

A PROGRAM FOR FACULTY PEER REVIEW OF TEACHING AT NORTH DAKOTA STATE UNIVERSITY

Charles McIntyre, Sudhir Mehta, Tim Sellnow

North Dakota State University

Introduction

North Dakota State University has recently created the Peer Review of Teaching (PRT) Program which seeks to promote student-centered learning through the use of cooperative peer review teams to promote enhanced teaching methods, techniques, and strategies. The PRT project is a faculty-driven initiative intended to offer individual faculty added feedback related to instruction. Faculty members work together to set goals and to interpret student reactions to instruction strategies. The process is intentionally limited to formative assessment, and the peer assessment data is owned by the individual faculty members. Project participants are required to observe the teaching materials and teaching activity of a peer for at least one class per semester, provide meaningful feedback to his or her peer related to his or her syllabus and teaching strategies, and provide a measure of evaluation and assessment related to enhanced student learning. The contents of this paper document, 1.) the background and development of the PRT program, 2.) the selection and coordination of the peer teams, 3.) the development of the peer philosophy and project deliverables, and 4.) an evaluation and assessment of the PRT program.

Background

Peer review at NDSU has always been officially considered part of the process of promotion and tenure. However, in a practical sense and within the last ten to twelve years, the peer review process has been nonexistent. While peer review is considered “good” practice by both faculty and administration (when conducted properly), a formal well-structured program for peer review has never been set into practice. The NDSU University Senate created an ad-hoc committee to investigate the peer review process and to develop strategies that could be implemented to achieved a successful and well-received program for peer review. A report was created and posted on the University Senate web page (<http://www.ndsu.edu/univsenate/prt/index.shtml>), refer to Figure 1. The updated information on the web page also contains information that was developed as part of the PRT Program, as summarized in this paper.

University Senate ad hoc Committee on Peer Review of Teaching

[Report to the University Senate - April 9, 2001](#)

[Revised Recommendations for Implementation
Draft for May 7, 2001 University Senate](#)

[Responses to Questions and Concerns](#)

[Peer Observation in the Classroom](#)

[Peer Interviewing of Students](#)

[Peer Review of Syllabi](#)

[Resource Reviews](#)

- [Power of Mindful Learning](#) by E. J. Langer. 1997.
- [Mind Sculpture, Unlocking Your Brain's Untapped Potential](#) by I. H. Robertson. 1999.
- [Making Teaching Community Property, A Menu for Peer Collaboration and Peer Review](#) by P. Hutchings. 1996.
- [How People Learn, Brain, Mind, Experience, and School](#) by two committees of the National Research Council's Commission on Behavioral and Social Sciences and Education: Developments in the Science of Learning and Learning Research and Educational Practice. 2000.
- [Thinking about Teaching and Learning, Developing Habits of Learning with First Year College and University Students](#) by R. Leamson. 1999.

Figure 1. Web Page for the University Senate ad-hoc Committee on Peer Review of Teaching

Based on the report from the ad-hoc committee, the University Senate and the Provost decided to fund a project for peer review of teaching. Initially, the program was very loosely structured and intentionally so, in order to provide a relaxed, social atmosphere for peer review. However, as the program matured, more structure was required (as documented in this paper). Basically the call for a more organized approach came from both the faculty and administration. Faculty were calling for more structure for several reasons, but primarily to give them guidance and support for the peer review process which was a new endeavor for most faculty. Administration needed a means to document faculty participation and level of effort, since each faculty participant would be awarded a stipend of five hundred dollars.

Selection and Coordination of the Peer Teams

A call for proposals was sent to all NDSU faculty during the 2002 Spring Semester. Interested faculty were asked to collaborate with a team member, ideally from ones' discipline, thus forming a peer team. Approximately thirty teams were selected for the PRT program based on their response to the proposal solicitation. The PRT program was to begin at the start of the 2002 Fall Semester. On August 19, 2002 prior to the start of the Fall Semester, Dr. Stephen W. Kiefer from Kansas State University presented a one-day workshop related to the peer review process. Dr. Kiefer's presentation consisted of three interactive segments: Interaction 1 – Syllabus Review, Interaction 2 – Classroom Particulars, and Interaction 3 – Evidence of Student Learning.

Some of the basic topics covered in the workshop included, Scholarship of Syllabus, Permission Forms, Course Goals, Partner/Peer Review, Teaching Methods, and Assessment. The workshop set the tone for the remainder of the semester and helped to add some structure to the overall process, as well as, developing a more refined philosophy and actual deliverables for the PRT teams.

Peer Review Philosophy

The mission of the PRT project seeks to enhance student learning through the use of cooperative peer review teams. The PRT project is a faculty-driven initiative to offer individual faculty added feedback related to instruction. Faculty members work together to set goals and to interpret student reactions to instruction strategies. The process is intentionally limited to formative assessment, and the peer assessment data is owned by the individual faculty members.

PRT Project Deliverables

A Four-Step PRT process was established for the 2002-2003 academic year. Each project participant had to agree to perform the following tasks (Note: These tasks are developed based on the workshop given by Dr. Stephen Kiefer and the PRT call for applications):

Step 1.):

Observe the teaching materials and teaching activity of a peer for at least one course per semester. Provide meaningful feedback to your peer related to his or her syllabus. Provide meaningful feedback to your peer related to classroom observations of his or her teaching strategies. Provide meaningful feedback to your peer related to the evidence of student learning that your peer collects from his or her students.

Step 2.):

Attend group meetings with your PRT leader.

Step 3.):

Write three reflective essays per semester, based on your goals and feedback from your peer. You may want to use the guidelines given in Dr. Stephen Kiefer's PowerPoint presentation (that was sent to you) for writing the essays. Also, please consult with and get feedback on your essays from your PRT leader. The essays must be completed no later than the last day of the semester.

- T Write a reflective essay, not to exceed one page, based on discussions with your peer related to your syllabus or outcomes for the class that is being reviewed.
- C Write a reflective essay, not to exceed one page, based on discussions with your peer related to the teaching strategies you have selected for review. This reflective essay should be based, at least in part, on the observations your peer makes in your classroom.
- Write a reflective essay, not to exceed one page, related to the evidence of student learning that you collect from your students.

The essays will be forwarded, with all authorship anonymous, to your group leader for project assessment. The board is required to present the assessment report to the NDSU University senate. Reporting of the essay content will be restricted to group comparisons. With the exception of this basic assessment, the essays are exclusively the property of the author.

Step 4.):

At the end of each semester, complete a brief numerical rating scale that summarizes your activity in and your assessment of the PRT project. This rating scale should not take more than ten minutes to complete. Only group comparisons of the data generated by this rating scale will be made public. The identity of all respondents will remain anonymous. The rating scale will be completed on-line. Additional information about the assessment form will be sent at a later date.

Having completed the above requirements at the end of spring semester, the Provost would like to recognize your efforts and provide you with a stipend of \$500.00.

Student Consent Form

In accordance with University policies concerning proprietary of student information and student involvement in research projects (human subjects), each faculty participant in the PRT project was asked to distribute a consent form to each student in his or her classes that were involved in the PRT project. The form (given on the following page) basically asks for student permission to participate in the project and review their work.

Instructor's Participation in the Project: Teaching as Scholarship

The professor of this course is involved, with other NDSU faculty members, in a University-wide project that is intended to improve the quality of teaching and learning experiences of faculty and students. Because the main goal is to improve your learning experience, your help is requested in the following ways:

1. You may be asked periodically to fill out forms similar to a course evaluation to help learn more about your participation and your learning.
2. Your graded material may be looked at anonymously by people other than the professor to document the learning process. A small, random sample of student work on each assignment will be photocopied and kept as an archive for the course. Normally there are no names kept on student papers, but you may request that your name be retained on any of your work that is part of that small sample. The sample of student work will be looked at by other faculty who are helping your professor to develop greater student understanding.
3. The classroom activities may be observed periodically by other faculty, with the focus primarily on the professor. The observers are making no judgments of quality of your performance; they are keeping track of how the time in class is spent on different activities. No individual student participation is noted in any way.

Your participation is greatly appreciated, and it is integral to the improvement of teaching and learning. If you have concerns or questions, please feel free to discuss them with the professor. Should you feel those concerns are not addressed, you may request that your work not be included in the sample of work placed in the archive.

-----Please tear here and return signed form to Dr. _____-----

I have read and understood the above information regarding Dr. _____ involvement in the Teaching as Scholarship Project. I hereby grant my professor permission to photocopy any of my work with the understanding that all indications of my identity will be removed prior to photocopying. To rescind this permission at any time, I simply need to inform Dr. _____ in writing.

(Signature)

(Please print name)

(Date)

Evaluation and Assessment

A number of methods are used to evaluate and assess the PRT project including: Group Session Assessment Forms, Reflective Essays, and PRT Assessment Forms. The Group Session Assessment Forms consisted of a paper-based form that was distributed to each project participant and asked three basic questions:

- 1.) What changes are you proposing in your course/syllabus?
- 2.) What new teaching strategies are you employing?
- 3.) What evidence are you collecting in order to evaluate student learning?

The Reflective Essays were forwarded to the PRT group leader, then summarized (authorship anonymous) and forwarded to the PRT Board. Summaries of the submitted information are available on the PRT web site.

The PRT Assessment Form was completed using Blackboard. An anonymous survey was used to collect feedback concerning the PRT process for the 2002 Fall Semester. A "Peer Review of Teaching" course was created in Blackboard and contained the following:

PRT Assessment Form

Instructions: This form is designed to get anonymous feedback regarding your PRT experience last semester. The statements are divided into two categories. In the first section (questions 1 to 4), we request you to respond to the statements based solely on the interaction you had with your PRT partner. In the second section (questions 5 to 7), we request you to respond to the statements based on the PRT program. This includes the session with Stephen Kiefer, the reading materials, the group meetings with your board member, etc. For each of the statements in both sections, please indicate whether you strongly agree (5), agree (4), feel neutral (3), disagree (2), or strongly disagree (1) by choosing the appropriate number.

Question 1

The meetings with my PRT partner regarding my course syllabus were productive.

Question 2

The discussions with my PRT partner regarding her/his observations of my teaching were productive.

Question 3

The meetings with my PRT partner to discuss ways of enhancing my classroom teaching methods were productive.

Question 4

The meetings with my PRT partner to discuss ways of assessing students' learning were productive.

Question 5

The PRT program helped me improve either the content of my syllabus or my understanding of how to communicate the course objectives to my students.

Question 6

The PRT program helped me to improve my classroom instruction.

Question 7

The PRT program helped me to improve the assessment of students' learning.

Question 8 (Short Answer / Essay)

Please provide additional comments or suggestions.

Conclusions

Initial faculty assessment of the PRT project indicated that the end of semester deliverables provided the necessary structure and due date requirements needed to complete the required tasks. The anonymous essays required each faculty participant to take a reflective look at the work accomplished and also determine what work remained.

The final assessment for PRT project will actually be completed after the end of the 2003 Spring Semester when the final essays have been submitted and the project ending faculty assessments have been completed. These final results will be presented at the 2003 American Society for Engineering Education Annual Conference & Exposition in Nashville, TN in June.