Texas State University
Outcomes Report

General Information

Academic Year: 2011-2012
College: Liberal Arts
Department: Geography
Program: Geography (PhD)
Program Code: 45.07
Outcome Type: Student Learning
Degree: Doctoral
Contact Name: Dr. David Butler, Graduate Coordinator
Status: Data Entry Closed

Mission Statement
The doctoral degree in Geography is designed to provide depth and breadth of knowledge in geographic theory and research methods resulting in the completion of significant original research in the form of a PhD dissertation. Students will be educated in the process of geographic research, the development of new knowledge and methods and the application of research, techniques, pedagogy and geographic knowledge to address problems with spatial dimensions.

Evidence of Improvement

Geography’s PhD students showed significantly improved performance in terms of (1) grasping the historical and philosophical aspects of the discipline by the comprehensive exam stage of their program (Outcome 1, Result 2), and (2) in the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal by the dissertation proposal point of their program (Outcome 2, Result 2).

Doctoral graduate teaching assistants (TAs), who are lecturing as instructors-of-record, are doing an outstanding job as indicated by the results presented for Outcome 5, Method 1. Teaching evaluations exceeded expectations for 22 of 26 courses taught by TAs, with the median score for TAs exceeding the overall departmental undergraduate course median in both fall and spring semesters.

Faculty will strongly encourage their PhD advisees to make professional presentations at conferences, for which the department will continue to provide substantial financial support towards travel expenses. The department will conduct a comprehensive survey of all PhD alums in order to update current employment.

Outcome 1
Students will demonstrate an advanced understanding of the historical development of geographical thought, and the major current philosophical and theoretical debates in geography.

Outcome 1 - Method 1
Review and evaluation of student performance on a paper in the required core course GEO 7302 Nature and Philosophy of Geography.

Procedure: Student papers will be assessed by the instructor for GEO 7302 at the end of the semester using Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.” We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

Outcome 1 - Method 1 - Result
GEO 7302 is taught once a year with incoming PhD students usually taking it during their first semester. In Fall 2011, the performance on the final term paper for 15 students was assessed, with 0 students (0%) rated as having “minimal understanding,” 2 (25%) rated as having “acceptable understanding”, 5 (62.5%) rated as having “superior understanding,” and 1 (12.5%) rated as having “exceptional understanding” of the subject matter. With 87.5% rated as “superior” or “exceptional”, we failed to reach the target goal of 100%, but the results were better than that experienced in Fall 2010 and Fall 2009 (74% and 71%).

Outcome 1 - Method 2
Comprehensive Exam. Students will be evaluated on their performance on the required written and oral comprehensive exams, as related to the historical development of geographical thought and the major current philosophical and theoretical debates in geography.

Procedure: After completion of the comprehensive exam by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures students performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.” We expect that 100% of students will demonstrate “superior” or
A total of 15 PhD students completed their comprehensive exams during the 2011-2012 academic year, which was a much higher number than the 8 during the previous academic year. Of the 15 students, 0 (0%) were rated with “minimal” understanding, 1 (6.6%) was rated “acceptable,” 9 (60%) were rated “superior,” and 5 (33.3%) were rated “exceptional.” This means that 93.3% met the goal of superior or exceptional performance (compared to 50%, 75% and 69% during the previous 3 years). Although we still did not meet our target of 100% of students rated as superior or exceptional, this year’s results represented a significant improvement over the previous three years. This suggests that our PhD students are grasping the historical and philosophical aspects of the discipline much better by the midpoint (i.e. comprehensive exam) stage of their program.

Outcome 2

Students will demonstrate an advanced understanding of the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

Outcome 2 - Method 1

Review and evaluation of student performance in the required core course GEO 7300 Advanced Geographic Research Design.

Procedure: Student term papers/projects in GEO 7300 will be assessed at the end of the semester by the instructor for GEO 7300, using a Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding. We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.”

Outcome 2 - Method 1 - Result

GEO 7300 is taught during spring semesters and is usually taken by first-year doctoral students. For the 9 students rated this year, 1 (11%) was rated as having “minimal understanding”, 0 (0%) were rated as having “acceptable understanding”, 4 (44%) were rated as having “superior understanding”, and 4 (44%) were rated as having “exceptional understanding”. The target of 100% being rated as “superior” or “exceptional” was therefore not met this year due to the poor performance of one student.

Outcome 2 - Method 2

Dissertation Proposal. Students will be evaluated on their performance on the required written and oral dissertation proposal as related to the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

Procedure: After completion of the dissertation proposal by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.” We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

Outcome 2 - Method 2 - Result

A total of 10 students completed their dissertation proposal during 2011-2012. Of the 10 students, 6 (60%) were rated “superior” and 4 (40%) were rated “exceptional. Thus the goal of 100% rated as “superior” or “exceptional” was met. By comparison, 87.5% rated as such last year and only 62% the year before that. This suggests that our doctoral students are doing very well in the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal by the dissertation proposal point of their program.

Outcome 3

Students will demonstrate advanced proficiency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.

Outcome 3 - Method 1

Review and evaluation of student projects in the required core course GEO 7301 Advanced Quantitative Methods in Geography.

Procedure: At the end of the semester, the instructor for GEO 7301 will assess student projects in GEO 7301 using a grading rubric with a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.” We expect that 100% of students will demonstrate “superior” or “exceptional competency” on this outcome.
GEO 7301 is taught once a year in the spring semester. Of the 7 students who took the course in Spring 2012, 5 (71%) were rated as “superior” and 2 (29%) were rated as “exceptional”. Thus, we met our goal of 100% rated as “superior” or “exceptional”. However, 77% of students were rated as “exceptional” last year so the top end was not as strong in quantitative methods this time.

Comprehensive Exam. Students will be evaluated on the required written and oral comprehensive exams, as related to competency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.

Procedure: After completion of the comprehensive exam by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.” We expect that 100% of students will demonstrate “superior” or “exceptional competency” on this outcome.

A total of 15 Ph.D. students completed their comprehensive exams during 2011-2012, which was a much higher number than the 8 during the previous academic year. Of these, students’ quantitative and other technical skills were rated “acceptable” in 3 (20%) cases, “superior” in 6 (40%) cases and “exceptional” in 6 (40%) cases. Thus, of the 8 students, 80% were rated “superior” or “exceptional” which compares favorably to the past two years, and remains below the goal of 100%.

Students will demonstrate significant research and writing expertise resulting in meaningful scholarly contributions.

Compilation of student presentations at professional conferences and student-authored or co-authored publications.

Procedure: At the end of the spring semester, the Graduate Coordinator and/or Chair will prepare a summary of student participation at professional conferences and student-authored or co-authored publications. We strive for 100% participation by students on this method for this outcome.

In February 2012, the department hosted the 8th annual Texas Geography Student Research Symposium (GSRS). As was the case in the previous year, 29 PhD students presented posters or papers on their research. It is a tradition in the department to use this opportunity as a practice run for students scheduled to participate in the national AAG meeting, which was held in New York City later in February. During the 2011-12 year, 33 of our PhD students made 55 professional presentations (posters or papers) at 13 different national, international or regional conferences. This level of participation has been consistent during the past several years. As always, the largest participation occurred at the national Association of American Geographers meeting which was held in New York City with 25 Texas State PhD students presenting. Other conference presentations included: National Council for Geographic Education (8), Geography Association of the UK (5), Applied Geography Conference (4), Binghamton Geomorphology Symposium (3), Southwest Division of the AAG (3), and single participants at 7 other conferences. Again, more than 90% of full-time in residence doctoral students made presentations at such conferences, along with a small number of part-time students.

Dissertation. Assessment of the quality of individual student dissertations.

Procedure: After completion of the dissertation by an individual student, the student’s doctoral advisor will complete an assessment of the overall quality of the dissertation using a Likert-type scale which measures student performance as “minimal quality,” “acceptable quality,” “superior quality,” or “exceptional quality.” We expect that 100% of students will demonstrate “superior” or “exceptional quality” on this outcome.

A total of 9 PhD students completed their doctoral dissertation during the 2011-2012 academic year. Four of the dissertations were rated “exceptional”, 4 were rated “superior”, and 1 was rated as “acceptable”. During each of the past 3 years, one dissertation has been only rated as “acceptable”. Therefore, we continue to not quite meet our goal of 100% “superior” or “exceptional” performance.

Students will be prepared for advanced-level careers in academia, with governmental research and educational organizations, or within the private sector.
Outcome 5 - Method 1
Assessment of student assistantship duties including review of student teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties.

Procedure: At the end of each Spring semester, the Graduate Coordinator and/or Chair will review graduate assistant teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties, and prepare a summary evaluation of student performance. Student performance on this outcome will be evaluated on the basis of the following rubric: “does not meet,” “meets,” or “exceeds expectations. We expect that 100% of students will demonstrate “meeting” or “exceeding expectations” on this outcome.”

Outcome 5 - Method 1 - Result
The Department conducts student evaluations every semester for all instructors. The instrument uses a 5 point scale. Instructors scoring below 3.5 on this scale are deemed to have failed to meet expectations and mentoring action is initiated. Those scoring between 3.5 and 4.0 have met expectations while those scoring over 4.0 have exceeded expectations.

During Fall 2011, 14 courses were taught by PhD teaching assistants (TAs) as instructors-of-record. Eleven of these instructors received student evaluations deemed to exceed expectations (scoring 4.0 or greater on the 5 point scale), which was a remarkable collective record! Three of these scored in the top 11 among the 60 undergraduate classes evaluated in the department. Median scores for the doctoral TAs exceeded the departmental median by a significant amount (4.59 versus 4.37 on a 5-point scale).

Unfortunately, one doctoral instructor-of-record scored below 3.5 thus not meeting expectations. This individual was assigned to research assistant duties the following semester while undergoing additional mentoring with respect to college-level teaching.

During Spring 2011, 12 courses were taught by doctoral teaching assistants (TAs). Eleven of these instructors scored higher than 4.0 (on the 5 point scale) on student evaluations thus exceeding expectations, which is an absolutely excellent record. The one TA not in this group failed to meet expectations with a score just below the 3.5 cutoff. Median scores for the doctoral TAs again exceeded the departmental median by a significant amount (4.605 versus 4.475 on a 5-point scale).

Twelve doctoral students taught labs as instructional assistants (IAs) in Fall 2011 and 13 during Spring 2012. Unfortunately, 6 of these lab instructors scored below 3.5 on their student teaching evaluations during the Fall and 4 in the spring. The lab instructors with the lowest three scores in the fall all substantially improved their performance in the spring. The other three with low fall scores were all international students who struggled with language issues. One improved in the spring while the other still struggled. Mentoring assistance is being provided before future lab instructor placement.

Several PhD students were assigned as research assistants (RAs) during the year. Most doctoral RAs received very strong evaluations from the faculty members for whom they worked, with only one receiving just “acceptable” scores (3’s on a scale of 1-5) from the faculty mentor.

Outcome 5 - Method 2
(Indirect) Post-graduate job placement. Ongoing tabulation of doctoral graduates’ job placement upon degree completion and thereafter.

Procedure: The Department will maintain an ongoing record of doctoral graduates’ job placement upon degree completion and will endeavor to track subsequent employment. This record will evaluate the frequency and degree of post-doctorate job placement of students. We expect that 100% of our students who seek employment will have professional positions within one year of graduation.

Outcome 5 - Method 2 - Result
The Department continues to maintain a comprehensive record of PhD graduates and their subsequent or last known job placement.

During the past year (August 2011+December 2011+May 2012), Geography produced 8 new PhD graduates. None have yet landed a tenure-track academic position, although 3 have lecturing positions at universities. Two have post-doctoral fellowships, one is working for the Texas Water Development Board, and two are older individuals who have chosen to work as independent scholars. As of May 2012, a total of 74 students have graduated from Geography’s PhD programs (since the first graduation in 2000). Of these, 35 are in university academic positions, 7 have community college or high school teaching positions, 11 have university research or post-doctoral fellowship positions, 9 are employed in governmental positions, 8 are involved with the private sector, and 4 are independent scholars or retired.

Approval History
Approval History Event Approval
Outcomes Approved Level 1 Philip Suckling (PS33)
Outcomes Approved Level 2 Michael Hennessy (mh17)
Outcomes Audit Report Submitted Lucy Harney (ld12)
Results Approved Level 1 Philip Suckling (PS33)
Results Approved Level 2 Michael Hennessy (mh17)
Results Audit Report Submitted Lucy Harney (ld12)
The doctoral degree in Geography is designed to provide depth and breadth of knowledge in geographic theory and research methods resulting in the completion of significant original research in the form of a PhD dissertation. Students will be educated in the process of geographic research, the development of new knowledge and methods and the application of research, techniques, pedagogy and geographic knowledge to address problems with spatial dimensions.

Geography PhD students showed improved performance in terms of research design at the dissertation proposal stage with 87.5% superior or exceptional performance compared to 62% the previous year, although this still failed to meet our 100% target for such performance. Recent Geography PhD graduates continue to enjoy a superb job placement record.

Results from both methods for this outcome indicate failure to meet our goal of having students perform at superior or exceptional levels. This has been the case for the past few years. These results strongly suggest that there is a need to more critically examine the quality of the credentials of our applicant pool to ensure that they are adequately prepared before acceptance into the program. As part of the screening process, we are implementing an intermediate step whereby applications will be screened by the entire graduate committee (i.e. in addition to the graduate coordinator) before circulation to the PhD core faculty for solicitation of an initial advisor.

While the results for Method 2 showed distinct improvement over the previous year, the goal of 100% superior or exceptional performance was not met by both methods. As was the case for Outcome 1, these results strongly suggest that there is a need to more critically examine the quality of the credentials of our applicant pool to ensure that they are adequately prepared before acceptance into the program. As part of the screening process, we are implementing an intermediate step whereby applications will be screened by the entire graduate committee (i.e. in addition to the graduate coordinator) before circulation to the PhD core faculty for solicitation of an initial advisor. For current and future students, doctoral advisors need to continue to emphasize the importance of research methods.

The Department will continue to strive to meet its goal of graduating 6 to 8 PhD students per year, with dissertations that make meaningful scholarly contributions.

The Department will continue to place emphasis on supporting student travel to participate in professional conferences. Locally, the Department plans to conduct the spring Texas Geography Student Research Symposium as a warm-up, in part, for the national AAG meeting. Additionally, students will be strongly encouraged to submit articles for potential publication in a timely manner. Such activity will strongly enhance students’ credentials for their post-graduation careers.

The assistantship duties of PhD students will continue to be monitored closely. The Chair will strive to provide doctoral students with a variety of experiences tailored to their individual career goals whenever possible. The TA/Adjunct Mentoring and Review Committee, which was established in early 2008, will continue to monitor cases where TAs are deemed to need assistance, along with faculty advisors. The excellent placement record of Geography’s PhD graduates is a source of considerable pride for the department. We will continue to maintain a comprehensive record of our alumni activities and careers.
Outcome 1
Students will demonstrate an advanced understanding of the historical development of geographical thought, and the major current philosophical and theoretical debates in geography.

Outcome 1 - Method 1
Review and evaluation of student performance on a paper in the required core course GEO 7302 Nature and Philosophy of Geography.

Procedure: Student papers will be assessed by the instructor for GEO 7302 at the end of the semester using Likert-type scale which measures student performance as "minimal understanding," "acceptable understanding," "superior understanding," or "exceptional understanding." We expect that 100% of students will demonstrate "superior" or "exceptional understanding" on this outcome.

Outcome 1 - Method 1 - Result
GEO 7302 is taught once a year with incoming PhD students usually taking it during their first semester. In Fall 2010, the performance on the final term paper for 15 students was assessed, with 2 students (13%) rated as having "minimal understanding," 2 (13%) rated as having "acceptable understanding", 7 (47%) rated as having "superior understanding," and 4 (27%) rated as having "exceptional understanding" of the subject matter. With 74% rated as "superior" or "exceptional", we failed to reach the target goal of 100%, with results being comparable to the 71% rated as superior or exceptional but below the 90% rated as "superior" or "exceptional" in each of Fall 2008 and Fall 2007.

Outcome 1 - Method 2
Comprehensive Exam. Students will be evaluated on their performance on the required written and oral comprehensive exams, as related to the historical development of geographical thought and the major current philosophical and theoretical debates in geography.

Procedure: After completion of the comprehensive exam by an individual student, the student's doctoral advisor will complete an assessment of the student's performance on this outcome using a Likert-type scale which measures students performance as "minimal understanding," "acceptable understanding," "superior understanding," or "exceptional understanding." We expect that 100% of students will demonstrate "superior" or "exceptional understanding" on this outcome.

Outcome 1 - Method 2 - Result
A total of 8 PhD students completed their comprehensive exams during the 2010-2011 academic year. Of the 8 students, 1 (12.5%) was rated with "minimal" understanding, 3 (37.5%) were rated "acceptable," 3 (37.5%) were rated "superior," and 1 (12.5%) was rated "exceptional." This means that only 50% of students met the goal of superior or exceptional performance (compared to 75% last year and 69% the year before), and we still did not meet our target of 100% of students rated as superior or exceptional.

Outcome 2
Students will demonstrate an advanced understanding of the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

Outcome 2 - Method 1
Review and evaluation of student performance in the required core course GEO 7300 Advanced Geographic Research Design.

Procedure: Student term papers/projects in GEO 7300 will be assessed at the end of the semester by the instructor for GEO 7300, using a Likert-type scale which measures student performance as "minimal understanding," "acceptable understanding," "superior understanding," or "exceptional understanding. We expect that 100% of students will demonstrate "superior" or "exceptional understanding" on this outcome.

Outcome 2 - Method 1 - Result
GEO 7300 is taught during spring semesters. For the 10 students rated, 2 (20%) were rated as having "acceptable understanding", 7 (70%) were rated as having "superior understanding", and 1 (10%) was rated as having "exceptional understanding". The target of 100% being rated as "superior" or "exceptional", which was met last year, was therefore not met this year.

Outcome 2 - Method 2
Dissertation Proposal. Students will be evaluated on their performance on the required written and oral dissertation proposal as related to the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

Procedure: After completion of the dissertation proposal by an individual student, the student's doctoral advisor will complete an assessment of the student's performance on this outcome using a Likert-type scale which measures student performance as "minimal understanding," "acceptable understanding," "superior understanding," or "exceptional understanding."
understanding,” “superior understanding,” or “exceptional understanding.” We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

### Outcome 2 - Method 2 - Result

A total of 8 students completed their dissertation proposal during 2010-2011, compared with 13 last year. Of the 8 students, 1 (12.5%) was rated as “acceptable”, 6 (75%) were rated “superior” and 1 (12.5%) was rated “exceptional”, with no significant variation among the three doctoral programs (as was the case last year). With 87.5% rated as superior or exceptional, these results were significantly better than last year, when only 62% were so rated. However, the 100% goal was still not met.

### Outcome 3

Students will demonstrate advanced proficiency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.

### Outcome 3 - Method 1

Review and evaluation of student projects in the required core course GEO 7301 Advanced Quantitative Methods in Geography.

Procedure: At the end of the semester, the instructor for GEO 7301 will assess student projects in GEO 7301 using a grading rubric with a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.” We expect that 100% of students will demonstrate “superior” or “exceptional competency” on this outcome.

### Outcome 3 - Method 1 - Result

GEO 7301 is taught once a year in the spring semester. Of the 13 students who took the course in Spring 2011, 2 (15%) were rated as “acceptable”, 1 (8%) was rated as “superior” and 10 (77%) were rated as “exceptional”. With 85% rated as superior or exceptional, we fell short of our goal (note that the goal was met last year).

### Outcome 3 - Method 2

Comprehensive Exam. Students will be evaluated on the required written and oral comprehensive exams, as related to competency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.

Procedure: After completion of the comprehensive exam by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.” We expect that 100% of students will demonstrate “superior” or “exceptional competency” on this outcome.

### Outcome 3 - Method 2 - Result

A total of 8 students completed their comprehensive exams during 2010-2011. Of these, students’ quantitative and other technical skills were rated “acceptable” in 1 (12.5%) case, “superior” in 6 (75%) cases and “exceptional” in 1 (12.5%) case. Thus, of the 8 students, 87.5% were rated superior or exceptional which compares favorably to the 77% last year, but was still below the goal of 100%.

### Outcome 4

Students will demonstrate significant research and writing expertise resulting in meaningful scholarly contributions.

### Outcome 4 - Method 1

Compilation of student presentations at professional conferences and student-authored or co-authored publications.

Procedure: At the end of the spring semester, the Graduate Coordinator and/or Chair will prepare a summary of student participation at professional conferences and student-authored or co-authored publications. We strive for 100% participation by students on this method for this outcome.

### Outcome 4 - Method 1 - Result

In April 2011, the department hosted the 7th annual Texas Geography Student Research Symposium. Twenty-nine PhD students presented posters or papers on their research (compared to only 21 the previous year). It is a tradition in the department to use this opportunity as a practice run for students scheduled to participate in the national AAG meeting, which was held in Seattle, WA during April. During the 2010-11 year, PhD students made 60 professional presentations (posters or papers) at 14 different national, international or regional conferences. This level of participation was about the same as the previous year. The largest participation occurred at the national Association of American Geographers meeting held in Seattle, WA (31 students compared to 33 and 31 at the 2010 and 2009 meetings and well above the 24 at the 2008 meeting). Other conference presentations included: National Council for Geographic Education (8), Applied Geography Conference (7),
Binghamton Geomorphology Symposium (2), National Council for the Social Studies (2), American Geophysical Union (2), and single participants at 8 other conferences. As was the case last year, over 90% of full-time in residence doctoral students made presentations at such conferences, along with a small number of part-time students. However, we did not reach the 100% participation goal.

**Outcome 4 - Method 2**

**Dissertation. Assessment of the quality of individual student dissertations.**

Procedure: After completion of the dissertation by an individual student, the student’s doctoral advisor will complete an assessment of the overall quality of the dissertation using a Likert-type scale which measures student performance as “minimal quality,” “acceptable quality,” “superior quality,” or “exceptional quality.” We expect that 100% of students will demonstrate “superior” or “exceptional quality” on this outcome.

**Outcome 4 - Method 2 - Result**

A total of 9 PhD students completed their doctoral dissertation during the 2010-2011 review period. Five of the dissertations were rated “exceptional”, 3 were rated “superior”, and 1 was rated as “acceptable”. Last year, one dissertation was also only rated as “acceptable”. Therefore, like last year, we did not meet our goal of 100% superior or exceptional performance.

**Outcome 5**

Students will be prepared for advanced-level careers in academia, with governmental research and educational organizations, or within the private sector.

**Outcome 5 - Method 1**

**Assessment of student assistantship duties including review of student teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties.**

Procedure: At the end of each Spring semester, the Graduate Coordinator and/or Chair will review graduate assistant teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties, and prepare a summary evaluation of student performance. Student performance on this outcome will be evaluated on the basis of the following rubric: “does not meet,” “meets,” or “exceeds expectations. We expect that 100% of students will demonstrate “meeting” or “exceeding expectations” on this outcome.”

**Outcome 5 - Method 1 - Result**

The Department conducts student evaluations every semester for all instructors. The instrument uses a 5 point scale. Instructors scoring below 3.5 on this scale are deemed to have failed to meet expectations and mentoring action is initiated. Those scoring between 3.5 and 4.0 have met expectations while those scoring over 4.0 have exceeded expectations.

During Fall 2010, 13 courses were taught by PhD teaching assistants (TAs) as instructors-of-record. Five of these instructors received student evaluations deemed to exceed expectations (scoring 4.0 or greater on the 5 point scale), including one who scored the fourth highest score among the 58 undergraduate courses taught in the department. Three individuals unfortunately scored below 3.5 thus not meeting expectations), while the five met expectations.

During Spring 2011, 13 courses were again taught by doctoral TAs, with two being different instructors. Nine of these instructors scored higher than 4.0 (on the 5 point scale) on student evaluations thus exceeding expectations, which is an unprecedented collective teaching performance for our doctoral TAs. All three of the TAs who scored below 3.5 in the fall showed significant improvement in the spring and thus met expectations, along with one other TA. One TA, who was lecturing for the first time, scored below 3.5 (in fact below 3.0) during the spring semester, thus not meeting expectations. This individual does not aspire to a teaching career and will be utilized in a research capacity in the future by her choice.

Fourteen doctoral students taught labs as instructional assistants (IAs) in Fall 2010 and twelve during Spring 2011. Only one lab instructor scored below 3.5 (in fact below 3.0) on their student teaching evaluations during the Fall. This individual received close mentoring and improved significantly (to a 4.0 out of 5) in the spring with the same course lab assignment. Thus, all lab instructors met expectations during the spring semester. Several PhD students were assigned as research assistants (RAs) during the year. The vast majority of the RAs received very strong evaluations from the faculty members for whom they worked. On five evaluation questions, RAs scored mostly 5s on a scale of 1-5. One RA received a low score of 1 on one of the five questions since he was deemed not to have the appropriate skills for the task – this individual did well on a teaching assignment and will be utilized in teaching and other research roles in the future. Another RA received a 2 score on one question for failing to meet with the professor on a routine basis. She has been appropriately mentored. Both of these RAs met or exceeded expectations on the remaining four questions.

**Outcome 5 - Method 2**

(Indirect) Post-graduate job placement. Ongoing tabulation of doctoral graduates’ job placement upon degree completion and thereafter.

Procedure: The Department will maintain an ongoing record of doctoral graduates’ job placement upon degree completion and will endeavor to track subsequent employment. This record will evaluate the frequency and degree of post-doctorate job placement of students. We expect that 100% of our students who seek employment will have professional positions within one year of graduation.
The Department continues to maintain a comprehensive record of PhD graduates and their subsequent or last known job placement. During the past year (August 2010+December 2010+May 2011), Geography produced 8 new PhD graduates. Two have tenure-track positions as Assistant Professors. Two have term lecturer positions at universities or community colleges. One has a post-doctoral fellowship with EPA. Two are employed full-time in the private sector (environmental consultant; senior systems analyst). One May graduate has just returned to Italy and is not yet employed. We have met our goal of all employed within one year of graduation; if the last student becomes employed in the coming months, the goal will again be met for next year’s report. Given the current state of the economy especially in higher education, this is a remarkable placement record.

As of May 2011, a total of 66 students have graduated from Geography’s PhD programs (since the first graduation in 2000). Of these, 32 are in university academic positions, 7 have community college or high school teaching positions, 11 have university research or post-doctoral fellowship positions, 5 are employed in governmental positions, 9 are involved with the private sector, 1 is retired and 1 recent graduate has not yet obtained employment.

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Mission Statement

The doctoral degree in Geography is designed to provide depth and breadth of knowledge in geographic theory and research methods resulting in the completion of significant original research in the form of a PhD dissertation. Students will be educated in the process of geographic research, the development of new knowledge and methods and the application of research, techniques, pedagogy and geographic knowledge to address problems with spatial dimensions.

Evidence of Improvement

For outcome 4, Geography PhD students have a superb participation rate for presenting research papers and posters at professional conferences – over 90% of in-residence students presented papers/posters during the past year. For the national Association of American Geographers meeting held in Washington, DC in April, the 33 Texas State PhD student participants are believed to represent the largest number of student participants from any single geography department. For outcome 5, despite the poor national economy, the seven Geography PhD graduates from the past year have a 100% placement rate in professional jobs for next Fall.

Action Plan

The results of Method 1, which measures student learning in the core GEO 7302 course typically taken during a student’s first semester, indicate a drop in the students’ understanding and knowledge of research themes in Geography compared to the previous year even though the same instructor taught the course in both years. While examination of the course content may be warranted, this result strongly suggests that there is a need to more critically examine the quality of the credentials of our applicant pool before acceptance into the program. Given the recent increase in applications over the past couple of years, this is a feasible and necessary part of our action plan. Method 2 involves an assessment at the end of coursework when students are preparing for their subsequent dissertation work. While students who took their comprehensive exams during 2009-2010 performed slightly better than those in the previous year, we remain below the goal of 100% performing at a “superior” or “exceptional” level, thus requiring careful mentoring by advisors of our PhD students during their coursework years.

While the results for Method 2 revealed fewer students performing at “superior” or “exceptional” levels for this outcome compared to last year, higher faculty expectations for our maturing doctoral program may be the main reason. Careful screening of the credentials for future acceptance of students into our PhD programs is warranted and feasible given the recent increase in applications. For current and future students, doctoral advisors need to emphasize the importance of research methods, while continuing to critically assess student progress. This will ensure that students graduating from our program will be well equipped for their future careers.

Students’ quantitative abilities as measured by their performance on projects and examinations in GEO 7301 seem strong perhaps, in part, to course content recommendations that evolved from last year’s Task Force that reviewed the content of the Department’s quantitative methods courses. Course content will continue to be reviewed as appropriate given evolution of modern methods and technology. While results from Method 2 for this Outcome continue to indicate that quantitative and technical skills for all students assessed later in their program are reasonable, careful advising from doctoral mentors will be encouraged in order to ensure that students who are not performing at least at a “superior” level acquire the necessary skills for their dissertation research.

The Department will continue its goal of graduating 6 to 8 PhD students per year, with dissertations that make meaningful scholarly contributions. The Department will continue to place emphasis on supporting student travel to participate in professional conferences. Locally, the Department plans to conduct the 2011 Texas Geography Student Research Symposium during March 2011 and co-sponsor the Graduate College’s graduate student conference scheduled in November 2010. Additionally, when going to such conferences, students will be encouraged to participate in the student paper competitions since such awards enhance their credentials and resumes as well as garner useful feedback from attendees that will enhance their research work. Additionally, students will be strongly encouraged to submit articles for potential publication in a timely manner. Such activity will strongly enhance students’ credentials for their post-graduation careers.

The assistantship duties of PhD students will continue to be monitored closely. The Department Chair assumed responsibility for the teaching practicum course in Spring 2010 with a revised course format that was well-received by participants. The Chair will teach the full sequence of GEO 7150 (Fall) and GEO 7250 (Spring) during the 2010-2011 academic year. Student learning will be enhanced through a series of methodological and teaching philosophy presentations from faculty colleagues. The TA/Adjunct Mentoring and Review Committee (established in early 2008) will continue to monitor cases where TAs are deemed to need assistance, along with faculty advisors. The department will build on the success of informal workshops on applying/interviewing for academic positions and preparing conference poster/paper presentation held during the past two years. For 2010-11, the Chair has appointed a Colloquium/Professional Workshop Committee composed of 3 faculty members. This committee will
be responsible for formalizing and scheduling such workshops and presentations by external prominent colloquium speakers.

**Outcome 1**

Students will demonstrate an advanced understanding of the historical development of geographical thought, and the major current philosophical and theoretical debates in geography.

**Outcome 1 - Method 1**

Review and evaluation of student performance on a paper in the required core course GEO 7302 Nature and Philosophy of Geography.

Procedure: Student papers will be assessed by the instructor for GEO 7302 at the end of the semester using Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.” We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

**Outcome 1 - Method 1 - Result**

GEO 7302 is taught once a year with incoming PhD students usually taking it during their first semester. In Fall 2009, the performance on the final term paper for 17 students was assessed, with 1 student (6%) rated as having “minimal understanding,” 4 (24%) rated as having “acceptable understanding,” 9 (53%) rated as having “superior understanding,” and 3 (18%) rated as having “exceptional understanding” of the subject matter. With 71% rated as “superior” or “exceptional”, we failed to reach the target goal of 100%, and actually slipped compared to the 90% rated as “superior” or “exceptional” in each of Fall 2008 and Fall 2007. Note that the same instructor taught the course in Fall 2009 and Fall 2008.

**Outcome 1 - Method 2**

Comprehensive Exam. Students will be evaluated on their performance on the required written and oral comprehensive exams, as related to the historical development of geographical thought and the major current philosophical and theoretical debates in geography.

Procedure: After completion of the comprehensive exam by an individual student, the student's doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures students performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.” We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

**Outcome 1 - Method 2 - Result**

A total of 12 PhD students completed their comprehensive exams during the 2009-2010 academic year (4 in each of the Environmental, GIScience and Geographic Education programs). Of the 12 students, 1 (8%) was rated with “minimal” understanding, 5 (42%) were rated “acceptable,” 7 (58%) were rated “superior,” and 2 (17%) were rated “exceptional.” This means that 75% of students met the goal of superior or exceptional performance (compared to 69% last year), but we still did not meet our target of 100% of students rated as superior or exceptional. Relative performance of students among the three PhD programs was very similar, as it was last year.

**Outcome 2**

Students will demonstrate an advanced understanding of the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

**Outcome 2 - Method 1**

Review and evaluation of student performance in the required core course GEO 7300 Advanced Geographic Research Design.

Procedure: Student term papers/projects in GEO 7300 will be assessed at the end of the semester by the instructor for GEO 7300, using a Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding. We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.”

**Outcome 2 - Method 1 - Result**

GEO 7300 was taught during the Spring 2009 semester in two sections with different instructors. For the 9 students rated, all (100%) were rated as having “superior understanding” of the subject matter. None were rated as having “exceptional understanding” of the subject matter. The target of 100% being rated as “superior” or “exceptional” was therefore met. Thus, students in our program are developing meaningful research problems which, upon reflection, is a very successful attribute of our doctoral program.

**Outcome 2 - Method 2**

Dissertation Proposal. Students will be evaluated on their performance on the required written and oral dissertation proposal as related to the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.
Procedure: After completion of the dissertation proposal by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.” We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

**Outcome 3 - Method 1**

Review and evaluation of student projects in the required core course GEO 7301 Advanced Quantitative Methods in Geography.

Procedure: At the end of the semester, the instructor for GEO 7301 will assess student projects in GEO 7301 using a grading rubric with a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.” We expect that 100% of students will demonstrate “superior” or “exceptional competency” on this outcome.

**Outcome 3 - Method 2**

Comprehensive Exam. Students will be evaluated on the required written and oral comprehensive exams, as related to competency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.

Procedure: After completion of the comprehensive exam by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.” We expect that 100% of students will demonstrate “superior” or “exceptional competency” on this outcome.

**Outcome 3 - Method 2 - Result**

A total of 13 students who completed their comprehensive exams during 2009-2010 were rated for this Outcome (5 in Environmental Geography, 4 GIScience, 3 Geographic Education). Of the total, students’ quantitative and other technical skills were rated “acceptable” in 3 cases, “superior” in 7 cases and “exceptional” in 3 cases. No students were rated with just “minimal” skills. Thus, of the 13 students, 10 (or 77%) were rated superior or exceptional. While this is below the goal of 100% in these two categories, the collective performance was comparable to the previous year.

**Outcome 4**

Students will demonstrate significant research and writing expertise resulting in meaningful scholarly contributions.

**Outcome 4 - Method 1**

Compilation of student presentations at professional conferences and student-authored or co-authored publications.

Procedure: At the end of the spring semester, the Graduate Coordinator and/or Chair will prepare a summary of student participation at professional conferences and student-authored or co-authored publications. We strive for 100% participation by students on this method for this outcome.

**Outcome 4 - Method 1 - Result**

Students will demonstrate advanced proficiency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.
Result 1 In March 2010, the department hosted the annual Texas Geography Student Research Symposium. Twenty-one PhD students presented posters or papers on their research. It is a tradition in the department to use this opportunity as a practice run for students scheduled to participate in the national AAG meeting, which was held in Washington, DC during April. During the 2009-10 year, PhD students made 59 professional presentations (posters or papers) at 13 different national, international or regional conferences. The largest participation occurred at the national Association of American Geographers meeting held in Washington, DC (33 students compared to 31 at the 2009 meeting and 24 at the 2008 meeting). Other conference presentations included: National Council for Geographic Education (8), Applied Geography Conference (4), Binghamton Geomorphology Symposium (4), Southwestern Division of the AAG (2), Texas Council for the Social Studies (2), and single participants at 7 other conferences (including 4 in other countries). Over 90% of full-time in residence doctoral students made presentations at such conferences, along with a small number of part-time students.

Outcome 4 - Method 2

Dissertation. Assessment of the quality of individual student dissertations.

Procedure: After completion of the dissertation by an individual student, the student’s doctoral advisor will complete an assessment of the overall quality of the dissertation using a Likert-type scale which measures student performance as “minimal quality,” “acceptable quality,” “superior quality,” or “exceptional quality.” We expect that 100% of students will demonstrate “superior” or “exceptional quality” on this outcome.

Outcome 4 - Method 2 - Result

A total of 7 PhD students completed their doctoral dissertation during the 2009-2010 review period graduating in August 2009 (1) or May 2010 (6). Of these, 3 graduated in Geographic Education, and 2 in each of Environmental Geography and GIScience. Six of the dissertations were rated "exceptional" and 1 was rated "acceptable". Thus, students in our program are developing strong research and writing skills which, upon reflection, is a very successful attribute of our doctoral program.

Outcome 5

Students will be prepared for advanced-level careers in academia, with governmental research and educational organizations, or within the private sector.

Outcome 5 - Method 1

Assessment of student assistantship duties including review of student teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties.

Procedure: At the end of each Spring semester, the Graduate Coordinator and/or Chair will review graduate assistant teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties, and prepare a summary evaluation of student performance. Student performance on this outcome will be evaluated on the basis of the following rubric: “does not meet,” “meets,” or “exceeds expectations. We expect that 100% of students will demonstrate “meeting” or “exceeding expectations” on this outcome.

Outcome 5 - Method 1 - Result

During Fall 2009, 15 courses were taught by PhD teaching assistants (TAs) as instructors-of-record. Five of these instructors received very respectable student evaluations (scoring 4.0 or greater on a 5 point scale and thus meeting expectations), including one who scored in the top 10 of all instructors among the 51 undergraduate courses taught in the department. One individual unfortunately scored below 3.0 (suggesting that they did not meet expectations). This was this student’s last semester as a graduate assistant in the department. During Spring 2010, 14 courses were taught by doctoral TAs. Eight of these instructors scored higher than 4.0 (on the 5 point scale) on student evaluations, which is an unprecedented collective teaching performance for our doctoral TAs. One instructor scored 8th highest among all instructors among the 59 undergraduate geography courses taught in this semester. This was a different instructor than the one who was in the top 10 in the Fall, and was especially remarkable given that the instructor was teaching the course (a junior-level quantitative methods course) for the first time. No doctoral teaching assistants scored below 3.0 during the spring semester. Thus all doctoral students lecturing with full responsibility met expectations in the Spring. Thirteen doctoral students taught labs as instructional assistants (IAs) in Fall 2009 and fourteen during Spring 2010. Two of these scored below 3.0 on their student teaching evaluations during the Fall. The professor in charge of the course in one case strongly recommended removal of that lab instructor from this role until further mentoring can be provided. Since this graduate assistant failed to meet expectations as an instructional assistant, he was assigned as an RA in spring, and he will be required to repeat GEO 7250 in Fall 2010 before any future decision about a teaching role is considered. The other IA who fell below 3.0 (on the 5.0 scale) was strongly mentored and she subsequently improved her score substantially (to 3.85) in the spring (in the same course). Thus, she met expectations during the second semester. No other lab instructors scored below 3.5 (on the 5.0 scale) in Fall and only one in the Spring – this latter graduate assistant was teaching for the first time and has some language issues which will be monitored in the future. Several PhD students were assigned as research assistants (RAs) during the year. The vast majority of the RAs received very strong evaluations from the faculty members for whom they worked. On five evaluation questions, RAs scored mostly 5s on a scale of 1-5. Two RAs received somewhat lower scores but still met expectations. The mentors for these individuals are aware of the situation and will provide more structured supervision during the next year for these individuals.

Outcome 5 - Method 2

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(Indirect) Post-graduate job placement. Ongoing tabulation of doctoral graduates’ job placement upon degree completion and thereafter.

Procedure: The Department will maintain an ongoing record of doctoral graduates’ job placement upon degree completion and will endeavor to track subsequent employment. This record will evaluate the frequency and degree of post-doctorate job placement of students. We expect that 100% of our students who seek employment will have professional positions within one year of graduation.

Outcome 5 - Method 2 - Result
The Department continues to maintain a comprehensive record of PhD graduates and their subsequent or last known job placement. During the past year (August 2009–December 2009+May 2010), Geography produced 7 new PhD graduates. Three will begin tenure-track positions as Assistant Professors this fall. Three have term lecturer positions at universities or community colleges, and one will begin a post-doctoral fellowship in August. Given the current state of the economy especially in higher education, this is a remarkable placement record. As of May 2010, a total of 58 students have graduated from Geography’s PhD programs (since the first graduation in 2000). Of these, 29 are in university academic positions, 6 hold community college or high school teaching positions, 10 have university research or post-doctoral fellowship positions, 5 are employed in governmental positions, and 8 are involved with the private sector.

Approval History
Approval History Event
Outcomes Approved Level 1
Outcomes Approved Level 2
Outcomes Audit Report Submitted
Results Approved Level 1
Results Approved Level 2
Results Audit Report Submitted
The doctoral degree in Geography is designed to provide depth and breadth of knowledge in geographic theory and research methods resulting in the completion of significant original research in the form of a PhD dissertation. Students will be educated in the process of geographic research, the development of new knowledge and methods and the application of research, techniques, pedagogy and geographic knowledge to address problems with spatial dimensions.

In terms of progression through the program, it is notable that during 2008-2009, far more students completed comprehensive exams (16 compared to 3 the previous year) and dissertation proposals (8 compared to 4 during the previous year).

During 2008-2009, a larger number of PhD students presented research papers or posters at regional and national professional meetings and conferences (75 versus 49 the previous year). PhD students won six awards at these meetings, which is a similar number to the previous year.

The results of Method 1, which measures student learning in the core GEO 7302 course, indicate stability in students’ understanding and knowledge of research themes in Geography given that over 90% of students were rated “superior” or “exceptional” during each of the past two years. This outcome needs to be carefully monitored in upcoming years in order to help assess the quality of our incoming students and thus our admission standards. Method 2 involves an assessment at the end of coursework when students are preparing for their subsequent dissertation work. While students who took their comprehensive exams during 2008-2009 performed reasonably well with 69% performing in a superior or exceptional manner, we are considerably below the goal of 100% performance at such levels.

Unfortunately, the sample for 2007-2008 was too small to make a comparison between the two years. Therefore, we need to assess further cohorts of students during the next couple of years in order to ascertain whether students are performing well with respect to this learning outcome, and whether we are making progress towards the goal of 100% performing at the superior or exceptional level.

While the 2008-2009 results from Method 1 suggest weaker performance by students in 7300 compared to the previous year, this was due in part to a substantial difference in how the two instructors in that year approached learning outcomes reporting. It should be noted, however, that the difference between the two years was primarily in ratings of “exceptional” versus “superior” performance; students still performed at an acceptable level both years. Results for Method 2 indicate that our students are well-prepared with respect to research methods by the time they are ready to formally present their research proposal. Given the small sample size inherent in evaluating dissertation proposals over the past two years, it is imperative to carefully assess our students’ understanding and ability to apply research methods for the upcoming cohorts of students. Ideally, progression to more “exceptional” proposals, especially among the GIScience doctoral students, will be seen before we can fully assess students’ overall research skill preparation.

Students’ quantitative abilities as measured by their performance on projects and a comprehensive exam given in GEO 7301 suggest that this year’s cohort may have weaker skills compared to the previous year. The results for this Outcome are of sufficient concern that during Spring 2009, the Chair established a Task Force to review the content of the Department’s quantitative methods courses. The work of this Task Force, which is still ongoing, is expected to result in recommendations for the course that will ultimately result in improved student learning.

Fortunately, the 2008-2009 results from Method 2 for this Outcome indicate that quantitative and technical skills for all students assessed later in their program were reasonable with no students having only minimal skills at this stage of their program. This suggests appropriate “growth” in students’ technical skills is occurring by the end of students’ course work (i.e. when the comprehensive exams take place). However, given that only 73% performed at a superior or exceptional level, we need to assess further cohorts of students during the next couple of years in order to ascertain whether students are performing well with respect to this learning outcome, and whether we are making progress toward the goal of 100% performing at the superior or exceptional level.

The Department will continue to place considerable emphasis on supporting student travel to participate in professional conferences. Locally, the Department plans to conduct the 2010 Texas Geography Student Research Symposium during March 2010. Students will also be encouraged to
participate in the Graduate College’s planned student conference to be held in November 2009. Additionally, when going to such conferences, students will be encouraged to participate in the student paper competitions since such awards enhance their credentials and resumes as well as garner useful feedback from attendees that will enhance their research work.

Method 1 for this outcome will be modified next year to delete quality of student conference presentation performance, which proved to be an unfeasible task. However, to provide some feedback to the department, we will sample the “practice sessions” held on campus (i.e. presentations at the Geography Student Symposium and Graduate College Symposium) in order to monitor quality.

The Department will continue to foster an environment conducive to the graduation of 6 to 8 PhD students per year (our sustainable goal) with dissertations that make meaningful scholarly contributions.

The TA/Adjunct Mentoring and Review Committee (established in early 2008) proved to be very useful in assessing problems and mentoring TAs who had difficulty in the classroom. Faculty advisors also assessed and mentored TAs. These efforts will be continued and enhanced next year. The assistantship duties of PhD students will continue to be monitored closely. The teaching practicum courses (7150/7250) will undergo revision under a different instructor for 2009-2010.

As a result of the success of informal workshops held during 2008-09 on applying/interviewing for academic positions and preparing conference poster/paper presentations, the Chair has appointed a Colloquium and Professional Workshop Coordinator for 2009-2010 who will be responsible for formalizing and scheduling a repeat of these workshops and other similar workshops. Note that these efforts will not be part of formal coursework – student participation was very good during the past informal workshops and will be strongly encouraged in the future.

### Outcome 1

Students will demonstrate an advanced understanding of the historical development of geographical thought, and the major current philosophical and theoretical debates in geography. We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

#### Outcome 1 - Method 1

Review and evaluation of student performance on a paper in the required core course GEO 7302 Nature and Philosophy of Geography.

Procedure: Student papers will be assessed by the instructor for GEO 7302 at the end of the semester using Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.”

#### Outcome 1 - Method 1 - Result

GEO 7302 is taught once a year with incoming PhD students usually taking it during their first semester. In Fall 2008, the performance on the final term paper for 10 students was assessed, with 1 student (10%) rated as having "minimal understanding," 3 (30%) rated as having "superior understanding," and 6 (60%) rated as having "exceptional understanding" of the subject matter. Note that in Fall 2007, 14 students were rated using this Method. The results for Fall 2008 were comparable to those for Fall 2007 with over 90% rated in the "superior" and "exceptional" categories during both years.

#### Outcome 1 - Method 2

Comprehensive Exam. Students will be evaluated on their performance on the required written and oral comprehensive exams, as related to the historical development of geographical thought and the major current philosophical and theoretical debates in geography.

Procedure: After completion of the comprehensive exam by an individual student, the student's doctoral advisor will complete an assessment of the student's performance on this outcome using a Likert-type scale which measures students performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.”

#### Outcome 1 - Method 2 - Result

A total of 16 PhD students completed their comprehensive exams during the 2008-2009 academic year. The students were almost evenly divided among the three programs: 5 in each of the Environmental and GIScience programs and 6 in Geographic Education. Of the 16 students, 5 (31%) were rated “acceptable,” 8 (50%) were rated “superior,” and 3 (19%) were rated “exceptional.” This means that 69% of students met the goal of superior or exceptional performance, although we did not meet our target of 100% of students rated as superior or exceptional.

Relative performance of students among the three PhD programs was not dissimilar. Compared to the 2007-2008 academic year, the number of students who completed their comprehensive exams increased substantially (from 3 in the 2007-2008 academic year to 16 this year). Given the small sample size for 2007-2008, no meaningful comparison between the two years can be made.

### Outcome 2

Students will demonstrate an advanced understanding of the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal. We expect that 100% of students will demonstrate "superior" or "exceptional
understanding” on this outcome.

**Outcome 2 - Method 1**

Review and evaluation of student performance in the required core course GEO 7300 Advanced Geographic Research Design.

Procedure: Student term papers/projects in GEO 7300 will be assessed at the end of the semester by the instructor for GEO 7300, using a Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.”

**Outcome 2 - Method 1 - Result**

GEO 7300 was taught during the Spring 2009 semester and during the Summer 2008 semester. Three different instructors taught the three sections of the course, with no significant difference among their ratings of student ratings. [Note that during 2007-2008, a very substantial and problematic difference among the instructors was evident for the course.] For 2008-2009, of the 14 students rated, 1 was rated as having "minimal understanding," 3 were rated as having "acceptable understanding," 7 were rated as having "superior understanding," and 3 were rated as having "exceptional understanding" of the subject matter. During 2007-2008, 10 PhD students were rated using Method 1. Compared to the 2007-2008 results, almost 50% fewer students were rated "exceptional" (40% for 2007-2008 compared to 21% for 2008-2009). It is likely that this change was due to one instructor during Fall 2007 rating almost all students as “exceptional” and perhaps not making a critical assessment in the context of learning outcomes.

**Outcome 2 - Method 2**

Dissertation Proposal. Students will be evaluated on their performance on the required written and oral dissertation proposal as related to the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

Procedure: After completion of the dissertation proposal by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures student performance as “minimal understanding,” “acceptable understanding,” “superior understanding,” or “exceptional understanding.”

A total of 8 students (4 Geographic Education, 2 Environmental Geography, 2 GIScience) completed their dissertation proposal during 2008-2009, compared with 4 during the previous year. Of the students, 4 were rated "superior" and 4 were rated "exceptional" (50% each). No students were rated "acceptable" or "minimal" in 2008-2009. This compares favorably with the 2007-2008 performance when only 1 student was rated as "exceptional." 2 were rated as "superior" and 1 was only rated "acceptable."

It is interesting to note that, contrary to the results for Outcome 1 and Outcome 3, results this year for Outcome 2 vary across programs regarding the number of "exceptional" performances: no research proposal was rated "exceptional" in GIScience, whereas 75% of those in Geographic Education and 50% of those in Environmental Geography were rated as such.

**Outcome 3**

Students will demonstrate advanced proficiency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis. We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

**Outcome 3 - Method 1**

Review and evaluation of student projects in the required core course GEO 7301 Advanced Quantitative Methods in Geography.

Procedure: At the end of the semester, the instructor for GEO 7301 will assess student projects in GEO 7301 using a grading rubric with a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.”

**Outcome 3 - Method 1 - Result**

GEO 7301 is taught once a year in the Spring semester. In Spring 2009, the 8 students who took the course were evenly divided between “acceptable” and “superior” (4 each) ratings. No students were rated “minimal” or “exceptional.”

By comparison, the 14 students who took this course in Spring 2008 semester were rated much higher with 12 of the 14 students (86%) rated “exceptional!” Given that the same instructor taught the course in both years, these results indicate that the 2008-2009 group of PhD students may be weaker in terms of their quantitative skills.

**Outcome 3 - Method 2**

Comprehensive Exam. Students will be evaluated on the required written and oral comprehensive exams, as related to competency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.
Procedure: After completion of the comprehensive exam by an individual student, the student’s doctoral advisor will complete an assessment of the student’s performance on this outcome using a Likert-type scale which measures student performance as “minimal competency,” “acceptable competency,” “superior competency,” or “exceptional competency.”

**Outcome 3 - Method 2 - Result**
A total of 15 students who completed their comprehensive exams during 2008-2009, were rated for this Outcome (5 in each of Geographic Education, Environmental Geography, and GIScience). Of the total, students’ quantitative and other technical skills were rated “acceptable” in 4 cases, “superior” in 8 cases and “exceptional” in 3 cases. No students were rated with just “minimal” skills. Of the 15 students, 11 (or 73%) were rated superior or exceptional which is below the goal of 100% performance at such levels. Given that only 3 students completed their comprehensive exams during 2007-2008, no meaningful comparison can be made between the two years.

**Outcome 4**
Students will demonstrate significant research and writing expertise resulting in meaningful scholarly contributions. We expect that 100% of students will demonstrate “superior” or “exceptional understanding” on this outcome.

**Outcome 4 - Method 1**
Review of student presentations at professional conferences and student-authored or co-authored publications.

Procedure: At the end of the spring semester, the Graduate Coordinator and/or Chair will prepare a summary of student participation at professional conferences and student-authored or co-authored publications. Student participation will determine student performance based on “minimal expertise,” “acceptable expertise,” “superior expertise,” or “exceptional expertise.”

**Outcome 4 - Method 1 - Result**
During Spring 2009, an informal workshop was presented to discuss how to prepare and present a professional conference poster or paper. In early March, the department hosted the Texas Geography Student Research Symposium with several students presenting their research. Many used this opportunity as a practice run for their scheduled presentations at the national AAG meeting held in Las Vegas later in March. During the 2008-09 year, 75 doctoral student presentations were made at professional conferences. The largest participation occurred at the national Association of American Geographers meeting held in Las Vegas (31 students compared to 24 the previous year). Other conference presentations included: Southwestern Division of the AAG (19), National Council for Geographic Education (5), HERODOT Network for Geography in Higher Education in the UK (2), National Council for the Social Studies (2), Urban & regional Information Systems (2), and single participants at 14 other conferences.

Special professional awards received by PhD students during 2008-09 included: Best Content Article published in the Journal of Geography, Best Article on Teaching at the Secondary Level in the Journal of Geography, first place in Student Paper Competition for the SWAAG meeting, second place in Student Poster Competition for the SWAAG meeting, first place in student paper competition for the AAG Remote Sensing Specialty Group, and runner-up student dissertation proposal grant for the AAG Mountain Geography Specialty Group. This is a similar number of special awards as won by PhD students the previous year.

The total of 75 PhD presentations is a substantial increase from the 49 such presentations during 2007-08. Rating of students’ conference presentation performance proved to be unfeasible.

**Outcome 4 - Method 2**
Dissertation. Assessment of the quality of individual student dissertations.

Procedure: After completion of the dissertation by an individual student, the student’s doctoral advisor will complete an assessment of the overall quality of the dissertation using a Likert-type scale which measures student performance as “minimal quality,” “acceptable quality,” “superior quality,” or “exceptional quality.”

**Outcome 4 - Method 2 - Result**
A total of 8 PhD students completed their doctoral dissertation during the 2008-2009 review period graduating in August 2008, December 2008 or May 2009, with 5 in Geographic Education, 2 in Environmental Geography, and 1 in GIScience. Six of the dissertations were rated “exceptional” and 2 were rated “superior”.

The number and quality of this year’s dissertations were similar to those for 2007-2008 when nine dissertations were completed.

**Outcome 5**
Students will be prepared for advanced-level careers in academia, with governmental research and educational organizations, or within the private sector. We expect that 100% of students will demonstrate “meeting” or “exceeding expectations” on this outcome.
Outcome 5 - Method 1

Assessment of student assistantship duties including review of student teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties.

Procedure: At the end of each Spring semester, the Graduate Coordinator and/or Chair will review graduate assistant teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties and prepare a summary evaluation of student performance. Student performance on this outcome will be evaluated on the basis of the following rubric: “does not meet,” “meets,” or “exceeds expectations.”

Outcome 5 - Method 1 - Result

During Fall 2008, 11 courses were taught by PhD teaching assistants (TA’s). Four of these instructors received very respectable student evaluations (scoring 4.0 or greater on a 5 point scale). Several of these doctoral students were quite experienced lecturers. Three individuals scored below 3.0 (suggesting that they did not meet expectations). Two were subsequently not scheduled to teach in Spring; however their performance was examined closely by the newly established TA/Adjunct Mentoring and Review Committee and mentoring arranged. The third individual was mentored by advisors and allowed to teach during Spring 2009 (subsequent performance improved during Spring). During Spring 2009, 12 courses were taught by doctoral TAs. Again, four of these instructors scored higher than 4.0 (on the 5 point scale) on student evaluations including three repeating this performance from Fall. Three individuals scored below 3.0 (i.e. did not meet expectations) but were different individuals than the previous semester. Two of these TAs had considerable prior successful experience – their drop in evaluations is being investigated. The other individual, who scored low, was teaching for the first time.

Ten doctoral students taught labs as instructional assistants (IAs) in Fall 2008 and eleven during Spring 2009. Only one IA in Fall and three in Spring scored below 4.0 (on the 5.0 scale). There were only two scores below a 3.5 and none below 3.0. Therefore, all students at least met expectations.

Several PhD students were assigned as research assistants (RAs) during the year. The vast majority of the RAs received very strong evaluations from the faculty members for whom they worked. On five evaluation questions, RAs scored mostly 5s on a scale of 1-5. A few RAs received lower but still adequate scores.

Outcome 5 - Method 2

(Indirect) Post-graduate job placement. Ongoing tabulation of doctoral graduates’ job placement upon degree completion and thereafter.

Procedure: The Department will maintain an ongoing record of doctoral graduates’ job placement upon degree completion and will endeavor to track subsequent employment. This record will evaluate the frequency and degree of post-doctorate job placement of students. We expect that 100% of our students, who seek employment, will have professional positions within one year of graduation.

Outcome 5 - Method 2 - Result

The Department continues to maintain a comprehensive record of PhD graduates and their subsequent or last known job placement. As of May 2009, 51 students have graduated from Geography’s PhD programs (since the first graduation in 2000). Of these, 25 are in university academic positions, 4 in community college or high school educational positions, 15 in governmental or university research positions, and 7 are employed in the private sector.

Of the 8 PhD students who graduated during the past 12 months (i.e. August 2008, December 2008, May 2009), 4 have academic positions as Assistant Professors (3 as tenure-track), 1 is employed at a community college, and 3 are employed in governmental or university research/service jobs. This continues our strong record of 100% professional employment within one year of graduation. During the Fall 2008 semester, an informal workshop was organized to help students prepare for applying/interviewing for academic positions.

Approval History

Approval History Event
Outcomes Approved Level 1
Outcomes Approved Level 2
Outcomes Audit Report Submitted
Results Approved Level 1
Results Approved Level 2
Results Audit Report Submitted
The doctoral degree in Geography is designed to provide depth and breadth of knowledge in geographic theory and research methods resulting in the completion of significant original research in the form of a PhD dissertation. Students will be educated in the process of geographic research, the development of new knowledge and methods and the application of research, techniques, pedagogy and geographic knowledge to address problems with spatial dimensions.

Mission Statement

The doctoral degree in Geography is designed to provide depth and breadth of knowledge in geographic theory and research methods resulting in the completion of significant original research in the form of a PhD dissertation. Students will be educated in the process of geographic research, the development of new knowledge and methods and the application of research, techniques, pedagogy and geographic knowledge to address problems with spatial dimensions.

Evidence of Improvement

Academic year 2007-08 represents the first year of data collection and results for Geography's doctoral program. Preliminary data indicate that the Department needs to ensure consistency among sections of the Advanced Geographic Research Design course (GEO 7300). The Department will continue to emphasize funding doctoral student participation at research conferences. A Teaching Assistant/Adjunct Mentoring and Review Committee was established in order to monitor and mentor Teaching Assistants who have teacher-of-record responsibilities.

Further data collection is needed to derive meaningful conclusions. Faculty will discuss the meaning of variation by section and will explore the feasibility of a panel review of a sample of student work to ensure consistency of grading across sections.

An ongoing record of the very active professional undertakings of our PhD students will be maintained. The Department will continue to provide substantial travel funds in support of student participation at professional meetings. Given the very small sample to date, data will continue to be collected regarding the quality of the final dissertations.

Students will demonstrate understanding of the historical development of geographical thought, and the major current philosophical and theoretical debates in geography.

Outcome 1 - Method 1

(Direct) Review and evaluation of student performance in the required core course GEO 7302 Nature and Philosophy of Geography.

Procedure: Student papers will be assessed using a Likert-type scale which measures student performance as "minimal understanding," "acceptable understanding," "superior understanding," or exceptional understanding."

Outcome 1 - Method 1 - Result

During Fall 2007, 14 students took GEO 7302, which is generally taken during the first semester in the doctoral program. The instructor rated all but one of the students' papers as "exceptional" or "superior" in terms of their understanding and performance with regard to geographic thought and the current philosophical and theoretical debates within the discipline. This suggests that our incoming doctoral students are well-prepared in the discipline.
Outcome 1 - Method 2

(Direct) Comprehensive Exam. Students will be evaluated on their performance on the required written and oral comprehensive exams, as related to the historical development of geographical thought, and the major current philosophical and theoretical debates in geography.

Procedure: After completion of the comprehensive exam by an individual student, the student’s doctoral advisor will complete an assessment of the student's performance on this outcome using a Likert-type scale.

Outcome 1 - Method 2 - Result

Only 3 students were assessed for this outcome/measure. Two were rated "exceptional" and one "superior" by their advisors regarding this outcome. To date, the sample size is too small to make any meaningful statement.

Outcome 2

Students will demonstrate an understanding of the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

Outcome 2 - Method 1

(Direct) Review and evaluation of student performance on papers and/or projects in the required core course GEO 7300 Advanced Geographic Research Design.

Procedure: Student term papers/projects in GEO 7300 will be assessed using a Likert-type scale.

Outcome 2 - Method 1 - Result

During Spring 2008, two sections of GEO 7300 Advanced Geographic Research Design were offered. Each section has 5 doctoral students enrolled (in addition to some MS students). For one section, the instructor rated four student papers/projects as "exceptional" (the top rating) and one as "superior". By contrast, the instructor for the second section did not rate any student papers/projects as "exceptional", while rating two as "superior" and three as only "acceptable". This represents a substantial difference between the two sections, which may be due to differences in instructor expectations rather than true differences in student capability/ performance. Additional data from future course offerings are needed to ascertain the actual situation, or the faculty may have to provide a panel review for a sample of papers/projects.

Outcome 2 - Method 2

(Direct) Dissertation Proposal. Students will be evaluated on their performance on the required written and oral dissertation proposal as related to the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.

Procedure: After completion of the dissertation proposal by an individual student, the student's doctoral advisor will complete an assessment of the student's performance on this outcome using a Likert-type scale.

Outcome 2 - Method 2 - Result

During 2007-08, four doctoral students presented their dissertation proposal. In terms of research design, dissertation advisors rated the student performance as: one "exceptional", two "superior" and one simply "acceptable". This represents too small of a sample for meaningful discussion at this time.

Outcome 3

Students will demonstrate competency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.

Outcome 3 - Method 1

(Direct) Review and evaluation of student performance on projects that demonstrate proficiency on quantitative methods and tools for spatial analysis in the required core course GEO 7301 Advanced Quantitative Methods in Geography.

Procedure: Student projects in GEO 7301 will be assessed using a Likert-type scale.

Outcome 3 - Method 1 - Result

In Spring 2008, 14 students took GEO 7301 Advanced Quantitative Methods. The instructor rated student projects very highly with 12 as "exceptional", 1 as "superior" and 1 as just "acceptable". This suggests strong quantitative methods preparation for our doctoral students.

Outcome 3 - Method 2

(Direct) Comprehensive Exam. Students will be evaluated on their performance on the required written and oral comprehensive exams, as related to competency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.

Procedure: After completion of the comprehensive exam by an individual student, the student’s doctoral advisor will complete an assessment of the student's performance on this outcome using a Likert-type scale.

Outcome 3 - Method 2 - Result
During 2007-08, four students undertook comprehensive exams after which they were rated in terms of quantitative methods and other appropriate technical tools. Advisors rated two as "exceptional", one as "superior" and one as just "adequate". This preliminary result suggests that there may be some students with marginal preparation in quantitative methods.

**Outcome 4**

Students will demonstrate significant research and writing expertise resulting in meaningful scholarly contributions.

**Outcome 4 - Method 1**

(Direct) Review of student presentations at professional conferences and student authored or co-authored publications.

Procedure: At the end of Spring semester, the Graduate Coordinator and/or Chair will prepare a summary of student participation at professional conferences and student authored or co-authored publications.

**Outcome 4 - Method 1 - Result**

During 2007-08, 49 doctoral student presentations were made at professional conferences. The largest participation occurred at the national Association of American Geographers meeting held in Boston (24). Other conference presentations included: National Council for Geographic Education (9), Applied Geography (6), Southwest Division AAG (3), International Geography Union in Tunisia (2), and single participants at Southeast Division AAG, National Council for the Social Studies, British Geographical Association, American Society for Photogrammetry and Remote Sensing, and the International Workshop on Cryosphere and Hazards for the Tibetan Plateau (in Nepal).

Special external awards received by PhD students during 2007-08 included the 2007 NCGE Distinguished Teaching Achievement Award (High School category), 2007 Texas Alliance for Geographic Education Distinguished Service Award, 2008 Texas Military Forces retiree scholarship, 2008 American Society for Photogrammetry and Remote Sensing best student paper award ($2000), 2008 American Alpine Club dissertation award ($1000), 2008 AAG Remote Sensing Specialty Group best paper award. Several students are serving as AAG specialty group student directors. At least two PhD students had papers accepted for publication in refereed journals.

**Outcome 4 - Method 2**

(Direct) Dissertation. Assessment of the quality of individual student dissertations.

Procedure: After completion of the dissertation by an individual student, the student's doctoral advisor will complete an assessment of the overall quality of the dissertation using a Likert-type scale.

**Outcome 4 - Method 2 - Result**

During 2007-08, reports for five students completing dissertations were filed for learning outcomes. Of these, four advisors rated the student's performance as "exceptional" and one as "superior". This indicates high advisor/faculty satisfaction with the final doctoral product -- the dissertation.

**Outcome 5**

Students will be prepared for advanced-level careers in academia, with governmental research and educational organizations, or within the private sector.

**Outcome 5 - Method 1**

(Direct) Assessment of student assistantship duties including review of student teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties.

Procedure: At the end of Spring semester, the Graduate Coordinator and/or Chair will review graduate assistant teaching evaluations, peer teaching evaluations, and mentor evaluations of research duties and prepare a summary evaluation of students' performance.

**Outcome 5 - Method 1 - Result**

During Fall 2007, 11 courses were taught by PhD teaching assistants (TA's). Six of these instructors received very respectable student evaluations (scoring 4.0 or greater on a 5 point scale). Several of these doctoral students were quite experienced lecturers. Only one scored below 3.5, and this individual subsequently received considerable mentoring (and showed some improvement during the Spring semester).

During Spring 2008, 10 courses were taught by doctoral TA's. Only one TA scored higher than 4.0 on student evaluations, and three scored less than 3.5. In part, this may reflect the inexperience of the group (a few taught for the first time).

Ten doctoral students taught labs as instructional assistants (IA's) in each semester. Half of these scored well on student evaluations (above 4.0), while 3 during Fall and 2 during Spring scored less than 3.5. Mentoring resulted in the lowest rated IA of the Fall improving to a very respectable 4.2 score in the Spring. In a couple of cases, spoken English proficiency was the main issue, despite the fact that the Department is very selective in the instructional roles assigned for non-native speakers.

Several PhD students were assigned as research assistants (RA's) during the year. All but one received strong evaluations from the faculty members for whom they worked. In one case, personal issues prevented the student from doing an adequate job; that student will not have an
assistantship next year but will instead continue in the program on a part-time basis.

One mid-year change with regard to doctoral teaching assistants was implemented in order to help improve our teaching program (i.e. doctoral TA performance when teaching undergraduate courses). A Teaching Assistant/Adjunct Mentoring and Review Committee, composed of senior-level faculty members, was established. One major "charge" for this committee is to conduct teaching reviews for doctoral TA's.

**Outcome 5 - Method 2**

(Indirect) Post-graduate job placement. Ongoing tabulation of doctoral graduates’ job placement upon degree completion and thereafter.

Procedure: The Department will maintain an ongoing record of doctoral graduates’ job placement upon degree completion and will endeavor to track subsequent employment.

**Outcome 5 - Method 2 - Result**

The Department has a comprehensive record of PhD graduates and their subsequent or last known job placement. As of December 2007, 41 students had graduated from Geography’s PhD programs (since the first graduated in 2000). Of these, 21 are in university academic positions, 3 in community college or high school educational positions, 10 in governmental or university research positions, and 7 work in the private sector.

Of the 10 students who graduated during calendar year 2007, 3 have academic positions, 4 are employed in governmental or university research jobs (including a post-doc fellowship), and 3 are employed by the private sector.

**Approval History**

**Approval History Event**

Outcomes Approved Level 1
Outcomes Approved Level 2
Results Approved Level 1
Results Approved Level 2