

UNIVERSITY COUNCIL
PLANNING COMMITTEE
REQUEST FOR DECISION

PRESENTED BY: John Rigby, Chair, Planning Committee
DATE OF MEETING: Jan. 25, 2007
SUBJECT: **Issues and Criteria When Considering Viable Enrolments at the University of Saskatchewan**

DECISION REQUESTED:

That University Council endorse the report, “*Issues and Criteria when Considering Viable Enrolments at the University of Saskatchewan*” [attached] and forward it to the Dean’s Council and the Provost’s Committee on Integrated Planning (PCIP) as advice for the consideration of those two bodies.

BACKGROUND:

A Subcommittee called the “Viable Enrolments Subcommittee” was established by the Planning Committee in 2004 to make recommendations about the Integrated Plan section on reviewing low-enrolment programs and courses.

Composition:

Chair: Planning: Lou Qualtiere, Medicine (2004) and John Rigby, Commerce (2005)
Budget: Grant Isaac, Commerce
Research: Rob Hudson, Philosophy
APC: Jim Merriam, Geological Sciences
IDCC: Linda Ferguson, Nursing
Student member: Evan Cole, USSU VP Academic
support: Rob Schultz; Pauline Melis; Cathie Fornssler

Mandate: To survey data on course enrollments and program/specialization graduation; to study and analyze courses and programs/specializations that appear to have relatively low enrollments; to identify from this analysis instances that may be of concern from a university-wide planning perspective; to make recommendations to Planning Committee concerning actions to be taken.

Following review of program and course enrolment data from the Institutional Analysis office, the Subcommittee discussed several possible recommendations with the Planning Committee in the spring of 2006.

The Planning Committee has now developed the attached report and recommendations. These have been circulated for discussion and advice to several Council committees.

**Issues and Criteria when Considering Viable Enrolments
at the University of Saskatchewan
January, 2007**

Introduction

The Integrated Plan directly speaks to the issue of low enrolment programs and courses.

Excerpt from Integrated Plan: **Addressing Low Enrolments**

The University of Saskatchewan has not completed a substantial review of its program and course structure for many years. We continue to offer a broad array of courses and programs, a small number of which attract very few students. It is imperative that the University be more intentional about the use of its limited resources and hold colleges and departments responsible for enrolment patterns that cannot be sustained. While implementation details have yet to be finalized, programs which graduate a small number of majors each year – even if they were rated highly under SPR – will be examined by the Provost’s Office and Council committees with a view to closing and/or amalgamating many of them in the coming three years. All students in these programs will be assured of the courses they require to graduate. While all of the criteria have not been fully established, one important component of this examination will be the ‘service’ teaching provided by these units. In the same vein, low enrolment courses will also be the subject of review with colleges required to establish a minimum base of student numbers for the offering of any specific course.

(source: http://www.usask.ca/university_council/planning/reports/PC_report_for_information_April_2005.pdf#page=7)

The Planning Committee of Council struck a subcommittee in 2004 to study viable enrolments and bring back a report. This present report is based on the work of that subcommittee. This report is intended by the Planning Committee of Council to indicate for Council that the question of the viability of low enrolment programs and courses continues to be an issue worthy of attention. It is also intended to give University Council a vehicle whereby Council can communicate to the University Deans and the Provost’s Committee a possible approach for identifying and dealing with courses and programs that might not be viable.

This report is intended as advisory, not directive. In the view of the Planning Committee it would be inappropriate and unwise for University Council to directly intrude in the areas of assignment of duties and operating level resource allocations, both of which are potentially impacted by consideration of program and course viability. Nonetheless, given Council’s overarching interest and responsibilities in academic matters, it does seem appropriate that Council express an opinion on this matter for the information and consideration of the University Deans and the Provost’s Committee.

Issues

Using 2004 data, supplied by the office of Institutional Analysis (IA), this report focuses on undergraduate, on-campus, lecture courses. The issues considered fall broadly into two categories:

- (1) Criteria to use when determining viability;
- (2) Available information.

Criteria to consider as “viable”¹

The basic question is: “Do the accomplishments of the program justify the resources committed to it?” This question implies considering:

- **Incremental resources required:** on the resource side the fundamental question is, “What resources are being consumed by this program that would be available for other uses if the program was not offered?” Three general resource issues could be considered.
 - Use of teaching resources: how many students are enrolled in the program or course? How does this number compare to other programs and courses across campus? The issue with enrolment is equitable and efficient use of teaching resources.
 - Administrative and Support requirements: what administrative and support resources are devoted to a program and would become available if a particular program is discontinued?
 - Complementarity: does the program support other programs (e.g. B.Mus & B.Mus.Ed.²)? Does the program use courses from, or in combination with, other program offerings on campus? The implication is that complementary programs will use fewer incremental resources than will completely stand alone programs, other things being equal.
- Program accomplishments: on the outcome side the basic question is, “Is the program making a meaningful contribution to Society and to the overall goals of the University?” One could consider:
 - Completeness of program offerings: some programs may be important to support a claim of providing a full line of offerings in a particular academic area. An Agricultural College is expected to have a Soil Science program for example. Similarly, an Arts College is expected to have a Philosophy program.
 - Service teaching: some programs may have low declared enrolment but may provide a valuable and necessary role providing first and second year courses for other programs on campus. Attracting and retaining faculty in these areas may be dependent on the presence of degree program.
 - Public Good: some small enrolment programs may result in disproportionate levels of positive outcomes and contributions to Society as a whole. Some programs may significantly promote the University of Saskatchewan’s “sense of place” within the province and country.

¹ A similar list of criteria is contained in the document **Program Termination Procedure at the University of Saskatchewan**, *Approved by Council April 19, 2001*. See Appendix One.

² Examples are sometimes given in this document as an aid to clarity. No comment about the viability or lack of viability of the examples is intended.

- Prestige: some small enrolment programs may result in disproportionate levels of positive publicity and prestige accruing to the Department, College, and University. The faculty in some programs may attract significant Tri-Council funding.
- Quality of program including program coherence and ability to meet stated learning outcomes: although the integrated plan states that even some high quality low enrolment programs may need to be restructured, unless there is compelling grounds flowing from the above criteria, there seems little justification for continuing low quality low enrolment programs. Most programs at the University of Saskatchewan have undergone a Systematic Program Review (SPR) in this planning cycle so considerable information regarding program quality is available.

Available Information Regarding Enrolments³

Institutional Analysis has access to student information in 4 basic manners:

1. Degrees Granted

- identifies the individual, the degree, date degree granted and the student's declared specialization (which may be different than what they have declared on their normal sessional registration, i.e., their major for registration purposes--see point 2 below)

- all the classes, degrees and transfer credits applicable to the student are available in the core Student Information System. At this time it would be very labour intensive to identify the core classes, required electives or other courses that lead to a degree. Also, course credit prior to one degree (even if not applicable to that degree) may apply to a subsequent degree. The Curriculum, Advising, and Program Planning (CAPP) in SiRIUS, when implemented, should make significant progress to identify credit activity applicable to a specific degree. It is not certain when CAPP will be implemented at this time.

- a student's primary specialization is mapped to their degree—specializations are handled slightly differently between undergraduate and graduate students

- there are 'bits' of erroneous data in degree qualifications contained in the 'old' student system--typos in degree labels etc. It will be a manual, labour intensive, exercise to clean this data.

2. Majors

- these are as declared by the student and verified by each department and college. The quality of this data verification is sometimes suspect--the colleges and departments often don't have the resources to clean this information

- some colleges/programs have 1st and 2nd majors. IA can not distinguish between classes that apply to either major (other than some obvious matches where the subject of the course and the department/program equal each other, e.g., CHEM)

- data for a student's major in the first 2 years in most programs (at least the direct entry programs) is very soft

- credit activity can not be directly mapped to the majors or programs

³ All italicized material has been provided by Mr. Rob Schultz, Director, Institutional Analysis.

3. Course registrations

- Class registration is probably the cleanest data of major, year in program and program/degree

- cross-listed classes can be identified, but there may be some difficulty with areas like music where students from different years in their program come together for instruction, e.g., each of a 100, 200, 300 & 400 level class may meet together but appear as separate classes. IA should be able to appropriately analyze this information, but it may be resource intensive.

- specific course activity can be mapped to an individual student

- course registrations by students receiving instruction from colleges other than the college with academic responsibility for the class are identified as service teaching activity. Student activity within the college they are registered have not typically been identified as service teaching even if their major is distinct from the subject area of instruction, e.g., a Physics major taking a sociology course for an elective would not be considered service teaching whereas an Engineering Physics major taking the same sociology course would be considered service teaching.

4 Course Inventory

- a student's program can be mapped to a budgetary unit that provides instruction

- the CIS programs are close to an SPR-type mapping, e.g., CIS rolls all of Arts & Science first 2 years into an Arts & Science 'General' category There is no SPR category for 'general arts & science'

One major caveat, the new student system essentially came into effect 1 May 2005 (registration data). A significant number of subjects and departments have been renamed to fit the field size in the new system. It is anticipated that the number of data anomalies will increase substantially until the new system 'settles out'. The change in systems will challenge the ability to provide consistent longitudinal data.

Implications of Available Information Regarding Enrolment

- The program level information contained in the student system may not be sufficiently detailed or as robust as is required for this analysis. Course level information provides more detail, but requires manual intervention to be linked to program information.
- Given the major change in the student registration system from which IA draws its data additional challenges are anticipated and some reports may not be readily available. The exact timeline, as is normal with new systems installations, is uncertain, but some reports may not be easily available for a period of two years or longer.
- Students' degree granted may not closely match declared majors because there is not a forced link between registration and degree (CAPP should help alleviate this issue).
- None of the information may closely match "programs" as considered by the SPR process. The "course inventory" used for budget unit program mapping purposes comes closest but does not have the level of detail required for this type of analysis.
- It is difficult to regress programs to their underlying courses (and, of course, most degree programs have considerable flexibility in actual course requirements.) This problem is

compounded if a student completes more than one undergraduate degree or switches major, concentration, program or college.

- Information on majors is based on student input (student intent), verified by the department/college and may not be accurate.
- First and second year information relating to majors is less reliable than upper year information.
- Year in program data is further complicated by the fact that colleges calculate this indicator differently. Some colleges track the credits completed (30 credits equates to one year of study), others the number of credits applicable to the degree/program, and still others the anticipated duration to completion (e.g., 4 years to complete the degree requirements places the student in first year).

Recommended Approaches

A two pronged approach is recommended to address the question of program viability. The first is to consider program level data and actions, notwithstanding the difficulties of the data. Secondly, College Deans and the Provost's Committee should also consider low enrolment courses. The Integrated Plan implies that both levels of analysis might be considered.

Issues implied when considering Programs

There are several advantages to focusing on programs.

- Strategically it makes sense to make resource allocation decisions at the program level. It is easier to determine the fit of an entire program with the Integrated Plan than it may be to determine the fit of individual courses.
- It is more efficient administratively to consider programs. Given that there are fewer low enrolment programs than there are low enrolment courses, considering programs would potentially deal with groups of low enrolment courses.

There are also disadvantages to focusing on programs.

- It is difficult to link resource use directly with programs at the level of major. One of the problems IA has providing data is that multiple programs consume resources from a single budgetary unit, i.e., one can't identify the specific resources that apply to a program because these resources are 'shared' with other programs and responsibilities. Indeed, for some programs incremental administrative resources (as opposed to teaching resources) may be negligible. The Course Inventory System contains information that allows mapping of programs to budgetary units providing the instruction, but it does not contain information at the program level to allow 'drill-down' to the students' major.
- Student enrolment across courses within a particular program is unlikely to be uniform. Some courses, within the same program, will be more highly subscribed than others. It will make no sense to simply discontinue all courses associated with a particular program.
- There is not invariably a compact identifiable group of courses associated with, and only with, a particular program.
- Low enrolment programs do not strictly imply low enrolment courses – particularly if two or more programs are sharing courses. The interdependence of programs with

specific course offerings needs to be examined in detail before decisions can be made about viability of program enrolments.

- In any event, discontinuing a program does not necessarily entail discontinuing the associated courses.
- It is difficult for IA to determine precise program enrolment based on students' declared majors as students can and do change their declared major from time to time. Program enrolment information would need to be verified with the department involved.
- The new student information system may make it challenging to identify program enrolment.

An Action Plan for Considering Low-Enrolment Programs

- Establish a metric. University Council recommends that decision-makers focus on programs (specializations) with five or fewer graduates in the last five years (i.e. an average of one graduate a year or less). At that benchmark approximately 13 programs would be identified four of which have been discontinued.
- Clean obvious errors from the data. The available data shows that some of these “specializations” exist because of input errors and in no way reflect department or program activities. Such errors will be particularly prevalent in specializations showing one, or a very few, graduates.
- Confirm cleaned data with departments to create an agreed upon list of low enrolment programs. Cleaning and confirming the data will fall to IA – a task that the Director of IA suggests will be a time consuming manual process.
- Deans would discuss with the Provost's Committee, the Planning Committee and/or the Academic Programs Committee, and the relevant Departments how well the identified programs meet the criteria for viability.
- Confirm continuation of program, revise the program or move to termination.

Issues implied when considering Courses

There are also advantages to focusing on individual courses with low enrolment.

- The discussion becomes more focused on the actual incremental use of resources and naturally identifies incremental resources.
- Course level data has more detail and is more robust than program/major data.
- Programs that have a large number of low enrolment courses would be identified quite quickly, notwithstanding the focus on courses. That is, the only reasonable purpose to maintaining a low enrolment course is that it is required by a particular program. If the same program requires multiple low enrolment courses, Deans and the Provost's Committee can discuss the merits of continuing the program, despite its need for low enrolment courses, using the suggested criteria.
- Departments and Colleges with programs that have a small number of low enrolment courses may see ways to reduce the number of low enrolment courses while maintaining the academic integrity of the program.

Disadvantages of focusing on courses with low enrolment

- Sheer numbers. Depending on the enrolment cutoff used there are potentially hundreds of courses which could be categorized as low enrolment.
- Different decision rules (cutoffs) would be appropriate for first and second year courses versus third and fourth year courses.
- Cross listed classes: some low enrolment courses are currently offered jointly with other courses, implying that more students are in the classroom than is reflected in the data. IA can identify cross-listed classes.

An Action Plan for considering Low Enrolment Courses

- Establish a metric. University Council recommends that for first and second year courses decision-makers focus on courses with an enrolment of eight students or less (roughly the number of students necessary to recoup the stipend of a sessional instructor). In 2004, this point would identify approximately 14 courses. For third and fourth year courses a cutoff of five students is recommended, recognizing that some upper year courses are smaller by design. This benchmark would involve approximately 62 courses in 2004.
- The normal decision rule is that identified low enrolment courses are not offered.
- IA supplies the Department, College Dean, and the Provost's Committee with a report identifying low enrolment courses at some agreed upon interval, probably term by term.
- If a department wishes to offer a low enrolment course, special permission is required from the Dean – recognizing the Dean's budget responsibility (i.e. the Dean can determine, given the overall College priorities and financial situation if it makes sense to offer this course at this time).
- If a course requires special permission from the Dean in three consecutive offerings the course is referred to the Provost's Committee to discuss with the College and Department the viability of continuing to offer this course.
- If the course is necessary in order to offer a particular program the Provost's Committee and the Planning Committee discuss with the relevant Departments and Colleges how well the identified program meets the criteria for viability.
- Confirm continuation of program, with an exemption for this course from further review for some time period, or revise the program, or move to termination.

Summary

The viability of low enrolment programs and courses continues to be an issue worthy of the attention of University Council. The basic question is do the accomplishments of the program justify the resources committed to it.

Viability should, therefore, be determined by comparing the incremental resources required by low enrolment programs or courses against the accomplishments of the program. Resources can be considered from the perspective of teaching resources, administrative resources and complementarity. Accomplishments can be assessed by considering completeness of program offerings, service teaching, public good, prestige, and quality of the program.

Those programs that are graduating an average of one or fewer graduates a year should be examined by the Dean of the college housing the department and by the Provost's Committee in consultation with the relevant department.

First and second year courses with an enrolment of eight or fewer, and third and fourth year courses with an enrolment of five or fewer, should not be offered. If such courses are offered it is with special permission of the Dean. If the Dean extends special permission for three consecutive course offerings special permission is required of the Provost's Committee.

These observations and recommendations are offered by University Council as advisory to the Deans and to the Provost's Committee.

Appendix One

Excerpt from: **Program Termination Procedure at the University of Saskatchewan**

Approved by Council April 19, 2001

2. Keeping in mind the guidelines listed, the Subcommittee will consider the following issues:
 - a) The academic value of this program to a major university.
 - b) The quality assessment achieved by this program in the Systematic Program Review process.
 - c) The impact of termination on students and how they will be advised to complete their programs, especially the impact on graduate students.
 - d) The impact of termination on faculty and staff, including the implications of provisions of collective agreements.
 - e) The impact of termination on any ongoing research projects or the overall research capacity and reputation of the university.
 - f) Any financial and/or resource impacts, including faculty, staff, physical facilities and equipment, library resources, disposition and archiving of materials, termination of trust funds, impact on development or alumni projects.
 - g) The impact of termination on other programs, departments or colleges, and in particular whether related programs will be affected by this termination. Areas of consideration would include: quality, demand, efficiency, unique features, relevance to the province, whether this program is already available from another college or department, whether course terminations will affect any other programs, if there is any impact on internal or external partners in interdisciplinary programs, and whether it is likely, or appropriate, that another department or college will develop a program or courses to replace the ones deleted.
 - h) Any external impact from the termination (university reputation, accreditation, other institutions, high schools, community organizations, professional associations, etc.), including whether it is likely or appropriate that another educational institution will offer this program if it is deleted at the University of Saskatchewan.
 - i) And it may also be appropriate to consider the impact of the program termination on areas such as extension and public service, education equity, interdisciplinarity, the university mission and goals.