

**Date:** 29 January 2018  
**To:** Darlene Juschka, Chair, Council Committee on Academic Mission  
**From:** Kyle Hodder, Head, Department of Geography & Environmental Studies  
**Re:** Unit response to recommendations of the Academic Unit Review External Reviewers Report

Dr Juschka and members of the Council Committee on Academic Mission,

I am writing in response to your letter of 17 October 2017 and the report from the External Reviewers for Geography & Environmental Studies Department that was submitted as part of our Academic Unit Review. We are most appreciative of the time and effort of our colleagues, Drs Stephen Bend (University of Regina), Dirk de Boer (University of Saskatchewan), Theresa Garvin (University of Alberta) and Wayne Forsythe (Ryerson University), for serving as reviewers in our academic unit review. We also very much appreciate the feedback we received from the Council Committee on Academic Mission at our meeting on 21 September 2017.

Our External Reviewers recommended a number of significant changes, including but not limited to: undergraduate program rationalization, development of new undergraduate courses, reinstatement of a regularized graduate program alongside significant revisions to the graduate course roster and program, hiring new staff, representation on Council in the Faculty of Science, and the modernization of existing infrastructure; each of these in concert with the development of a departmental strategic plan. Consideration of any one of these recommendations requires extensive internal dialogue within the department and consultation with one or more partner programs and/or Faculties. The nature, and scope, of the review comments have led us to focus, strategically, upon our undergraduate program(s) and curricula as a common thread among most of the recommended changes, but also as a foundation upon which other proposed changes can be constructed. Our review of undergraduate program(s) and curricula has taken the form of facilitated, half-day, retreats during which we are incorporating feedback from External Reviewers, but also (re)visioning the future of our department and our programs. This is a careful, deliberate and deliberative process that has engaged the overwhelming majority of our members.

Corresponding with our focus on undergraduate program(s) and curricula, we have deferred an immediate response to the specific recommendation to regularize our graduate program. We acknowledge the importance of giving full deliberation to a regularized graduate program, and the corresponding resources needed to offer a high-quality program that occupies a niche in western Canada. We remain very proud of our graduate alumni, and their successes both in the academy and beyond. We acknowledge the vital 'two-way' interaction between graduate students and faculty: graduate students can serve a vital role in the research programs of our faculty, and graduate students also simultaneously benefit from the mentorship provided by our faculty.

In general, our department agrees with many of the recommendations provided by External Reviewers. Notwithstanding our deferred response to the specific recommendation for a regularized program, we concur with several of the other recommendations surrounding the graduate program and/or graduate students as outlined in the pages attached. As requested, we provide herein an itemized list of the actions our unit is taking to implement findings in the report from External Reviewers and also discussion – in places – for those recommendations with which our unit disagrees.

Sincerely,  
  
Kyle R Hodder

on behalf of the Department of Geography & Environmental Studies

## **Key Recommendations**

There were five “key recommendations” that emerged from our review:

### **1. The department must develop a strategic plan**

We agree with reviewers that a strategic plan will help clarify goals for the Department of Geography & Environmental Studies. The nature, and scope, of the review comments have led us to focus, strategically, upon our undergraduate program and curricula in the first instance. We intend to use this strategic focus on undergraduate program(s) and curricula as a foundation upon which to construct a strategic plan.

### **2. Undergraduate Program Rationalization**

We agree that we have an opportunity to truncate the number of programs we offer, and we have committed to doing so as part of our undergraduate program and curricula review, presently underway. We intend to bring forward specific recommendations at the conclusion of that review process. The nature, and scope, of the review comments have led us to focus, strategically, upon our undergraduate program(s) and curricula as a common thread among most of the recommended changes, but also as a foundation upon which other proposed changes can be constructed.

### **3. Reduce and Standardize Undergraduate Courses**

We agree with reviewers that there are multiple sections being taught of lower level courses, and we acknowledge that there may be different approaches to the allocation of our teaching resources. However, we disagree that this represents an inefficient use of scarce teaching resources, for reasons that we elaborate upon on page 3.

We also note that the reviewers may have misunderstood our spring/summer course offerings, as they recommended that: “*Consideration should be given to not offering undergraduate courses (especially first and second year courses) in the Spring and Summer sessions (unless they are taught by additional sessional instructors)*”. None of our permanent faculty offer courses ‘in-load’ during the spring/summer term.

We do agree that courses that have not been mounted recently will be removed from the Undergraduate Course Catalogue.

Finally, the development of a core set of mandatory courses at the 300 or 400 level, as recommended by reviewers, is one option we are considering as part of our undergraduate program and curriculum review.

### **4. Reinstate the Graduate Program**

We have deferred an immediate response to the specific recommendation to regularize our graduate program - particularly until the undergraduate program and curricula review process has been completed. We acknowledge the importance of giving full deliberation to a regularized graduate program, and the corresponding resources needed to offer a high-quality program that occupies a niche in western Canada.

### **5. Transition the Map Library**

We agree with reviewers that the Map Library has long had a valued role in the department, and that modernization of this infrastructure will require consultation. The Map Library serves as the only formal laboratory space for our 1XX-level students, as well as the many other 2XX, 3XX and 4XX-level courses that rely on the materials and/or equipment housed therein. Use of this space as a formal laboratory space is only related, in part, to the access to paper or digital mapping resources. The space also houses specialized equipment and resources that support undergraduate instruction. We propose that neither the word “map” nor the word “library” adequately describe the function of this space.

## **Detailed Recommendations**

Our external reviewers made specific recommendations, which appeared in 46 bullet points. We have correspondingly labeled the recommendations from the report of our External Reviewers consecutively, and we respond below to each to indicate what actions our unit is presently undertaking, or will undertake in the future, to implement the findings in the report.

### **Undergraduate Teaching and Learning: Number of Undergraduate Programs**

*Recommendation 1: "The current number of programs available should be reduced by at least 40%. Despite the argument that reducing the number of different programs may not result in a reduction of the number of courses taught in a department, a multitude of closely-related, relatively similar programs creates confusion for students, complicates student advising, and represents an administrative burden to the department, faculty, and university. Program rationalization will allow the unit to focus on its flagship programs, and may provide an opportunity to align the faculty in the department with common goals and providing cohesiveness to the diverse body of departmental faculty."*

**Unit Response to 1:** We agree that the number of undergraduate programs should be reduced. There are currently 12 programs at the undergraduate level (including Honours, Majors, and Minors). Our undergraduate program and curriculum review, presently underway, will set forth specific recommendations in the near future.

### **Undergraduate Program Requirements**

Reviewers offered detailed commentary on the credit hours required in our programs. As a preface to this topic, we note that the Faculty of Arts at the University of Regina stipulates that major programs require between 36 and 45 credit hours and we operate within this stipulation. As noted by reviewers, our BA-Major in Geography requires 39 credit hours delivered by the department; we are aware of only 3 other BA programs in the Faculty of Arts which require fewer credit hours delivered by the cognate department (Philosophy, Political Science and Sociology). Therefore, we agree that it is possible for us to reduce the credit hours required in our BA-Major by 3 credit hours, and we are deliberating upon this option within our undergraduate program and curricula review. However, it is not within our scope to reduce the number of required credit hours below that stipulated by the Faculty of Arts. We correspondingly disagree with reviewers that our program requires a high number of Geography credit hours for majors within our local context at the University of Regina.

A related, but distinct, matter is provision for flexibility in a degree program by stipulating the number of required credit hours *but limiting the number of specific courses deemed mandatory*. In other words, students have the option to pursue pathways of their own choice through a degree program by selecting a subset of courses from an approved list of courses within, or beyond, the department. We agree with reviewers that this flexibility is attractive to students, and we agree that it may also have positive consequences for deployment of our teaching resources. The BA Major in Geography, for example, currently requires only 2 specific courses from our department, with the remaining 11 chosen from a subset.

*Recommendation 2: "For each retained program, the number of required Geography courses should be reduced to no more than five (5) in first and second year, and 3-6 in third and fourth year. In addition, the department should allow students the opportunity to explore their own specialized interests through using cross-listed course options from other departments towards credits in their Geography or Environment program. For the BA Environmental Studies program, requirements should be standardized similar to the Geography program."*

**Unit Response to 2:** We agree, in principle, that the requirements of the BA-Environmental Studies program requirements should be similar to the Geography program. Our undergraduate program and curricula review, presently underway, will set forth specific recommendations in the near future.

*Recommendation 3: "The department should explore the opportunity to move from very specialized courses in third and fourth year to more generalized course titles that sit within the expertise of current faculty and allow for flexible topic coverage over time. Such courses could also be offered in alternating years, based on available teaching resources."*

**Unit Response to 3:** We are currently exploring the possibility of generalized course titles as part of our undergraduate program and curricula review, and we look forward to reporting on the outcome(s) from that process. We are pleased to note that, in general, we feel that the expertise in our department is already aligned with the majority of upper-year undergraduate courses and topics, and that we have a long-standing practice of alternating upper-year course availability to correspond with both teaching resources and student demand.

Recommendation 4: *“The department and faculty should provide minimal funding to allow members of the department to visit other universities to explore how other Geography departments have faced similar challenges. Short one-day or two-day trips to other universities (University of Alberta, University of Calgary, University of Manitoba, University of Saskatchewan, University of Winnipeg) will foster the adoption of program innovations.”*

**Unit Response to 4:** We disagree with reviewers that site visits would be an effective use of the limited resources presently available; our preference is to allocate these resources to support laboratory and field-based learning (Recommendations 14-15, page 4) and/or teaching facilities (Recommendations 34-38, page 7). We have incorporated knowledge from other Geography (and Environmental Studies) departments across Canada via consultation with departmental websites, and our colleagues therein. Finally, informal discussion on adaptations to shared challenges was undertaken at the most recent Prairie Division meeting of the Canadian Association of Geographers - our disciplinary partner institutions in this region.

### **Coordinating Joint Major/Minor Programs**

Recommendation 5: *“The department should review the existing joint majors based on decisions made in the program review.”*

**Unit response to 5:** We agree, and this review is currently underway. We look forward to reporting on the outcome(s) from that process in the near future.

Recommendation 6: *“The department should carefully and judiciously explore the options for future joint majors and minors.”*

**Unit response to 6:** We agree. At present, we have no plans to develop new joint majors or new joint minors.

### **Courses Listed in the Calendar**

We concur with reviewers that a redesign of Majors and Minors provides an opportunity to build a set of courses ‘from the ground up’.

Recommendation 7: *“As part of the program restructuring, revise course offerings to present a cohesive set of flexible courses that meet the needs of students, while offering a straightforward, stepwise introduction of content through the four years of the degree(s).”*

**Unit response to 7:** We agree, and this review is underway. We look forward to reporting on the outcome(s) from that process in the near future.

Recommendation 8: *“An elective course in programming (in r or python) was identified as desirable by current students and alumni.”*

**Unit response to 8:** We agree that an elective course in programming can be a useful option in an undergraduate Geography and/or Environmental Studies program and/or Geographic Information Science program. Students in our existing programs can already select one or more programming courses as an elective outside, as there are 19, 15, 6 and 18 elective course options in each of the BA-GEOG, BA-ENST, BSc-GEOG and BGISc programs.

### **First Year/Introductory Courses**

Recommendations from reviewers in this section of the report focussed on the linkages between first-year course offerings, and our available teaching resources and the (potential) role these courses play in the recruitment of students into our program(s). Reviewers also note that *“...some first-year courses were offered in multiple sections in the same term. Given the strain on teaching resources, this appears to be duplication.”* We agree, this is duplication. However, we do not agree that this duplication is necessarily *“...an inefficient use of the scarce teaching resources at the introductory level”*. For example, GEOG121 regularly operates with enrolment at ~97% of capacity; in other words, we have met student demand with the supply of seats available. We remain open to optimization of our undergraduate course offerings, including first-year courses and we are currently in the process of undergraduate program and curriculum review.

The single most common Declared Major for students enrolled in our first-year courses is ‘undeclared’; a statistic that exemplifies the nature of first-year students in the liberal arts and sciences. Our first-year courses therefore serve an important role in exposing students to our discipline, and a corresponding role in recruiting students into our programs. Furthermore, about half of declared majors in our first-year courses are not enrolled in the Faculty of Arts, which emphasizes the important role our courses serve in the degree programs of students in enrolled in the faculties of Business Administration, Education, Engineering & Applied Science, Media Art & Performance and Science.

Recommendation 9: *“Retain 120 and 121 as required first-year courses.”*

Recommendation 10: *“Ensure enthusiastic, seasoned faculty members teach first year courses and incorporate research into teaching.”*

Recommendation 11: *“Move 100 (World Geography) to a second-year course.”*

Recommendation 12: *“Reduce the number of second-year course offerings to 2-4 key courses that will provide students with core geographic skills.”*

Recommendation 13: *“Embrace the recent Environmental Studies name change and increase course offerings with the “environmental” designation (especially for first year courses). Incoming first year students are familiar with environment but likely not so familiar with geography since it is not offered at the high school level in Saskatchewan.”*

**Unit response to 9 through 13:** Our undergraduate program and curriculum review is underway. We look forward to reporting on the outcome(s) from that process in the near future, and we are incorporating these recommendations into that process. We agree that GEOG120 and GEOG121 play important roles as required first-year courses, and it is crucial to have enthusiastic instructors teaching these (and all of our) courses.

### **Laboratory and Field-based Learning**

We were very pleased to see that reviewers emphasized the importance of experiential learning, both in the laboratory and in the field. We agree with reviewers that fieldwork is a key and identifying feature of geographic learning and can be emphasized as a way to reach out to the new generation of experience-based and group learners. We also agree with reviewers that size constraints of laboratory facilities impose a limit upon our enrolment and ‘hands-on’ time, especially at the introductory level.

Recommendation 14: *“For on-campus courses, move to a model of classroom lectures (faculty member) & lab (graduate TA) as used by other universities for lab-based learning. Increasing the number of small lab sections per course will enable higher course registrations without impacting the workload of teaching faculty. In the short term, this may require additional work for instructors to develop new methods of course delivery; however, in the long term it will reduce instructor workload and foster increased enrollments for those courses that are currently full.”*

**Unit response to 14:** The topic of lab and field-based learning has been a significant aspect of our undergraduate program and curriculum review, presently underway. Support for lab-based and field-based learning has been a key principle underlying this discussion, and we have committed ourselves to seeking the resources needed to do so.

Recommendation 15: *“Reintroduce a consistently and predictably offered field-based course taught as part of faculty members’ regular teaching load. A substantial field course (GEOG411) to national and international destinations used to be part of the regular course offerings in the department. This needs to be reinstated as not only does it provide the field experience students have requested, it is also an effective recruitment tool. The Department might consider focusing field courses in regional locations that provide opportunities for both BSc and BA students to conduct work at the same time in order to lower transportation costs and take advantage of economies of scale. They might also consider offering the field course in alternate years, depending on teaching loads of faculty members.”*

**Unit response to 15:** We agree that field techniques are a vital part of Geography & Environmental Studies curriculum. We have scheduled (a) a field course [GEOG396-AT/‘(De)constructing Berlin’] for summer 2018 and (b) GEOG411/Field Techniques for the fall term in 2018. The topic of lab-based and field-based learning has been a significant ingredient in our undergraduate program and curriculum review, presently underway. Support for lab-based and field-based learning has been a key principle underlying this discussion, and we have committed ourselves to seeking the resources needed to do so.

### **Timetabling**

Recommendation 16: *“Timetabling of courses should be returned to the unit level. Unit control of course scheduling is the norm at most other post-secondary institutions in Canada and ensures an understandable and predictable program schedule for students. It also allows teaching faculty to effectively plan allocation of time for both teaching and research.”*

**Unit response to 16:** We look forward to consultation with, and advice from, the University Registrar on this recommendation. We note that reviewers found both students, and instructors, had expressed dissatisfaction with the current timetabling system. Specific issues mentioned by the reviewers included: courses having changed timeslots from year to year, courses having been scheduled at less convenient times during the day, and courses scheduled in conflict with other courses required for the program. We are happy to report that the last of these specific issues, re: courses scheduled in conflict with other courses required for the program, is likely to have been addressed with the DCU/Data Collection Utility at the University of Regina. We have used DCU “course combinations” to create groups of courses that are to be offered conflict-free in a particular semester, and we have

initiated collaboration with other departments (Geology, Economics) to do so. The DCU course combinations have been successful in addressing common conflicts that arose in the past. To help address time slot issues, we have also (a) offered courses during evening time slots since the review (a time of day during which many fewer courses are scheduled), and (b) initiated the development of several online courses in collaboration with the Centre for Continuing Education (a course delivery format that largely eliminates time-of-day conflicts).

We also agree with reviewers that it is highly desirable to have control over the schedule to allow teaching faculty to effectively plan allocation of time for *both* teaching and research.

### **Alternate Teaching Methods**

We noted, with interest, our reviewers support for development of new and innovative teaching methods in Geography & Environmental Studies. Reviewers largely framed their discussion around the development of asynchronous/online learning environments, and we agree that the process of developing online course content is best accomplished with access to instructional designers, distance-education experts, and IT/infrastructure personnel.

Recommendation 17: *“One faculty member should be tasked with exploring opportunities for future alternate teaching methods and report back to the department.”*

Recommendation 18: *“Alternate teaching methods should not be adopted until sufficient support resources are provided by university administration.”*

**Unit response to 17 and 18:** Our department has applied for, and received, funding from the Centre for Continuing Education for development of three online courses: GEOG121/Physical Geography, GEOG203/Introduction to Geographic Information Systems and GEOG327/Hydrology. Support for this process includes access to instructional designers, distance-education experts, and IT/infrastructure personnel alongside a period of time for instructor to develop each course. We anticipate these courses will appear online beginning in the 2018-2019 academic year. We consider it important to note that support for development of new and innovative teaching methods need not be confined to asynchronous/online learning environments; support for the development of alternate teaching methods via lab-based and field-based learning is equally important and we commit to seeking the resources needed to do so.

### **Honours program**

We agree with reviewers that our Honours program provides an attractive option for our students, and also helps cultivate a talent pool of students whom we might recommend for graduate school.

Recommendation 19: *“The honours program should be retained using the model of individual supervisor oversight (no common course required).”*

**Unit response to 19:** We agree. We do not anticipate any structural change to the existing Honours program in Geography; however, our undergraduate program and curriculum review, presently underway, may alter the name of the program(s) in which an Honours is available. We note that reviewers did not suggest an Honours program in Environmental Studies, for example, but we have received feedback from students to indicate this option is desirable.

Recommendation 20: *“The honours program should require a written thesis.”*

**Unit response to 20:** We agree. We infer this to be a misunderstanding on the part of reviewers, as a written thesis is mandatory in each of our Honours programs and has led to 16 theses over the review period.

### **Graduate Program**

We read, with interest, that alumni of our graduate programs who met with the review committee unanimously reported high satisfaction with the graduate program and that our alumni are saddened that the status of the program has changed (i.e. to ‘special case’). We remain very proud of our graduate alumni, and their successes both in the academy and beyond. We acknowledge the vital ‘two-way’ interaction between graduate students and faculty: graduate students can serve a vital role in the research programs of our faculty, and graduate students also simultaneously benefit from the mentorship provided by our faculty. The shift to a ‘special case’ program was initiated by the department, in part, as a result of resource matters that included: instructor availability to offer overload graduate courses, the availability of members for thesis committees who possess the specific expertise and/or experience to match each unique thesis research project, and the modest internal funding available for graduate student support at that time.

Recommendation 21: *“The graduate program must be reinstated as soon as possible”.*

**Unit Response to 21:** We have deferred an immediate response to the specific recommendation to regularize our graduate program - particularly until the undergraduate program and curricula review process are completed. We acknowledge the importance of giving full deliberation to a regularized graduate program, and the

corresponding resources needed to offer a high-quality program that occupies a niche in western Canada. We reiterate that we are very proud of our graduate alumni, and their successes both in the academy and beyond.

Recommendation 22: *"The department needs to support, enable, and encourage graduate applications to external sources of funding (Tri-council scholarships as well independent sources such as the Royal Canadian Geographical Society, and city and provincial sources)."*

**Unit Response to 22:** We agree that our students benefit from being made aware of funding opportunities from both internal and external sources. We have a practice of making graduate students aware of external sources of funding, and we will continue to do so.

Recommendation 23: *"The graduate course requirements should be revised to permit maximum flexibility for students and fewer course requirements to complete the program (3 courses maximum)."*

**Unit Response to 23:** We have deferred an immediate response to this specific recommendation - particularly until the undergraduate program and curricula review has been completed.

Recommendation 24: *"Faculty members must receive acknowledgement on annual reviews for the number of graduate students that they supervise and for overload graduate teaching."*

**Unit Response to 24:** We agree.

Recommendation 25: *"Where faculty members have external funding for graduate students, the department must support recruitment and retention."*

**Unit Response to 25:** We agree.

Recommendation 26: *"Current graduate funding should be used to support graduate students in Teaching Assistantship positions situated within labs and classrooms."*

**Unit Response to 26:** We agree.

Recommendation 27: *"Graduate students with TA/RA support should be encouraged to present guest lectures and give class presentations (participation should not be limited to marking only)."*

**Unit Response to 27:** We agree.

Recommendation 28: *"Once reinstated, the program should be widely advertised through Departmental, Faculty, and University websites and listserves, as well through national academic organizations and social media."*

**Unit Response to 28:** We have deferred an immediate response to the specific recommendation to regularize our graduate program - particularly until the undergraduate program and curricula review has been completed.

## Research

We are proud of the research accomplishments of our faculty, and concur with reviewers that our ongoing productivity and research impact confirm that research is a considerable strength of our unit. We note that reviewers found our research productivity and impact fall within the norms of similarly-sized departments in Canada, whether measured by number of publications, or quality of research journals, or success in peer-reviewed funding competitions.

Recommendation 29: *"The graduate program be reinstated as soon as possible to support recruitment of high quality personnel in support of faculty research programs."*

**Unit Response to 29:** We have deferred an immediate response to the specific recommendation to regularize our graduate program - particularly until the undergraduate program and curricula review has been completed.

Recommendation 30: *"Administration implement a mentoring program for new faculty that matches incoming assistant professors with experienced researchers outside of the department."*

**Unit Response to 30:** We agree. To some extent, this already occurs and reviewers may have been unaware of mentorship already underway; for example, junior members of the department have been paired with experienced scholars as part of the SSHRC-Cohort program.

Recommendation 31: *"Faculty should be encouraged to utilize existing University of Regina support structures for peer review grant and proposal development. Internal funding opportunities provided by the office of the VP Research should be utilized by faculty for developing larger grant proposals."*

**Unit Response to 31:** We agree.

## Service

Our faculty make important service contributions within, and beyond, our University. We concur with reviewers that given the size of our department, our contribution to service internally and externally is admirable.

Recommendation 32: *"Service roles for all faculty members should be carefully managed to ensure that service takes no more than 20% of their time. This is especially important for Assistant Professors."*

**Unit Response to 32:** We agree.

Recommendation 33: Administration must provide additional teaching/research capacity for secondments and university-level administrative appointments.

**Unit Response to 33:** We agree.

## Facilities

We agree with reviewers that teaching space – especially lab space for physical geography – is extremely limited as compared to other Geography departments in Canada of our size. We also agree that lack of appropriate teaching space, and especially lab space, is influencing the success of our programs: **this is a key finding from the review.**

Recommendation 34: *"The Faculty of Arts should liaise with the Faculty of Science to gain access to increased wet lab and dry lab teaching space for the physical geography courses."*

**Unit Response to 34:** We agree.

Recommendation 35: *"The University of Regina Library should assign a librarian to the task of reviewing the current Map Library holdings and searching alternative homes for important and historical documents."*

Recommendation 36: *"Current Map Library holdings should be rationalized to focus only on those needed to support current research and teaching foci."*

Recommendation 37: "The size of the Map Library should be reduced by at least 50% and space reallocated to meet greater needs (perhaps as a larger dry lab teaching space).

Recommendation 38: "If the Map Library is reallocated, the space must remain assigned to the Department.

**Unit Response to recommendations 35 through 38:** We agree with reviewers that the Map Library has long had a valued role in the department, and that modernization of this infrastructure requires consultation. We will incorporate modernization of this infrastructure into the discussion that flows from our undergraduate program and curricula review upon completion.

## Staffing and Administration

We agree with reviewers that the Department of Geography and Environmental Studies cannot be reduced in size without jeopardizing our mission of teaching, research, and service to the community. We were heartened to learn that undergraduate/graduate students and alumni who met with our review committee were generally happy, and report that our faculty are approachable and well-liked, and express genuine care for our students. We also agree with the reviewers finding that the lack of departmental representation on Faculty of Science Council, and its associated decision-making bodies, has affected the administration of our BSc program. We note that reviewers categorically rejected a divide of departmental faculty between two different Faculties, and we are committed to pursuing the resources and arrangements that support our students and faculty.

Recommendation 39: *"Priority should be given by the Faculty of Arts to replace the two faculty members retiring in the near future."*

**Unit Response to 39:** We agree.

Recommendation 40: *"Physical geographers should be encouraged to develop closer ties with colleagues in the Faculty of Science."*

**Unit Response to 40:** We agree with reviewers that close collaboration with colleagues in the Faculty of Science (and also the Faculty of Engineering & Applied Science) is mutually beneficial, especially for colleagues undertaking those research themes encompassed within the purview of natural science and engineering (e.g. NSERC). We were unsure whether reviewers unintentionally overlooked existing collaborative ties, or were merely encouraging continued cultivation of such ties. For example, David Sauchyn has long-standing research collaboration with colleagues in the Faculty of Science (Biology, Geology) and also the Faculty of Engineering & Applied Science (Environmental). Ulrike Hardenbicker also continues to collaborate with colleagues in the Faculty of Science (Geology). Kyle Hodder has long-standing research and teaching collaborations with colleagues in the Faculty of Science (Biology, Geology); and, to a lesser extent, also in the Faculty of Engineering (Environmental).

Recommendation 41: *“The Faculty of Science must permit the Faculty of Arts to appoint a physical geographer as a special representative to Faculty Council with the rights to propose changes to the BSc program.”*

**Unit Response to 41:** We agree to follow-up on this possibility within the Faculty of Arts, first, in which there are several departments with BSc degree programs.

Recommendation 42: *“The addition of a lab technician would greatly enhance the ability of the department to offer laboratory and field work learning opportunities that were emphasized by all of the current students and alumni with whom we met.”*

**Unit Response to 42:** We agree.

Recommendation 43: *“The inclusion of additional adjunct professors to may help to diversify course offerings.”*

**Unit Response to 43:** We agree. We have four Adjunct Professors at the present time, and we have recently drafted a department policy to clarify (a) the recruitment process for adjuncts, and also (b) the range of expectations and duties that correspond with this role.

Recommendation 44: *“Geography, as a department, should not move to Faculty of Science unless Faculty of Science supports the inclusion of the Human/social geographers in the move.”*

**Unit Response to 44:** The Department of Geography & Environmental Studies is committed to pursuing the resources and arrangements that support our students and faculty.

### **Financial Resources**

We agree with reviewers an annual discretionary budget allocation of approximately \$13k means that our resources are spread very thin: **this is a key finding in the review process**. It is exceptionally difficult to mount laboratory-based and field-based education, in addition to covering the miscellaneous expenses of a departmental office, with a budget of this magnitude. The resource needs for our department via laboratory and field based activities are unlike many other departments in the Faculty of Arts. While some geographers can teach and investigate with equivalent resources to members of other departments in the Faculty of Arts, natural scientists cannot. Laboratory-based and field-based education are both fundamental to the education of all students in Geography & Environmental Studies, but especially in our BSc and BGISc programs.

Recommendation 45: *“The use of TA/RA funding to staff the Map Library should cease immediately. All TA funding should be allocated to hands-on teaching such as field assignments, labs, and tutorials.”*

**Unit Response to 45:** Any shift in the use of the Map Library is tied to changes in our undergraduate curricula and program review, presently underway. We agree to incorporate this recommendation from reviewers into that discussion. The Map Library serves as the only formal laboratory space for our 1XX-level students, as well as the many other 2XX, 3XX and 4XX-level courses that rely on the materials and/or equipment housed therein. Use of this space as a formal laboratory space is only related, in part, to the access to paper or digital mapping resources. The space also houses specialized equipment and resources that support undergraduate instruction. We propose that neither the word “map” nor the word “library” adequately describe the function of this space.

Recommendation 46: *“One faculty member (as mentioned earlier) should be assigned to exploring options for teaching online courses. As previously stated, this should be approached with caution and any move to online teaching must be accompanied by appropriate and adequate support from university administration.”*

**Unit Response to 46:** Our department has applied for, and received, funding from the Centre for Continuing Education for development of three online courses: GEOG121/Physical Geography, GEOG203/Introduction to Geographic Information Systems and GEOG327/Hydrology. Support for this process includes access to instructional designers, distance-education experts, and IT/infrastructure personnel alongside a period of time for instructor to develop each course. We anticipate these courses will appear online beginning in the 2018-2019 academic year.

### **Indigenization**

Finally, we note that reviewers did not comment upon Indigenization of, or within, our unit in coordination with the University of Regina’s strategic plan. We include a few relevant details, below.

#### **Indigenization: Teaching & Outreach**

Two faculty members in our department, Dr Vanessa Mathews and Dr Emily Eaton, have participated in the nitôncipâmin omâ Student Success Program. The Aboriginal Student Centre sponsors this program, which is designed to provide a supportive learning environment for first-year Aboriginal students. Approximately 30 students were mentored through this program across 3 sections of World Regional Geography (GEOG100) in 3 separate semesters.

Dr Eaton, who serves as instructor for our Environment and Resource Management course (GEOG336), undertook significant revisions to the course including indigenization of course content. Students are challenged in the course to consider, and understand, the steps required to truly decolonize environmental decision-making for a variety of resources, including but not limited to: water, agriculture, mining, energy, forestry and wildlife.

Dr Vanessa Mathews was a guest speaker at the 2015 miskamowin Discovering Your Direction Grade 9 student conference, hosted at First Nations University of Canada. Dr Mathews delivered a workshop on Mental Mapping. The conference was designed to familiarize student with the University of Regina and First Nations University campuses and the options available within a university-level education.

In 2013, our department introduced a new course, titled Aboriginal Geographies of Canada (GEOG344). The course focuses on the cultural ecologies of the pre-contact period and the geographical relationships between Native peoples and the French, British, and Canadian governments. The course also emphasizes decolonization strategies and the contemporary geographies of aboriginal peoples across the country. Generating enrolment in this course has met with some difficulty; however, we look forward to mapping the future of this course as part of our undergraduate curricula and program review.

### **Indigenization: Training**

Our faculty have also participated in training programs. Dr Ulrike Hardenbicker attended the URIndigenization workshop, sponsored by the University of Regina, and focused on the scope of the indigenization process on a broad scale, but also specific strategies by which instructors can indigenize their teaching.

### **Indigenization: Research**

Dr Emily Eaton has organized, and hosted, a series of workshops titled Land & Community. The first of these workshops, titled Saskatchewan Oil Impacts Workshop, was held in Regina and attended by 50 participants including landowners, Indigenous land defenders and environmentalists from all across the province. At this workshop, participants decided to expand the focus from oil and gas to resource extraction more broadly. The next year the workshop was retitled Land and Community and Dr Eaton hosted it in Saskatoon as a two-day long event with an Indigenous-led component. Dr Eaton volunteered her organizing and logistics skills to a team of Indigenous advisors who planned the content, format, and delivery of the second day. The workshop considered how front-line communities could respond to resource extraction projects in Saskatchewan. The third workshop was held at Fish Lake Historic Métis Settlement near the Prince Albert National Park and featured voices of people living in the midst of extractive activities. It was attended by over 50 participants including landowners, Indigenous land defenders, and environmentalists. Out of this workshop participants formed a new group named the Coalition for the Defense of Turtle Island that is working together to support frontline communities fighting extraction projects.

Between 2005 and 2017, Dr Ulrike Hardenbicker examined the influences of soil erosion on biodiversity within field sites along the Qu'Appelle River valley within the Cowessess First Nation. Her research aims to support the knowledge, innovations and practices of indigenous people, while respecting traditional lifestyles relevant for the conservation and sustainable use of biological diversity. The Indigenous Peoples Health Research Centre, a collaborative partnership between the First Nations University of Canada, the University of Regina and the University of Saskatchewan, funded this research.

Finally, we look forward to making further progress on Indigenization of, and within, our department.