology of sport' is broad enough to include historical perspectives.
2. We are perturbed that only universities with a Ph.D. program should be permitted to offer discipline-oriented master's programs. This seems to limit other universities to professionally-oriented master's programs. The rigid distinctions between discipline-oriented and professionally-oriented degrees can be harmful to both types of degrees.
3. While we welcome the expansion of professionally-oriented master's programs, we do not agree that these programs should be terminal if that term forecloses future development at a university. The door should be left open, not only for future development of professionally-oriented doctoral programs, but also of concomitant discipline-oriented master's programs.

...2

4. Such programs should not necessarily be terminal in terms of possible future development of other degrees at a university.
5. We would presume a designation such as M.P.E. to imply a professional, and perhaps terminal, degree. This appears to contradict the recommendations above.
6. We support the emphasis that this is an area badly served in general within the province, and in particular within many universities including our own. The discipline as a whole has suffered from neglect and both internal and external funding has been insufficient for the desirable development of the field.

#### The University of Toronto

18. We accept this recommendation as it applies to the present situation at Toronto, and we would hope that the School of Physical Education will not be discouraged from developing its research capability and future graduate orientation.

We accept the general comments on pages 69-70 concerning Physical Education at the University and we welcome the view of the consultants that a graduate department here is desirable. However there are two statements in the report that should be corrected to prevent future misunderstanding. Firstly, the student/teacher ratio is not the poorest of any department in the province. In calculating the number of staff, the consultants appear to have counted only the 11 faculty of the School of Physical and Health Education and not the six F.T.E. (25 staff members) from the Department of Athletics who are involved in the undergraduate program. This is contrary to what was done in calculating the number of staff at some other universities, hence our comparatively high ratio. Secondly, it should be noted that of the nine recommendations of the Winegard report which were applicable, six have been fully, and a seventh partly, implemented. The new facilities recommended in the report will be built within the next two years. Only the recommendation to begin a graduate program has not been implemented.

#### The miscellaneous recommendations

20. We disagree with this recommendation which runs counter to the trend toward part-time studies in many graduate fields.
21. While we agree with the intention of this recommendation, we ask that ACAP think through the difficult practical problems involved in the organization and implementation of cooperative programs between universities.
22. We agree that such meetings should continue.

23. We disagree with this recommendation and we believe that once more ACAP may be setting a boundary between disciplines that cannot and should not be rigidly observed. Within the undergraduate program of this University's School of Physical and Health Education both fields, as the name of the school implies, are closely linked, while at the graduate and research level there is close contact with the School of Hygiene. The door should be left open for cooperative programs in health education.

Yours sincerely,

*A. E. Safarian*

A. E. Safarian,  
Dean.

AES:erb

Response of the University of Waterloo  
to the Report of the Consultants on  
Physical Education, Kinesiology & Related Areas  
to the Advisory Committee on Academic Planning  
submitted to ACAP, January 25, 1974

The problems faced by the consultants in assessing this field are quite different from those faced by consultants working in an established discipline. As pointed out by the consultants themselves in the preface to their report, the field of physical education, kinesiology and related disciplines is one that has yet to establish itself firmly in the university community. In developing any new field of study there is a need to identify the focus of the field, the specialized areas of study and the academic emphasis in these areas of study and to establish appropriate academic standards to maintain a high level of activity. We believe that this report will be most helpful to the universities in Ontario in achieving these objectives. In this submission we will make a few general comments on the report, comment specifically on the sections that refer to the University of Waterloo and finally state our position on the recommendations contained in the report.

General Comments:

In the general part of their report, the consultants present a very good outline of the development of the field of physical education. In particular they point out the direction in which this field has been growing in recent years. The University of Waterloo is particularly pleased to note a number of these developments. The mere fact that the term "kinesiology" is used in the title describing the discipline area is evidence of the extent to which developments in this field have moved in the direction in which this university has felt they should. We are also pleased to note the consultants' recognition of the four sub-fields: work physiology, biomechanics, sociology of physical activity and psychomotor behavior, since these are the areas identified by our department in 1970 in its proposal for a master's programme and the areas in which we suggested possible development at the post-graduate level. We believe that if this field is to find acceptance in the

university community as an academic discipline, it must develop along the lines indicated.

We are also pleased to note the consultants' division of programmes into professional and disciplinary and their recognition that at the master's level, programmes of both types can exist in universities whereas the main emphasis at the doctoral level must be disciplinary. The master's programme in kinesiology at this University has from its inception been disciplinary in its orientation as is recognized by the consultants.

On page A-21 the consultants set out the standards which they believe should be achieved for graduate programmes of high quality. In general, we agreed with these standards, our only question is whether the consultants have applied them consistently in their later evaluations of the various programmes in the different universities.

On the question of library holdings we suggest that the consultants' recommendation cannot be taken too literally. One must expect the library resources to be adequate to support the type of programme which the university in question plans to offer. Blanket statements of minimum numbers of journals and volumes are not very helpful since these are not directly related necessarily to the particular programme involved.

The section on cognate departments in schools also raises some important questions. Surely the most important first consideration is the strength of the department planning to operate the programme. Support from cognate departments while important in some programmes may be less so in others and each programme must be evaluated on its own merits. If support from a cognate department is important for the programme concerned, then it is one of the factors that would be considered in an appraisal of that programme. It is not clear to us, however, why supporting strength must necessarily be found in the same university. In Ontario many of the universities are geographically close to each other and a strong department proposing a doctoral programme in one of the fields in this discipline at one university might well be able to draw on support from cognate departments in neighboring universities. Whether such arrangements would be adequate to

provide the kind of support required by the programme would have to be judged at the time the programme was appraised. To state that no Ph.D. programme should be implemented in a university which does not have the supporting strength in a cognate department of its own seems to us to impose an unnecessary a priori limitation on the university system.

The section in the report on future prospects and man-power needs presents a good analysis of the situation. However, as the consultants themselves admit, there are very few figures to go on in this field. We believe that the study of this problem undertaken by the discipline group which is based upon a better statistical base will likely prove more helpful to the universities in planning than will the consultants' report although, the latter certainly provides a good general picture of the situation.

Finally we must comment on the use by the consultants of the word "sport". It is clear that the consultants feel that sport is the focus of physical education and by inference of the whole field of kinesiology and related disciplines. While sport is certainly a major form of human physical activity and indeed may be an appropriate focus for physical education, it is not appropriate in our view for the broader field of kinesiology. This latter field concerns itself with human movement capabilities and limitations in all of the many contexts in which human movement can be studied. Sport is only one aspect of this.

#### Specific Comments:

While the section of the report devoted to the University of Waterloo specifically is generally fair, we do wish to comment on one or two aspects of it. In particular, we find it difficult to interpret the numbers in the tables opposite the University of Waterloo in Table 8 on page 7-56. It is not clear whether the number of faculty represents full-time or part-time faculty in the particular special areas concerned or number of faculty active in the programme. In either case, the numbers do not appear to be correct for the University of Waterloo. Unless the basis for calculating these numbers is known, however, we cannot say what the correct ones should be.

In the section devoted to master's programmes in this table, we are rather surprised to see the master's programme at this University described under the heading of "General Professional". We do not view our master's programme as a general professional programme. In the body of the report the consultants make particular mention of the fact that our programme is discipline oriented at the master's level and commend us for having developed it along these lines. The number of graduate students shown in this table for our master's programme is consistent with the present enrollment. The table does not indicate any growth pattern, although in the body of the report the consultants indicate that they expect the master's enrollments to grow as the universities acquire sufficient faculty to handle the increased numbers. This University's plans call for a growth in master's enrollment to about 25 students over the next four or five years providing that we are able to make the necessary appointments to the faculty. We believe that these plans are quite realistic.

The statement on page A-39, that library holdings in the general area of physical education are sub-standard is not surprising since the programme at this University is not in the general area of physical education. Library holdings have been developed in the areas required to support the programme in the form in which it has been developed. Substantial allocation of funds to building up the collection in the area of physical education would not strengthen the library support for our graduate programme and we feel that such expenditure would not be justified. Indeed it would have a negative effect since it would use rather scarce resources which are needed elsewhere.

The suggestion that Waterloo develop a Ph.D. programme in the area of sociology of sport is consistent with this University's plans for development of doctoral work in this field. The University is currently actively engaged in seeking the additional faculty strength which the consultants suggest is needed before the programme can be mounted. The necessary support from the Department of Sociology will, of course, be part of the University's commitment to support this programme.



Comments on Recommendations:

The consultants make 23 recommendations in the report.

We agree in general with recommendations 1 to 6 although we would like to comment that recommendation 2 does not seem to be reflected in Table 8. In recommendation 5 we agree in-so-far as this refers to Ph.D. programmes and discipline oriented master's programmes but such specialized degree designations might very well be appropriate for specialized professional programmes. With respect to recommendation 6, we believe that such support should be forth-coming before 1980. In the case of Waterloo, such support has been available for several years and we are approaching, as planned, levels necessary to sustain the programmes we propose.

Recommendations 7 to 11 deal with Ph.D. degree programmes.

We agree with recommendation 7 and have already indicated that the implementation of a Ph.D. programme in the sociology of sport at this University is consistent with our plans for development of graduate work in this field. We believe, however, that there should be some clarification of the terms "sociology of sport" and "social science of sport". While the term sociology of sport seems to be reasonably well defined in the body of the report, the broader term social science of sport is less well defined.

We can also accept recommendation 8 if the date 1977 is considered to be flexible. It would be our intention to implement this programme when it was ready; that is when it had satisfactorily passed an appraisal which had determined that it had met the criteria for the development of doctoral work. Whether the university could reach this level of development in this programme prior to 1977 is a question at the present time, but we feel that the starting date should depend on when the programme is ready rather than be established rigidly.

We make no comment on recommendation 9.

We agree with recommendation 10 but we believe that when the need for another programme arises it should be possible for any university to submit a programme for appraisal. Waterloo already has an approved disciplinary oriented master's programme in this area and it is possible that this University would have the strongest programme to offer at the doctoral level in the future. Such a question can, of course, only be answered by an appraisal at the appropriate time.

We agree with recommendation 11 at the present time. We assume that the need for doctoral work in the field of biomechanics will be determined by future developments in that field.

Recommendations 12 to 18 refer to the master's degree programmes. We make no comment on those recommendations which refer to the programmes at other universities. We do wish to make one general comment however. Where programmes have been appraised, such as the programme at the University of Waterloo, areas of specialty have been clearly identified and the programmes have been assessed in accordance with these divisions. Approval has then been given for the university to operate its programme in those particular areas of specialty where it has the necessary strength and resources. In the case of programmes which have never been appraised, no such delineation of fields of specialty or assessment of strength has taken place. We suggest that it would be useful for ACAP to request those universities whose programmes at the master's level have not been appraised to indicate the fields of specialty in which they feel they have the necessary resources to offer master's degree work.

Recommendations 19 to 23 are listed under the heading of miscellaneous. We have no comment on recommendation 19.

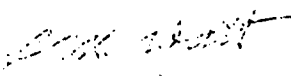
Recommendation 20 we can accept with respect to Ph.D. programmes but we do not agree with the consultants with respect to master's programmes. Indeed it would appear to us contrary to what the consultants say that specialized master's programmes in this field would lend themselves quite well to part-time study because of the kind of student that they may attract.

We agree with recommendations 21 and 22.

We can also accept recommendation 23 provided that programmes in health education are handled in some manner in the context of planning assessments and do not remain in limbo thus preventing any new developments in this field from starting.

The consultants report concludes with some general recommendations and rationale. We agree in general with the statements contained in this section of the report. We agree in particular that Ph.D. programmes in this field must be initiated from a power base and that this requires a strong nucleus of productive senior scholars. The achievement of the necessary power base to mount a Ph.D. programme will be assessed by an appraisal of the programme at the time of submission. It may be possible for some universities to move more rapidly towards acquiring the necessary resources to mount strong Ph.D. programmes than others. Proceeding with caution does not necessarily mean proceeding slowly but rather in a planned and prudent manner.

Respectfully submitted

  
L. A. K. Watt  
Dean of Graduate Studies  
University of Waterloo

## UNIVERSITY OF WESTERN ONTARIO

University Position on Report of ACAP Consultants for  
Physical Education

These comments have been prepared by a Senate Committee struck to consider the Report of the ACAP Consultants in Physical Education.

With reference to the Report of the ACAP Consultants for Physical Education, the Committee notes the following points in the anticipation that they will come under closer scrutiny by the Advisory Committee on Academic Planning:

1. We have difficulty in reconciling what appears to be an inconsistent use of terminology by the Consultants in describing the subdivisions of the discipline. After defining the four subdivisions on pg. A-18, they fail to make consistent use of these when describing individual programs later in the report. In particular, the sociology of sport is distinguished from the social science of sport on pp. A-39 and A-40 and in Table 8 on pg. A-56, in such a way as to imply a difference.
2. When describing the faculty complements supporting the various graduate programs, the Consultants are inconsistent in the data they cite for the different universities. Western has 33 full-time faculty members in Physical Education. Eighteen of these are involved in graduate work. The figure of 8.5 FTE cited on pg. A-40 is misleading and inconsistent with any other figures given in the report. Surely one of the points in having consultants do a general survey of all participating universities is to provide a consistent data base which can be used for planning purposes.
3. The Consultants refer on pg. A-40 to the problem of unfinished Masters degrees at Western. The number of students in this category has to be viewed in the perspective of the total number of students taking the program. 127 students have been admitted to the program in its first 10 years. 60 Masters degrees have been awarded, 4 students have withdrawn, one has transferred to Medicine, and 14 are part-time students continuing their study. From the first nine classes of full-time students, 56 have been awarded degrees and 32 have work outstanding, for a completion rate of ca. 65%. These figures are not unreasonable and indicate that the appropriate academic standards are being maintained.

4. The Committee finds difficulty in rationalizing the Consultants statement on pg. A-40 suggesting library resources need improvement, with the statement of the University Librarian and the documentation on library resources submitted to the Consultants which indicate library holdings equivalent to the Ph.D. standard given by the Consultants on pg. A-22 of the report.
  
5. The Committee takes exception to the Consultants statement on pg. A-40 indicating a limited level of publishable research activity on the part of the faculty at Western. Here again, we stress the need for a comparable data base. While there may be disagreement as to what constitutes a refereed publication in a relatively new discipline, the fact remains that a substantial number of faculty members at Western has publication records in excess of three refereed papers, the criterion used on page A-39 in characterizing (positively) another department.
  
6. Recommendation #14 on pg. A-2 indicates that specialized Masters programs in "Motor Behaviour and Play of Exceptional Children" should be mounted at Lakehead and York. It is our understanding that Western Ontario rather than York was recommended by the Consultants to implement a Masters degree program in "Motor Behaviour and Play of Exceptional Children" and that this is an error in the report. Certainly Western would be the logical place to initiate such a program. Professor Hayden has been heavily involved in research, teaching and program development in mental retardation for the past 14 years, including 7 years as a director at the Kennedy Foundation in Washington, D.C.; Professors Milne and Richardson have been involved in teaching and research in this area for several years and five M.A. theses have already been completed here involving the retarded and emotionally disturbed. Many innovative programs have originated from our faculty including the Winter Special Olympics for the retarded. There are many unique opportunities for field studies in the London area including the programs at the Children's Psychiatric Research Institute, the Madame Vanier Institute (for emotionally disturbed) and the new regional school for the deaf.
  
7. Recommendation #14 on pg. A-2 indicates that specialized Masters programs in "Cardiac Rehabilitation" should be introduced at McMaster, Ottawa, and Queens. The involvement in this area of the three universities listed is quite recent whereas Western pioneered with the first program of this nature in Canada in 1963 and has had a continuing program of research training conducted jointly by the faculties of Physical Education and Medicine for 11 years. A large number of publications have resulted from this work. Three M.A. theses have been completed in the area and three more are in progress. A Ph.D. student in Physiology will be conducting his research within this study beginning this summer. It would be extremely difficult to duplicate the experience and expertise in exercise rehabilitation for cardiacs represented by Professors Cunningham, Rechnitzer and Yuhasz.

8. The Committee notes the suggestion on pg. A-41 that Western develop a joint Ph.D. program with Windsor in the social science of sport area. Western would welcome the participation by Windsor in a program of this sort. At the present time a regular interchange of visiting speakers with Windsor is anticipated. At the same time, however, we feel that the question of personnel adequacy for the mounting of a Ph.D. program is one which should be determined by the OCGS Appraisals Committee at such time as a detailed program proposal is submitted. In attempting to assess the capability of faculty members for Ph.D. supervision, the ACAP Consultants have used a specialized set of criteria whereby a number of highly qualified individuals at Western have been excluded. This matter must ultimately be decided by the Appraisals Committee.

THE UNIVERSITY OF WINDSOR  
INSTITUTIONAL RESPONSE TO  
CONSULTANTS' REPORT ON  
PHYSICAL EDUCATION

*The University of Windsor envisages the proposed doctoral program in the socio-cultural area in Physical Education as a natural extension to its Master's program in this same field, which was the first in the Province to be successfully appraised six years ago under the present system. It is proposed to begin the offering of the Ph.D. program in the socio-cultural area in 1975 with the addition of two faculty members in 1975 and one in 1976. The other proposed Ph.D. stream in the bio-dynamics area would be offered some three years hence.*

*With the above in mind, the following constitutes the University's reaction to the consultants' report:*

*The consultants indicated that potentially they felt the Province was in a position to support programs at the doctoral level in Physical Education that would surpass those in existence in North America. This served as the basis for the entire evaluation. They readily agreed that if these same standards were applied to those programs presently in existence in North America that the vast majority of them would have to be phased out. An overall assessment of the consultants' standards would be that they were highly idealistic and unrealistic. They also agreed that there was a responsibility in the Province to provide our students with doctoral programs so that they would not be forced into enrolling in inferior programs in other countries.*

*They also utilized the strength of cognate departments, and publications in refereed journals in these cognate areas, as the chief criterion for determining the rating or value of proposed programs. In the United States there are many doctoral programs in Physical Education which would have to be phased out if support from the cognate areas was withdrawn. This dependence*

factor has largely been the history of the development of Physical Education in the United States and is not the case in Ontario. Overall, the strength of the faculty at the University of Windsor would rate very highly in comparison to those faculties associated with doctoral programs in the United States. We have first-hand evidence of this since all members in the Faculty with Ph.D.'s, with one exception, received them in the United States.

The consultants have recommended that a joint program involving Windsor and Western be initiated in the area of "Social Science" of Sport. Deans Galasso and Zeigler have discussed the matter thoroughly and both feel that the resources at his institution are more than sufficient to provide the basis for the establishment of an independent program at each institution. They both feel, also, that the bias of the consultants relative to the Humanities aspects of the discipline of Physical Education is evidenced by the title of the joint program that they recommend; at Windsor the title of the program is Socio-Cultural, which includes, at present, Sociology of Sport, History of Sport, Philosophy of Sport, and Administrative Theory of Sport. However, within the framework of the two independent programs, Deans Galasso and Zeigler have discussed all avenues of cooperation.

With respect to the University of Windsor library holdings, six years ago when the Master's program was appraised the library holdings were deemed to be adequate. Since then an additional \$70,000 has been expended from the Faculty budget alone in augmenting the library holdings and therefore it seems unlikely that the assessment of the consultants is valid. It would appear that the inadequacy of the Library of Congress classifications, as submitted by ACAP to the consultants, is largely responsible for the unwarranted remarks and evaluations as put forward by the consultants. As one



test case in the area of Philosophy of Sport and Physical Activity, a comparative evaluation was made and it was found that over 8,000 volumes were available in just this one sub-disciplinary area as compared to a mere handful of books as identified through the Library of Congress listings supplied by ACAP and investigated by the University of Windsor library. Additionally, it would appear that the consultants ignored the formal working relationship that exists (as of 1961) between the University of Windsor and Wayne State University with respect to the mutual use of the libraries. The University of Windsor students and faculty have direct access to the Wayne State University libraries with equal privileges to those of Wayne State University students and faculty. Geographically, the Wayne State library is located within a distance of the University of Windsor campus comparable to the distances that separate buildings on larger campuses in this Province. The attached letter submitted by Mr. Albert Mate, Assistant Librarian for Information Services, indicates the strength of the cognate areas at Wayne State University that would be referred to by Ph.D. students in Physical Education. Similar studies to the above, done in the Philosophy of Sport and Physical Activity sub-discipline, would produce the same results in the other sub-disciplinary areas. With respect to periodicals, all titles recommended by the appraisers of six years ago have been ordered, along with back issues, thus giving us excellent coverage based on our own assessment of our needs as well as those of the appraisers. We feel we have an excellent library base for the development of a doctoral program. The comparatively high funds allotted to library expansion will continue to be utilized for this purpose.

It is our firm belief that with reference to the consultants' assessment of major publications, among the faculty at the University of Windsor, it is biased towards publication in refereed journals

in cognate fields. The consultants agreed in the November meeting to alter their stance in this respect, and while they made editorial changes in removing the label of refereed journals in cognate fields, they nevertheless did not alter their wording in the final report with respect to their evaluation of publications, which obviously should have placed a greater weight on publication in journals in Physical Education. In our estimation, they also largely ignored the many international and national presentations made by the members of the Faculty of Physical and Health Education. These international and national presentations would outweigh publishing in some of the international journals. Over and above this point, the standards as outlined by the consultants, if applied to programs at the Ph.D. level in North America, would find over 90% of them wanting. This is yet another example of the unrealistic standards as applied by the consultants.

The consultants' assessment of our Bio-dynamics stream is again biased by their leaning toward the importance of the existence of cognate departments in specific areas, such as a physiology department as opposed to a department of biology. Again, this somewhat U.S. approach to Ph.D. programs in Physical Education evaluation distorts the picture in that it is clearly more important to evaluate the quality of the members within the Faculty of Physical and Health Education, as opposed to those in cognate areas, or the existence of cognate areas. In addition, the proposed Ph.D. program at the University of Windsor is not course oriented as is the case not only with the vast majority of programs proposed in this Province but as they exist in the United States, and therefore, in those programs a heavier reliance may be placed on cognate courses to be taken in the sister discipline. Therefore, at the University of Windsor, the emphasis must be placed even to a greater extent on the strength of the members of the Faculty of Physical and

Health Education. As long as library and laboratory facilities and equipment are adequate--and the consultants did agree that the laboratory space and equipment at the University are excellent--there is no valid basis for the consultants' report on our bio-dynamics area.

On their visit, the consultants indicated to the members of the Faculty of Physical and Health Education that they found the proposed programs for the Ph.D. degree exciting. They felt that an effort was being made to be innovative and encouraged us to pursue this. At the time, they did wonder about the apparent lack of coursework and expressed this in the Report, but in somewhat different language. The proposed program itself is not unstructured. The absence of courses, at least on a theoretical basis, does not in itself lead to an unstructured program. The only chief concern that it seems to us may be justifiable is one associated with quality control and standards. It would appear that the important factor is the quality of student research, since the Ph.D. degree is a research degree, and this is largely in control of the doctoral committee as well as the advisor. The student's program and his dissertation must be approved by the entire committee after a conference between the advisor and the student. Changes made are also controlled by the committee.

It is envisaged that the dissertation will be an outcome of participation on the part of the student in the integrated seminar which will involve all of the faculty members within the socio-cultural area and the graduate students who will be required to make presentations and defend points of view within the framework of socio-cultural problems in the areas of sport and physical activity, such as power, competition, conflict, etc. The theoretical framework behind this stream will be developed within problems as they exist in

the world of reality. In this respect, the faculty agree with the consultants' assessment of the approach to be taken in the study of problems. As has been indicated, theoretically, a highly-prepared student may enter the program and do no actual coursework other than the dissertation and participation in the integrated seminar. Those with deficiencies or those who have selected a dissertation topic which requires specialized knowledge would have a program adjusted by the advisor and the committee and may involve courses to be taken. Thus, with respect to quality control and standards, the program is highly structured and all of the artificial, irrelevant hurdles which exist to a large measure in the United States programs have been eliminated to enable the student to obtain a high level of research competence and to acquire and contribute to the evaluation of knowledge and its acquisition and development. At every stage, in all of the discussions with the consultants, they stressed the concept of innovation and yet when innovation was introduced through the University of Windsor program, their recommendation was to return to the course-oriented programs that exist traditionally in the United States, and which are extremely deficient in preparing individuals for the attainment of a high level of scholarship. The consultants, in fact, on the business of integration, contradict themselves in the last two sentences on page A-61 of their final report. On the one hand they recognize the definite effort to integrate the knowledge, and on the other hand question the lack of integration.

Reference was made originally to the proposed Ph.D. program acting as a natural extension of the present high quality Master's program. As an illustration of the quality of the Master's program, of the twenty students who have graduated with a Master's degree eight of them, to this point, have gone on to doctoral work at Alberta, Tennessee, Michigan, Illinois, Ohio State and the University of Minnesota. Of these eight students, three of them have been awarded Canada Council Ph.D. scholarships. At present, there are twenty students registered

*in the Master's program and judging by data as collected from other disciplines, this number in itself could serve as a sufficient base for the desired expansion to the Ph.D. level, without reference to obvious numbers that would be attracted from other institutions in the Province and the Country with only a Master's program.*

*The manpower needs, as supplied by the Discipline Group which were much more extensively researched than those of the consultants, indicate clearly a picture of need far in excess of the output of the proposed programs. There should be no hesitancy whatsoever at recommending the immediate and full approval of the programs as outlined in the consultants' report, but with the one amendment of creating independent programs at both Windsor and Western.*

*We have an obligation to the students of this Province and Country who are interested in graduate work to provide them with Ph.D. programs in Physical Education. The vast majority of physical educators with Ph.D.'s in Ontario acquired them in the United States--outside of two or three who acquired them at the recently instituted Ph.D. program at the University of Alberta. Obviously, no one institution is able to provide or meet the needs of a discipline or society, and therefore it is proposed that an independent program at the University of Windsor be instituted in the socio-cultural stream in 1975 with the addition of two faculty members in 1975 and one in 1976.*

## YORK UNIVERSITY

4700 KEELE STREET,  
DOWNSVIEW, ONTARIO, CANADA

FACULTY OF GRADUATE STUDIES  
OFFICE OF THE DEAN

12 February 1974.

Professor M.A. Preston,  
Executive Vice-Chairman, ACAP,  
Council of Ontario Universities,  
130 St. George Street,  
Suite 8039,  
Toronto, Ontario.

Dear Professor Preston,

I am responding on behalf of York University to the consultants' report to ACAP on graduate programmes in Physical Education, Kinesiology, and related areas.

In general, we accept the validity of this report as far as it applies to this University. However, we have some doubts about the consultants' categorical assumptions; we have no doubt that these will be intensively considered by the Discipline Group but there is one aspect which affects the recommendations regarding York, and this I mention in Section (a) below. There is also one substantive general recommendation which is contrary to our beliefs and aspirations, and this I mention in Section (b) below. My other comments are specific to the York recommendations.

- (a) Perhaps understandably, the "subdivisions" utilized by the consultants present some ambiguity. They involve problems of classification and considerable overlapping. It could be argued that the categories are either too broad or too specific. From our point of view these problems are highlighted by the recommendation that York should specialize in "Motor Behaviour and Play of Exceptional Children". Whilst we consider ourselves quite capable of offering a programme appropriate to this title, we would emphasize that our main specialized strength lies in the area of Effects of Stress. The consultants were aware of this and we were assured that the categorical title they selected was intended to cover the "stress" aspect as well as the "adaptive" aspect. Unfortunately, the categorical system employed does not allow this to be made clear.
- (b) We are strongly opposed to the general recommendation, number 20, that there should be no part-time programmes offered for specialized masters degrees or for doctoral degrees. From the purely academic point of view, we are unable to see any justification for this recommendation. From the point of view of demand, we know that there are many prospective students who would welcome the opportunity to study Physical Education on a part-time basis. And from the general social standpoint, we feel that part-time studies should be encouraged.

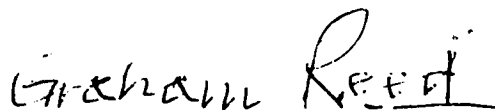
. . . cont'd

Professor M.A. Preston

11 February 1974

- (c) As regards the recommendation that we should expand into the area of "Psychology of Sport" we can make a most positive response, particularly as two new appointments at a senior level have been approved for the forthcoming year.
- (d) Our plans in the area of "Sports Administration" are contingent upon the outcome of our recruitment. We have complete confidence in our ability to arrange further cross-appointments of appropriate and willing faculty members from other areas of the University in line with the general feelings of the consultants.
- (e) As regards recommendation 17, we are currently engaged in planning a specialized programme in the Theory of Coaching, an area in which we feel we have considerable strength.
- (f) Whilst not wishing to quibble about the consultants' impressions, we do feel that their remarks about our library holdings and laboratory facilities are modest to the point of damnation by faint praise. It could be claimed with justification that York's facilities in this area are excellent. Indeed, where library holdings are concerned, York holdings are vastly in excess of the standards suggested by the consultants' themselves.

Yours sincerely,



Dr. Graham F. Reed,  
Acting Dean,  
Faculty of Graduate Studies.

GR/dm

A P P E N D I X D

PRODECURE OF PLANNING STUDY AND TERMS OF REFERENCE



Procedure for Planning Assessment in  
Physical Education, Kinesiology and Related Areas

February 15, 1973

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The planning assessment will cover the divisions of study shown at Appendix A.

- A. Tasks Requested from Discipline Group (with help available from ACAP at all stages)
- A.1 Suggest suitable consultants. This also will be a matter for discussion with ACAP.
- A.2 Examine and comment on pro formae to be used for the gathering of information on current, past and future programmes as described in paragraph B.1.
- A.3 Examine and comment on the adequacy of the data on current and past strength.
- A.4 Both in consultation with ACAP and separately, consider the situation revealed by the tabulation of proposed future programmes and consider whether future plans should be modified or developed in more detail. As a result of this step, individual universities may wish to revise the material described in B.1.d.
- A.5 Possibly develop a tentative plan for development of established or new graduate work in these aspects of Physical Education in Ontario, based on the evaluation of prospects and plans for the schools and departments collaborative arrangements and paying attention to adequate coverage of the divisions of the discipline. Any such plans will be reported to ACAP which will transmit them to the consultants.
- A.6 Meets with the consultants, at least twice, once before they begin site visits and again to discuss their draft report.
- B. Information from Universities
- B.1. Each university is asked to supply to ACAP, in the form indicated by ACAP after comment by the discipline group (paragraph A.3) information as follows:
- a) for each division in Appendix A:
- (i) current list of faculty members (for part-time members show the time spent on university duties); (Form 1)
- (ii) numbers of full-time and part-time faculty members for each of the past five years; (Form 3)

- (iii) for the current year and preceding four years, number of graduate students taking graduate courses in physical education; full and part-time shown separately. (Form 3)

Under these three headings one individual may appear under more than one category.

(b) for each "department"

- (i) Curricula Vitae of all faculty members, Assistant Professor and higher, now engaged in graduate work or soon expected to be and showing inter alia complete publication lists, research and consulting funding in the past five years when relevant to his academic work and students supervised during his career. (Major supervisor: completed and in progress shown separately.) (Form 2)
- (ii) resources of space - a statement indicating the department's view of the adequacy of its space, and, in connection with the future plans in (d) below, discussing future space provision; (Written Statement)
- (iii) undergraduate base; honours students, number of qualifying or make-up year students, etc; (Form 4)
- (iv) support from related departments including shared teaching and research in the divisions covered by this assessment; (Written Statement)
- (v) extent of major laboratory facilities and equipment in the divisions covered by this assessment; (Form 5)
- (vi) library resources: analysis of holdings and budget; (To Be Supplied)
- (vii) other general items relevant to research and graduate study; e.g. computing facilities
- (viii) description of any inter-university arrangements for graduate work. (Written Statement)

(c) table of characteristics of graduate students in the department

- (i) F.T. and P.T.; (Form 6a)
- (ii) immigration status (3 years) and country of first degree; (Form 6a)
- (iii) sources of financial support; (Form 7)
- (iv) drop-out number; (Form 6b)
- (v) degrees granted. (Form 6c)

d) proposed plans for the future, in as much detail as the department can provide, including the proposed scheme for support of these plans, and accompanied by supporting arguments, including consideration of the sources of graduate students and an analysis of demand for graduates from the programmes. The various headings in a) and b) above should be dealt with quantitatively where possible; as a minimum, planned numbers of faculty and graduate students should be given for the next five years.

B.2 The material so supplied will be collated by ACAP and transmitted to the discipline group for action.

B.3 Apart from the material described in B.1.d and to some extent generated at the department level, each interested university will be requested to make an individual statement on its plans for the development of physical education, in particular the items of future commitment implied by item B.1.d. Deadline dates for parts A and B will be established by ACAP.

C. Terms of Reference of Consultants

C.1 Consider the materials prepared by the discipline group and the universities and obtain other data they may require to carry out the tasks detailed below. They may obtain data and views from any relevant source, such as, for example, employers of holders of graduate degrees, professional and learned societies, federal agencies. The campus of each interested university shall be visited by at least two consultants. Consultants shall arrange their schedule of visits to the universities in consultation with ACAP to ensure uniformity. Previous reports of appraisal consultants are privileged documents and are not to be made available to ACAP consultants. Consultants shall liaise with the discipline group near the beginning of the work, during the work as they consider necessary, and immediately before preparing their final report in order to provide an opportunity to receive oral comment on a draft report.

C.2 Report on the adequacy of the present state of graduate work in physical education in the province in general and in each university where applicable, discussing the following:

- a) coverage of divisions and specialties, and extent of activity in each
- b) faculty quality and quantity
- c) nature of programmes offered
- d) enrolment size and distribution amongst universities
- e) quality of student body; admission requirements

- f) relationship to related disciplines
- g) physical facilities
- h) other matters considered by the consultants to be significant.

C.3 Make recommendations for the development of graduate work in physical education in Ontario between 1973 and 1984, but in more detail for 1974 through 1979, and, without limiting the generality of the foregoing, dealing with the following points:

- a) Academic trends in this field in the next decade, paying attention to the desirable programmes to be offered in the province in university graduate schools and considering both possible limitations or reductions of existing programmes and creation of new programmes and new kinds of programmes including the appropriateness of part-time programmes. In particular, consider any new areas of physical education in which graduate work should be developed and any application-oriented and interdisciplinary work in which physical education should be involved.
- b) Desirable provincial enrolments, year by year, in the various levels of graduate study and the various subject divisions. One should consider both the need for highly trained manpower and for educated people, i.e. the general cultural and societal factors which may lead students to pursue graduate work in physical education. In considering manpower needs one should take account of the "market" available to graduates (at least all of Canada) and of other sources of supply for that market. Results of forecasts of high level manpower employment should be treated with due caution and only in a clearly balanced relationship with cultural and societal needs.
- c) Distribution amongst the universities of responsibility for programmes and for specialties where appropriate, including consideration of the need for any increase or decrease in the number of universities offering doctoral work and including consideration of areas of collaboration and sharing of facilities at regional level and across the province.
- d) Distribution of enrolment amongst the universities, showing desirable ranges of enrolment.
- e) Desirable extent of involvement with related disciplines.

In all cases, it is important that the rationale for the recommendations be clear; this is especially important for items c) and d). Consultants are asked to comment on advantages and disadvantages of various techniques for arranging that their recommendations become effective.

C.4 It is permissible for consultants to recommend appraisals of individual programmes. This would arise if consultants were to suspect that a programme would be found to be wholly or in part below minimum acceptable standards; an appraisal by the Appraisals Committee is the

means of settling the question. It is recognized that this action would be infrequent. Perhaps more likely, in planning assessments in some disciplines, consultants may find an excess of programmes in the same area of study, all of which could pass an appraisal; they would then have to make their own judgements of relative quality ( a task outside the terms of reference of the Appraisals Committee), and guided by this judgement and other factors, the ACAP consultants would have to recommend where enrolment should be curtailed or eliminated.

D. Appointment of Consultants

The consultants shall include one person of wide academic experience in Canada but in a different discipline. The other two consultants shall be scholars of international standing in the field of physical education with suitable administrative or consulting experience.

E. Report of Consultants

The consultants submit a joint report to ACAP. Minority reports are of course, possible. The reasoning leading to their recommendations should be given fully, in view of the subsequent treatment of the report. The report is submitted for comment to the discipline group and to each interested university. There may be informal or interim exchanges of views amongst the discipline group, the universities, and ACAP. Any university which wishes to make a formal statement on the consultants' report shall submit it to ACAP. Any such report shall be transmitted to the discipline group. The discipline group shall submit its formal comments and/or recommendations to ACAP. ACAP considers the discipline group and university statements along with the consultants' report and transmits them to COU with its recommendations of the position COU should adopt. Copies of the material transmitted to COU will be supplied to OCGS, to the Council of Deans of Arts and Science, and to the members of the discipline group and to the interested universities. The consultants' report may be published together with the comments of the discipline group, those of any university so requesting, and with the position adopted by COU.

APPENDIX A

LIST OF DIVISIONS

History of Sport and Physical Activity

Philosophy of Sport and Physical Activity

Sociology of Physical Activity and Sport

Social Psychology of Physical Activity and Sport

Psychology and Psychomotor Learning

Administration Theory

Exercise Physiology

Growth and Development

Biomechanics

Professional Studies (Sport Medicine, International Comparative Systems,  
Physical Fitness, Paedagogy, Outdoor Living,  
Exercise Rehabilitation)

A P P E N D I X E

DISCIPLINE GROUP MEMBERSHIP

## APPENDIX E

## DISCIPLINE GROUP MEMBERSHIP

Guelph	- Professor J.T. Powell
Lakehead	- Professor J. Widdop
Laurentian	- Professor J. Dewar
McMaster	- Professor A.J. Smith
Ottawa	- Professor W.A.R. Orban*
Queen's	- Dr. G.M. Andrew until September 1973 Professor D. de F. Macintosh
Toronto	- Professor J. Daniel
Waterloo	- Professor G.S. Kenyon
Western Ontario	- Professor E.F. Zeigler
Windsor	- Professor P.J. Galasso Dr. G. Olafson July 1972 - July 1973
York	- Professor B. Taylor

\* Chairman



A P P E N D I X F

ROLES OF ACAP AND OF DISCIPLINE GROUPS

Ontario Council on Graduate Studies

By-Law No. 3

A By-Law to establish a Committee on the Academic Planning of Graduate Studies.

1. The Ontario Council on Graduate Studies, recognizing the importance of providing for the continued and orderly development of graduate studies in the Ontario universities, establishes a Standing Committee to be known as the Advisory Committee on Academic Planning (abbreviation - ACAP).

Interpretation

2. In this By-Law

- (a) "Committee" without further specification, means the Advisory Committee on Academic Planning;
- (b) "Council" or OCGS means the Ontario Council on Graduate Studies;
- (c) "Committee of Presidents" or CPUO means the Committee of Presidents of Universities of Ontario;
- (d) "university" means a provincially assisted university in Ontario;
- (e) "discipline" means any branch or combination of branches of learning so designated;
- (f) "discipline group" means a body designated as such by the Committee of Presidents of the Universities of Ontario, and normally consisting, for any one discipline, of one representative from each of the interested universities;
- (g) "planning assessment" means a formal review of current and projected graduate programmes within a discipline or a group of disciplines;
- (h) "programme" signifies all aspects of a particular graduate undertaking;
- (i) "rationalization" means the arranging of graduate programmes in order to avoid undesirable duplication, eliminate waste, and enhance and sustain quality.

### Membership

3. (a) The Committee shall consist of at least seven members of the professoriate in Ontario universities, some of whom shall be members of the Council.
- (b) The members of the Committee shall serve for such periods of time as the Council may determine, and they shall be selected in such manner as may provide for reasonable balance both of academic disciplines and of universities.
- (c) The members of the Committee shall be appointed as individuals.

### Chairman

4. The Chairman of the Committee shall be named by the Council, and he shall have one vote.

### Quorum

5. A majority of all members of the Committee shall constitute a quorum.

### Functions

6. The functions of the committee shall be
  - (a) To advise OCGS on steps to be taken to implement effective provincial planning of graduate development;
  - (b) To promote the rationalization of graduate studies within the universities, in cooperation with the discipline groups;
  - (c) To recommend, through OCGS, to CPUO the carrying out of planning assessments of disciplines or groups of disciplines and to recommend suitable arrangements and procedures for each assessment;
  - (d) To supervise the conduct of each planning assessment approved by CPUO;
  - (e) To respond to requests by CPUO to have a discipline assessment conducted by proposing suitable arrangements;
  - (f) To submit to CPUO the reports of the assessments together with any recommendations which the committee wishes to make. A copy of the report shall be sent to Council.

Jurisdiction

7. In order that the Committee may discharge the functions described in Section 6 above, it shall be authorized
  - (a) to request a university to provide such information pertaining to graduate studies as may enable the Committee to discharge its functions;
  - (b) to request a discipline group to provide such information as may enable the Committee to discharge its functions;
  - (c) to receive reports from the universities and from the discipline groups, and to comment and communicate with the universities and the discipline groups concerning such reports;
  - (d) to convene a meeting of any discipline group for the purpose of discussing the development to date, and proposals for the future development of graduate studies in the discipline concerned;
  - (e) to send one or more representatives to a meeting of a discipline group at the invitation of the discipline group;
  - (f) to make such suggestions to a discipline group as may be deemed appropriate to the functions of the Committee;
  - (g) to supervise the conduct of planning assessments, and to report thereon to the Committee of Presidents of Universities of Ontario;
  - (h) generally to report and to make recommendations to the Council;
  - (i) to seek and receive advice from appropriate experts;
  - (j) to employ consultants in connection with planning assessments.

Procedures

8. The procedure to be followed by the Committee shall be as approved by the Committee of Presidents of the University of Ontario.
9. The Committee's function is solely advisory.

Effective Date

10. This By-Law shall take effect January 1971.

ACAP DISCIPLINE GROUPS AND THEIR ROLES1. Establishment of a Group

- a. When it is considered desirable to activate planning of graduate work in some discipline(s) or interdisciplinary area, COU, on the advice of OCGS, will authorize the establishment of an ACAP discipline group, if it was not already approved and included in the May, 1968 list. If it is already authorized, ACAP may decide to set it up as described in paragraph b.
- b. The Executive Vice-Chairman of ACAP will then invite the executive head of each university (including Waterloo Lutheran University) either to nominate a member of the discipline group or to indicate that his university has no plans for graduate study in this discipline in the next five years or so. If a university can state no plans for future graduate work in the subject, but feels that a watching brief is desirable, it may appoint an observer to the group.
- c. Changes of a university's representative are to be notified by the executive head.
- d. The group shall select its own chairman.

2. Meetings

- a. A discipline group may meet at the call of its chairman or in accord with its own arrangements.
- b. A discipline group may be called to meet by the Executive Vice-Chairman acting for ACAP.

3. Responsibilities

- a. The group is to keep under review the plans for graduate work in its discipline in Ontario, including new developments and trends in the discipline, and to make reports to ACAP on a regular basis.
- b. The group may make recommendations to ACAP in connection with graduate work in its discipline when it considers it appropriate.
- c. ACAP will assist the group in obtaining information and data, as mutually agreed.
- d. When COU has instructed ACAP to conduct a planning assessment, the discipline group will assist and advise ACAP in determining procedures and terms of reference, will report as requested and will generally facilitate the assessment.

Approved by OCGS March 22, 1973  
and by COU April 6, 1973.

A P P E N D I X G

CURRICULA VITARUM OF CONSULTANTS

JOHN ARTHUR FAULKNER

Born December 12, 1923, Kingston, Ontario

B.A., Queen's University, 1949

B.P.H.E., Queen's University, 1950

Secondary School Teacher's Certificate, Ontario College of Education, 1951

M.Sc., University of Michigan, 1956

Ph.D., University of Michigan, 1962

University of Western Ontario, 1956-60, Assistant Professor of Physical Education

University of Michigan, 1960-, Department of Physical Education, Instructor 1960-62, Assistant Professor 1962-64, Associate Professor 1964-66, Department of Physiology, Associate Professor 1966-71, Professor 1971-

Burke Aaron Hinsdale Scholar, University of Michigan

American College of Sports Medicine, Board of Trustees 1962-, Vice-President 1971-72, Editorial Board for Medicine and Science in Sports Physiology 1969-72, Section Editor, Medicine and Science in Sports 1972-  
American Physiological Society, Editorial Board 1973-

Publications:

Training for Maximum Performance at Altitude. Proceedings of International Symposium of Effects of Altitude on Physical Performance

What Research Tells the Coach About Swimming

"Sports Tests" Chapters 1, 2, 3 in An Introduction to Measurement in Physical Education and numerous articles

Address: Department of Physiology  
Medical Science Building  
University of Michigan Medical School  
Ann Arbor, Michigan 48104  
U.S.A.

GUENTHER R.F. LUESCHEN

Born Oldenburg, Germany, January 21, 1930

Diploma, Sporthochschule Cologne, 1955

Dr. Phil., University of Graz, 1959

State Exam (German), University of Bonn, 1960

University of Michigan, Visiting Scholar in Sociology, 1960-61

University of Cologne, Research Associate and Project Director, 1961-65

Paedagogische Hochschule Bremen, Germany, Dozent and Professor, 1965

University of Illinois, 1966-, Associate Professor and Professor, Department

of Sociology with cross-appointment in Department of Physical Education

President, International Committee for Sociology of Sport

Member of Research Council, International Sociological Association

Publications:

Kleingruppenforschung und Gruppe im Sport, 1966

The Sociology of Sport, 1968

Soziologie der Familie, co-author, 1970

Cooperation, Association and Contest, 1970

The Cross-Cultural Analysis of Sport and Games, 1970

Family, Ritual and Secularization, 1972

Psychologischer Reduktionismus, 1973

Address: Department of Sociology

University of Illinois

Urbana, Illinois 61801

U.S.A.



ARNOLD WHITNEY MATTHEWS

Born Summerside, Prince Edward Island, 1901.

B.Sc. Pharm., University of Alberta, 1921  
 M.Sc., University of Alberta, 1925  
 Ph.D., University of Florida, 1941  
 LL.D., University of Alberta, 1967  
 D.Sc. (Hon.), University of British Columbia, 1968

University of Alberta, 1923-44, School of Pharmacy, Director, 1942-44  
 Rexall Drug Co. Ltd., 1944-51, elected a Director, 1946  
 Riker Pharmaceutical Co. of Canada, President, 1951-52  
 University of British Columbia, 1952-67, Professor and Dean of Pharmacy  
 Pharmacy Examining Board of Canada, 1967- Registrar Treasurer

Dr. E.R. Squibb International Award in Pharmacy and Biochemistry  
 Bowl of Hygeia Award  
 Centennial Award

Canadian Pharmaceutical Association, President  
 Canadian Conference of Pharmaceutical Faculties, Chairman  
 Canadian Foundation for the Advancement of Pharmacy, President  
 Association of Deans of Pharmacy of Canada, Secretary-Treasurer  
 Pharmaceutical Services Commission, Executive Officer, 1968-70

Publications:

Pharmacy in a New Age - Report of the Commission on Pharmaceutical Services.  
 Canadian Pharmaceutical Association Inc. 1971  
 and several others

Address: Pharmacy Examining Board of Canada  
 175 College Street  
 Toronto, Ontario  
 M5S 1P8

APPENDIX H

CONSULTANTS' RESPONSE TO QUERIES

CONSULTANTS' RESPONSE TO QUERIES

After reading the Discipline Group response and the university comments on the consultants' report, ACAP directed several questions to the consultants. Through correspondence, the responses of the consultants are in agreement. The following is a list of these questions with combined responses of the consultants.

Question 1     Recommendation 3 - "There should be an expansion of professionally-oriented terminal master's programmes". Can you elaborate on the meaning of "terminal"? What are the consequences for a student who takes a professional master's programme and then decides to go on for a doctorate?

Response        Our premise was that there was a great need for training up to the master's level for a variety of different specialized groups. These include persons trained in exercise rehabilitation for patients with heart disease and disturbed children, sports administrators, sports coaches, and outdoor education leaders. These people should be employable following the master's programme. We were disturbed by the over-emphasis on graduate programmes designed only to turn out research scientists in exercise physiology, sociology of sport, and psychomotor behaviour. The need for these scientists and scholars is great but it is for a very small number. The field should also concentrate on training service personnel in programmes designed to terminate at the master's level. Obviously, if such an individual decides later that he wishes to enter a doctoral programme he may do so but the master's programme is not designed to prepare him directly for a PhD programme. Why we specifically termed these programmes as "terminal" was because we wanted to emphasize the specialized training in an employable skill, not preparation for further training at the doctoral level.

Question 2     Recommendation 5 - "Professional designations (such as M.P.E. and D.P.E.) should not be used in the titles of graduate degrees in this field". Considering the more general aspect of your report that there should be a distinction between professionally-oriented and discipline-oriented programmes, what are your reasons for eliminating professional designations at the master's level?

Response        From the outset we were concerned with the inappropriateness of the designation "Physical Education" for this field. Furthermore, the term is held in very low regard by academicians both in and outside the field. Neither the Discipline Group nor the Consultants have been successful in proposing a suitable alternative although kinesiology, kinanthropology, and human kinetics are currently in use in some universities. It would be misleading and inappropriate to give persons trained

in a specialized master's programme in, for example, exercise rehabilitation an M.P.E. A special professional designation for each specialized master's on a province-wide basis would be appropriate but we could not resolve this. We felt that it was better to simply give an M.A. or an M.Sc. rather than attach the "stigma" of M.P.E. At the doctoral level we are not proposing any professional doctorates. Therefore, the Ph.D. is appropriate for the research degree.

Question 3

Recommendation 20 - "There should be no part-time programmes offered for specialized master's degrees or for Ph.D. degrees". It seems that most master's programmes in physical education would lend themselves quite well to part-time study because of the kind of student they may attract, as you note on page A-38 in referring to Ottawa. What kind of "specialized" programmes do you have in mind? Can you elaborate on your reasons for recommending no part-time programmes?

Response

Our feeling was that general professional programmes for upgrading secondary school teachers could be handled very nicely on a part-time basis. However, the specialized master's program for exercise rehabilitation of special groups requires an internship and "intensive" daily contact with patients, children, or prison inmates. The learning of difficult concepts and skills is not achieved easily on a part-time basis. We felt very strongly that Ph.D. programmes should be pursued only on a full-time basis. Each of us has had very negative experiences with part-time doctoral students and programmes. The training of a scientific and scholarly elite in a field that has very few scientists or scholars should not be attempted on a part-time basis.

Question 4

Page A-22 - "Typically libraries backing Ph.D. programmes should have 15,000 volumes in the discipline". How was this figure obtained? Does it include library holdings in cognate disciplines? In the Library of Congress profile for the physical education library survey no university had this number of volumes. Did you have in mind a larger group of L of C headings or do you feel none of the Ontario libraries are adequate?

Response

The figure includes holdings in cognate disciplines that are in content directly related to the field, e.g. Piaget: *The Moral Judgment of the Child*. The figure was suggested after counting library holdings of the U. of Illinois in this field where the somewhat more than 10,000 volumes in the special library plus additional holdings in the general library are barely adequate. European institutions have a substantially

higher number of holdings (Cologne, Leipzig, Moscow). The Sporthochschule at Cologne, one of the leading institutions in the field, has slightly more than 100,000 volumes of which close to 60% are in the field of physical education. The average for German universities is between 15,000-20,000 volumes in physical education; but it should be mentioned that only a few of these institutions have doctoral programmes.

## Question 6

Page A-40 - "Publications in refereed journals (are) limited (at Western Ontario)". You will notice that UWO is challenging this statement. We feel that to be fair we need some indication from you of what you consider to be a refereed journal. From the attached serials checklist from the library survey, which journals are refereed? Would you consider the "Journal of the Canadian Association for Health, Physical Education and Recreation" as a refereed journal? How is one to evaluate two or three page articles in JCAHPER?

## Response

All scientists and scholars in established disciplines are in agreement as to what constitutes a refereed article in a professional journal. The Journal has an Editor and an Editorial Board. The Editor sends copies of a submitted manuscript to referees who independently review its suitability for publication.

Articles of two or three pages, unless they are hard-core research reports, are not adequate. The Journal of CAHPER as of this time is to our knowledge not refereed, although we have given articles in that journal some consideration. One needs to account for the fact that there are so few refereed journals in the strict meaning of the term in the whole field. Our standards would thus predominantly require publication in journals associated with cognate disciplines, which is more difficult but is being done by some faculty.

Having said this, there is a point to be made in that a strictly Canadian publication, particularly in an emerging research field, of which physical education is but one example, must struggle hard to attain status. Some researchers, no doubt, feel some obligation to support their own publication even though conscious that it might be to their advantage to publish elsewhere.

We spent a great deal of time going through each individual's publication list and assessing the number of refereed publications, and we would not change our views about Western on this point as expressed in this report.

Of course if we had not had the impression that Western had considerable substance, we would not have recommended them for PhD programmes.

## Question 7

Page A- 22 - "Typically libraries backing Ph.D. programmes should have 50 specialized national and international journals (non-technical)". Can you give more examples of the journals which qualify? Which ones in the serials checklist are relevant for this purpose?

## Response

Serial holdings are not too strong, although about adequate in a few cases. In PhD-programmes they need expansion particularly in international journals. Serials of a technical nature are available to quite a degree and Departments need to have them. But the emphasis should be on journals reporting research or discussing theory, methodology or basic programmatic points. These would have to include journals of cognate fields, which in some cases are not available in respective university libraries. Here are a few examples of journals that need to be included: Society and Leisure (CSSR), Sociology of Education, British Journal of Educational Psychology, Quest, Theorie und Praxis (East Germany), Kultura Fizyczna (Poland), JOPHER (Japan), Sportarzt und Sportmedizin (West Germany). A few others were listed in our report. The list provided as a check-list was not too good and stressed technical journals. Also the library resources were somewhat difficult to assess, but we had rather high standards - particularly for PhD programmes, which we considered necessary, if one were to develop good programmes.

## Question 8

Page A- 56 - We find some difficulty with the terminology of Table 8 in connection with master's programmes. Do you use the term "general professional" as distinct from "specialized professional", the latter including such things as cardiac rehabilitation, exceptional children, etc? Or, alternatively, does "general professional" mean a broad programme with many specialized fields? We thought it meant the first of these alternatives until we noted your statement that Western should develop its programme with "exceptional children" even though you don't list it separately in Table 8. The second interpretation we ruled out because you list both "general professional" and a more specialized programme in the cases of Ottawa and York. Please clarify this point. It is most important, and probably will clarify the following more specific questions:

- (a) There are no discipline-oriented master's programmes shown in Table 8. Which universities do you recommend should offer discipline-oriented master's programmes? For example, is the master's programme at Waterloo discipline-oriented or professionally-oriented or both? Table 8 shows it as "general professional" while page A- 39 notes the "discipline, non-professional approach of the department".
- (b) What areas are included in the label "general professional" at Western Ontario in Table 8. Does it include the area of motor behaviour of exceptional children? This area is

mentioned on Page A-40 as one for possible expansion. If this area is recommended for Western why isn't it listed separately as motor behaviour and play as in the cases of York, Lakehead and Laurentian? Does Western currently offer master's work in motor behaviour and play of exceptional children?

- (c) The same questions appear to apply to the cardiovascular work at UWO.

**Response**

We perceived three types of master's programmes: Discipline-oriented, specialized professional, and general professional. Discipline-oriented would emphasize the scientific and research aspects of the field and would lead normally, although not necessarily, on to a doctoral programme. Our caution regarding too much emphasis on these programmes at the master's level is in response to the over-emphasis currently observed in this type of master's programme. This is conceived as the "elite" programme but the questions have not been answered regarding what do they do and where do they go? Everyone in a field cannot be a Ph.D.

We made some errors in computing Table 8 as a summary of our recommendations. [Corrections to the Table were included in the consultants' response and have been incorporated in their main report. ACAP] Western and Waterloo should both have discipline-oriented master's programmes in Table 8. General professional would emphasize education in the broad general aspects of the total field. This would likely appeal to the elementary and secondary school teachers of physical education. Such programmes are currently being offered to some degree at Western and Windsor, and to a very large extent at Ottawa. Such a master's programme would not likely include a thesis although students who choose to write a thesis should have this option. The specialized professional would be the preparation of leaders and administrators for specific physical activity oriented positions: exercise rehabilitation and sports programmes for patients, handicapped, and mentally retarded; administrators for sports bodies at local, provincial and national levels.

We did not list the Western programme for "Exceptional Children" because they have so many major problems to face in getting Ph.D. programmes underway that we did not see them ready to initiate this programme simultaneously. This Faculty, more than any other in the province, is overly ambitious and has spread itself too thin. Dr. Hayden has more experience and expertise than anyone else in the province. Currently, he is overburdened with the duties of Chairman of the Graduate Committee. He cannot realistically do both the Graduate Programme and set up a programme for exceptional children. If he stays with the leadership of the graduate programme, Western should not attempt the programme for Exceptional Children. The graduate programme

of this University has considerable potential but has the likelihood of more problems than any other. The programme for Exceptional Children is not included in Table 8 because it is not likely that Dr. Hayden will be clear of his present responsibilities in time to begin such a programme before 1978.

- 8(a) We intended to have discipline-oriented programmes at Western, Windsor, Waterloo, and Ottawa. Actually each currently offers discipline-oriented work at the master's level. This was a serious omission on our part and we apologize for it. Waterloo is definitely discipline-oriented as noted on page A-39.
- 8(b) Motor behaviour of Exceptional Children at Western would be a specialized professional programme. Western does not currently offer such a programme.
- 8(c) Although they have ongoing research that might foster such a programme (Cardiac rehabilitation programme at UWO), our feeling is that they will have more than their work cut out for them in implementing a Ph.D. in Exercise Physiology and since the same faculty is involved they should just concentrate on this.

Question 9

Recommendation 7 - "First priority should be given to implementation of the following Ph.D. programmes...social science of sport - jointly at the Universities of Western Ontario and Windsor". There are probably many good reasons why Western and Windsor should offer a coordinated programme and we would appreciate more detail about the complementarity of their strengths. There is one specific area where we are puzzled. For both universities, faculty appointments are recommended and together with existing staff these new professors would meet your minimum criteria (Page A-21) at each university separately. Was it your thought that the new appointments at Windsor might in fact be cross-appointments of people at Western and vice-versa? Or do you feel that even with each place separately meeting your minimum staffing criteria there are still important reasons for joint operation? As you will realize, this is another important point on which more detail of your thinking is very relevant.

Response

As pointed out by several Responses we have used both Sociology and Social Science of Sport. We were not so naive as to not realize we were inconsistent in using Sociology of Sport for the Waterloo programme and Social Science of Sport for Western and Windsor. The Waterloo programme is a much "cleaner" treatment of the Sociology of Sport. The proposed Ph.D. programmes at Western and Windsor are more contaminated with other Social Sciences. We did not feel that we should arbitrarily judge which was the correct approach but rather let both types of programmes be initiated and observe what happens. This is a problem that the Discipline Group was not able to solve before,



during, or since our report, so it appears to need more time and more exposure. Both types of approach may flourish. We were a little concerned with the diffuseness of the UWO approach to this area.

Regarding the joint programme at Windsor and Western, we did not think that three sociology oriented doctoral programmes should be initiated in the province. We perceived the Waterloo programme to be quite different from the other two. This left us with the 3 options of proposing (1) a programme at UWO but not at Windsor, (2) Windsor but not UWO, or (3) a joint programme. We settled for the latter because we felt that they would complement each other so that a joint programme would be a stronger offering than a programme at either since neither is currently very strong. In their approach, they are close enough to be compatible but different enough to add new dimensions to a joint approach.

The current and new appointments would not meet our minimum criteria at each school because the current faculty members at each university are involved in innumerable other duties already. For instance, one is a Dean and can be expected to have very limited time to devote to the work of Ph.D. students. Currently, in the master's programmes, students feel faculty are spread very thin and are not readily available. Throughout our assessment we were concerned with the diversity of duties and long working hours. Unfortunately, the selection of duties and tasks in physical education faculties is often largely inappropriate for a graduate faculty. To attempt a realistic recommendation of faculty needs for the new programme we set a FTE of 1 FTE per 4 Ph.D. students and 1 FTE per 8 Master's students. To then place these figures into a normal framework of university life we estimated that a graduate faculty member might devote 1/3 of his time to just these graduate duties if he were teaching and advising only Ph.D. students and 1/4 of his time if he were working exclusively with master's students. Therefore, in a "normal" faculty it would take 3/4 of a qualified Ph.D. faculty member to look after each Ph.D. student because such faculty are in such demand for other university and professional duties that they cannot devote full time to this Ph.D. programme. For master's, they are in slightly less university wide demand but they are likely to have more diverse duties in the department or school programmes at other levels particularly the undergraduate. We, therefore, set the arbitrary proportion of time as 1/4 so that it would take 4/8 of a faculty member qualified for master's work supervision to look after each master's student. In the specialized master's programmes at York, Lakehead, and Laurentian the current faculty who would be involved in these programmes are already involved to an extent that we felt they could handle even slightly fewer than 2 students per qualified faculty.

We added an additional faculty member to each of Windsor and Western for the joint Ph.D. programme (Table 8), because of the heavy commitments of the current faculty in other duties and because of the addition of the time lost in travel. We were greatly concerned with the willingness of departments and schools to embark on new, time-consuming graduate programmes with faculties who are already over-committed.