PLAN FOR THE ASSESSMENT OF STUDENT LEARNING OUTCOMES

DEPARTMENT OF GEOGRAPHY UNIVERSITY OF WISCONSIN---MADISON

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Overview

In the mid-1990s the Department of Geography under Chair Waltraud Brinkmann worked to develop a plan for the assessment of the degree programs in Geography. These efforts resulted in a plan that was submitted to the College of Letters & Science in December 1996 (attached). It describes the means of assessing the degree program offered at the undergraduate level.

As noted in the 1996 Geography assessment plan (attached), the assessment of student learning was a new endeavor for this department. The assessment that we adopted at that time consisted of two major components: (i) an assessment of our instructional program, and (ii) an assessment of the learning of individual students. With respect to the latter goal the Department adopted two sorts of assessment tools, transcript analysis and reports from faculty teaching our capstone course referred to as the Undergraduate Colloquium in Geography (Geography 565). A goal of this course is to assess the student's ability to formulate geographic questions and modes of inquiry, to analyze and evaluate geographic information, to integrate material into geographic frameworks, and to think critically, to write clearly, and to read and understand professional papers as would be expected of graduating students in the major.

The New Assessment Plan for the Department of Geography

During the past several months all members of the department have been informed of the undertaking of the new Assessment Plan. Several faculty and some students have become involved in these discussions. The preparations of the Plan were discussed twice in general faculty and staff meetings. The department chair (Professor Karl Zimmerer) then appointed a subcommittee consisting of the chairs of the Undergraduate and Graduate Affairs Committees who are Professors Kris Olds and A-Xing Zhu respectively. In addition the members of the department Advisory Committee participated actively in the process. This committee consists of Professors Robert Kaiser and Matthew Turner in addition to Professor Zhu. The final member of the committee was Ms. Charmarie Burke, the Graduate Coordinator. This subcommittee met in order to discuss the need for the assessment and to exchange and formulate ideas and information. Char Burke attended the seminar that the College of Letters & Science sponsored. This committee took on the responsibility for drafting and discussing this report and submitting it to the faculty and staff for approval.

In preparing the plan it became clear that the assessments of Undergraduate and Graduate learning outcomes are distinct and need to be treated separately. As a result the procedures proposed in this report differ between the Undergraduate and Graduate student populations. The report is organized accordingly.

The new Assessment Plan also reflects the range of Geography and the particular subfields that are covered in the Department. Both the Undergraduate and Graduate programs cover the four sub-fields of (i) human geography; (ii) physical geography; (iii) people-environment geography, and (iv) Geographic Information Systems/Cartography. As a result it is not possible for the Department to design single types of specific assessment instruments for all its students. Rather the assessment techniques are designed with the flexibility needed to provide an appropriate degree of specificity for each subfield.

Undergraduate Program Assessment Plan

A. Undergraduate Requirements for the Major in Geography, and Cartography and Geographical Information Systems

As noted above, Geography is a broad and diverse discipline. Given this, our educational goals and objectives for the undergraduate program are accordingly broad and diverse in nature. We seek to provide undergraduate majors with:

- 1. A broad spectrum of geographical knowledge and skills, as well as a degree of expertise in a specific sub-field of the discipline;
- 2. Skills in developing and implementing research plans;
- 3. Critical reasoning and analytical skills;
- 4. Communications skills.

The program should also prepare students for potential employment after graduation, as well as provide them with the necessary background and skills to conduct graduate work in geography and affiliated disciplines (e.g., urban planning, sociology, geology).

B. Proposed Measures

Given the size of the undergraduate program (approx 85-100 majors), and the annual graduation cohort (approx. 25), the department is prioritizing the acquisition of assessment data from all of the graduating majors via the Capstone course (GEOG 565) that is taught on an annual basis. Several additional assessment measures have also been developed to complement the core assessment data acquired via the Capstone course.

The tables that follow outline the measures, the goal(s) that each measure helps to assess, and the "uses of information", in particular the formal process through which the Department assures that collected data is both analyzed and acted upon.

Measures	Goal	Goal	Goal	Goal	Use of Information
	1	2	3	4	
Capstone Measure I.	Х	Х	Х	Х	Data is reported to the Executive
The senior capstone					Committee four weeks after the
course (GEOG 565),					end of the term(s) the senior
will be taught once					capstone course is held. Time
per year (in the					series results will be built up and
Spring term), and be					incorporated into the report on
restricted to seniors.					any one course. The data will also
In this course students					be reported to the Undergraduate
will complete					Affairs and Curriculum
individual and group					Development Committee
research projects and					(UACDC). The chair of the

associated class presentations. The instructor and 1-2 other faculty members will use criteria devised by the Dept., to evaluate the work.					department, the course instructor, and the chair of the UACDC, will meet annually to discuss the findings and develop any needed initiatives to adjust the undergraduate program. These initiatives will be planned by the UACDC, voted on by the Executive Committee, and then implemented by the UACDC.
<i>Capstone Measure</i> <i>II.</i> An external examiner from a peer department will assess, every fourth year, how effective we are in meeting our educational goals and objectives for the undergraduate program. The external examiner will mark a random sample of papers drawn from three year separate years of Capstone courses, and submit a formal report to the faculty.	X	X	X	X	The external examiner's report will be circulated to faculty for review, discussion, and action if needed. The UACDC will be tasked to implement all recommended changes.
<i>Capstone Measure</i> <i>III.</i> The chairs of the Undergraduate Affairs and Curriculum Development Committee (UACDC) and the Department will conduct focus group sessions with three groups of students from the Capstone course.	X		X	X	The data, in the form of written notes, will be circulated to faculty. The data will also be reported to the Undergraduate Affairs and Curriculum Development Committee (UACDC). The chair of the department, the course instructor, and the chair of the UACDC will meet annually to discuss the findings, and develop initiatives to adjust the undergraduate program. These initiatives will be planned by the UACDC, voted on by the Executive Committee, and then implemented by the UACDC.

Alumni Survey Measure. The Department will develop and implement a short web-based survey with all alumni every third year. The survey will be targeted to alumni who graduated three years prior. The focus of the survey will be on how well the program met the four objectives noted above, and how well the program prepared the graduates for employment and/or graduate school.	X	X	X	X	The data, in the form of recorded messages, will be printed out and shared with faculty. The data will also be reported to the Undergraduate Affairs and Curriculum Development Committee (UACDC). The chair of the department, the course instructor, and the chair of the UACDC will meet annually to discuss the findings, and develop initiatives to adjust the undergraduate program. These initiatives will be planned by the UACDC, voted on by the Executive Committee, and then implemented by the UACDC.
Graduate School Placement Survey Measure. The Department will acquire graduate school placement data from all seniors in their final month, and via the Employment Survey Measure. This anonymous survey will enable us to build up time series data about factors including length of time to first job, sectoral base, starting income, and geographic base.	X	X	X	X	Graduate school placement statistics will be reviewed annually by the chair of the department and presented to the faculty for action as needed.
Undergraduate Student Symposium. Each year the	X		X	X	Faculty members attend the symposium. Feedback is given to both the students and to faculty.

undergraduates			
(together with the			
graduate students)			
hold a student			
symposium to			
present findings			
from a research			
paper.			

C. Resource Implications

Multiple faculty members from different subfields will be tasked to participate in the governance of the Capstone course.

These measures have significant implications for the activities of the UACDC. This committee will utilize the data that is acquired from these measures to create an annual strategic plan.

Survey instruments will create additional demands on the time of the Department's webteam, and the administrative staff. 100 hours of additional student hourly assistance will be required to assist with the implementation and analysis of all surveys.

The external examiner will have to receive a \$400 honorarium when s/he assesses the sample papers. This expense will arise every fourth year.

The chair of the Department will be tasked to ensure that the data is appropriately acquired, analyzed, and acted upon if needed.

Graduate Program Assessment Plan

A. Educational Goals and Objectives

Geography is a very broad field covering physical geography, human geography, people-environmental geography, and geographic information science (cartography/geographic information system). Graduate students coming to geography mostly specialize themselves in one of these four subfields. Nevertheless, the educational goals and objectives are the same:

- 1. Achieve high level of proficiency in student's subspecialty (subfield), understand research issues facing the subfield and demonstrate ability to develop strategy (research proposal) for addressing the selected research issue.
- 2. Obtain familiarity with research methods used in the subspecialty and demonstrate ability to effectively use these methods in research.
- 3. Develop the ability to share knowledge related to the subspecialty via proficiency in teaching and in producing research worthy of publication and presentation.

The level of proficiency expected in each of these three areas for the Master's program is different from that for the Ph.D. program. The Master's program focuses on learning how to conduct research (Goals 1 and 2) while the Ph.D. program demands high proficiency in all these areas listed above.

B. Methods of Assessment

Basically, the graduate programs are structured in such a way that there is an assessment for every step along the way on an individual basis. Table 1 lists the methods of assessment to evaluate the overall performance of student learning in the Masters' program while Table 2 lists the methods of assessment for the Ph.D. program.

Table 1. Methods of assessment for the Master's programs					
Methods	Goal 1	Goal 2	Goal 3	Use of Information	
Quality of Master's	Х	Х	Х	Percentages of Master's thesis	
thesis:				at the publishable quality, at	
Orally defended in front				pass without revision, and with	
of a committee made up				pass can computed and studied	
of at least three faculty				by the Graduate Affairs and	
members. The result is				Research Committee and	
one of the following				reported to the faculty for	
three:				assessing the learning	
1) pass with no				performance in the Master's	
revision,				program.	
2) pass with					
revision,					
3) fail.					
The committee will also					
indicate whether the					

Table 1: Methods of assessment for the Master's programs

thesis is of publishable quality				
Job Placement: Information job placement will be collected and archived every year.	X	X	X	This information will be analyzed by the Graduate Affairs and Research Committee and reported to the faculty for action if needed.
Ph.D. Program Placement: Information on the Ph.D. program placement will be collected and archived every year.	X	X	X	This information will be analyzed by the Graduate Affairs and Research Committee and reported to the faculty for action if necessary.
Exit Interview: Exit interviews will be conducted by the graduate coordinator	X	X	X	Interview summaries will be presented to the Graduate Affairs and Research Committee and reported to the faculty for actions if necessary.

Table 2: Measures and methods for assessing the Ph.D. programs

Methods	Goal 1	Goal 2	Goal 3	Use of Information
Job Placement:	Х	Х	Х	This information will be
Information on job				analyzed by the Graduate
placement of Ph.D.				Affairs and Research
graduates will be				Committee. In particular, the
collected and archived				committee will pay special
every year.				attention to the percentage of
				Ph.D. graduates who pursue a
				faculty career and the
				percentage of those who land at
				Ph.D. granting institutions. The
				committee's findings will be
				reported to the faculty for
				action as needed
Publication:		Х	Х	Percentage of students who
Information on the				publish while in the program
publications will be				and percentage of publication in
collected every year and				top tier society journals will be
archived.				studied by the Graduate Affairs
				and Research Committee to
				assess the ability of students to
				disseminate research findings
				and by the Graduate

				Admissions and Recruitment Committee to grant the best student paper awards.
				Graduate publication information will be reported to the faculty for future assessment and actions.
Exit Interview: Exit interviews will be conducted by the graduate coordinator	X	X	X	Interview summaries will be presented to the Graduate Affairs and Research Committee and reported to the faculty for actions if necessary.

In addition, the following methods (Table 3) are applied to both programs (Master's or Ph.D.) not only to assess learning but also to provide students the incentives to achieve the educational goals.

Table 5: Additional methods for both Master's and Ph.D. programs					
Measures	Goal 1	Goal 2	Goal 3	Use of Information	
Conference			Х	Percentage of students who	
Presentations:				present at professional meetings	
Information on students				will be used by the Graduate	
attending professional				Affairs and Research	
conferences will be				Committee to allocate financial	
collected. Number of				resources to support this	
awards received from				activity.	
professional					
organization.				Number of awards will be used	
				to assess the quality of the	
				program in comparison to other	
				programs in the same fields in	
				the nation and world-wide.	
Teaching supervision			Х	Information provided faculty	
and advising:				classroom visit and teaching	
Each teaching assistant				evaluation will be used by the	
will be visited in				Graduate Budget Committee to	
classroom by a faculty at				allocate teaching assistantships	
least once a semester				as well as by the Graduate	
and a face to face				Admissions and Recruitment	
meeting between the TA				Committee to award TA for	
and the faculty is held to				outstanding teaching	
provide feedback on				performance.	
student teaching.					

Table 3: Additional methods for both Master's and Ph.D. programs

Teaching evaluation information is also collected.				
Student Symposium: Each year the graduate students (together with the undergraduate students) hold student symposium.		X	X	The symposium is attended by faculty members. Feedbacks are given to students and shared by faculty as another way for assessing student learning.
Subfield Student Seminars: Each subfield holds weekly or biweekly research seminars.	X	X	X	The seminars are attended by faculty members. Feedbacks are given to students and shared by faculty as another way for assessing student learning.

The department has also long relied on national ranking systems (particularly such as that of the National Research Council) and feedbacks from alumni as a means of evaluating the overall graduate program.

C. Responsibility and Reporting

The department has three committees related to the graduate programs: the Graduate Budget Committee, the Graduate Admissions and Recruitment Committee, and the Graduate Affairs and Research Committee. In addition, each subfield academic councilor (a faculty member) provides academic assistance to the students in the respective subfield. The three graduate committees work together and through the graduate coordinator coordinate efforts to assess graduate student performance. The assessment consists of four major steps: 1) Graduate work planning and coordination; 2) Student performance reporting; 3) Student performance assessment; and 4) Change recommendation.

- C.1 Graduate work planning and coordination: Each student is asked to work with their respective thesis advisor and/or their respective subfield academic councilor to develop a work plan during the first semester of their graduate programs.
- C.2 Graduate performance reporting: the graduate coordinator collects information on student performance (course work, progress on research, teaching evaluation). In addition, students also provide information on conference presentations and scholarly publications.
- C.3 Graduate performance assessment: In addition to the assessment specified as part of the program requirements, the department evaluates every student to see if they are making a satisfactory progress (level of achievements and the timeline for completing the requirements). Students who are not making a satisfactory progress will be notified in written. Further delinquency in meeting the requirements will lead to termination of financial support, even termination of his/her graduate program without degree.

C.4 Changes to program (including changes to assessment plan): Assessment may lead to changes to the programs and/or to the assessment plan. Example of this kind is the recent introduction of the "gate policy" which is a policy requiring Master's students with financial aid contracts to complete their thesis work in two years. This policy is a result of a recent assessment of the length for our Master's students to complete the Master's program.

D. Resources Needed

To implement and enforce the assessment plan, we need to streamline the planning and reporting process of student performance assessment. The most efficient and plausible way to do this is to implement online reporting and tracking system which will not only greatly facilitate the compilation of information related to student performance but also, more importantly, will make this assessment more effective.