

Assessment & Review of Graduate Programs

Duane K. Larick

North Carolina State University

Council Of Graduate Schools

New Deans Institute

July, 2006

Assessment and Review

- Outline of Presentation
 - Why review/assess graduate programs
 - NC State's 2- phase review process

Why Review/Assess Graduate Programs

- External Considerations
 - Improvement in the quality of graduate education
 - To help satisfy calls for accountability
 - Especially at the State level
 - Requirement for regional accreditation, licensure, etc.

Why Review/Assess Graduate Programs

- Internal Considerations
 - Meet short-term (tactical) objectives or targets
 - Meet long-term (strategic) institutional/departmental goals
 - Funding allocation/reallocation
 - Advanced understand of factors influencing graduate education
 - Causes of retention/attrition among students and faculty

Graduate Program Review at NC State University

- Formal graduate program review (external review on a periodic basis)
- Outcomes-based assessment (internal review that is continuous and ongoing process)

Marilyn J. Baker

Revised and Updated by:

Margaret King, Duane Larick,
and Michael Carter

NC State University

Assessment
and Review of
Graduate Programs

— • —
A Policy Statement



Council of Graduate Schools

Key Features of Formal Reviews

- Evaluative, not just descriptive
- Forward-looking: focus on improvement of program, not just current status
- Based on program's academic strengths and weaknesses, not just ability to attract funding
- Objective
- Independent, stands on its own
- Action-oriented: clear, concrete recommendations to be implemented

Questions Answered by Formal Review

- Is the program advancing the state of the discipline or profession?
- Is its teaching and training of students effective?
- Does it meet institutional goals?
- Does it respond to the profession's needs?
- How is it assessed by experts in the field?

Issues to be Resolved Before Beginning

- Locus of control
- Graduate-only or comprehensive program review
- Counting—and paying—the costs
- Master's and doctoral programs
- Coordination with accreditation reviews
- Scheduling the reviews
- Multidisciplinary and interdisciplinary programs

Key Elements of a Successful Program Review

- Clear, Consistent Guidelines
 - The purpose of graduate program review
 - The process to be followed
 - Guidelines for materials to be included in each phase
 - A generic agenda for the review
 - The use to which results will be put

Key Elements of a Successful Program Review

- Administrative Support
 - Departmental resources: time, funding, secretarial help, etc.
 - Central administrative support for larger review process
 - Adequate and accurate institutional data, consistent across programs

Key Elements of a Successful Program Review

- Program Self-Study
 - Engage the program faculty in a thoughtful evaluation of:
 - The program's purpose(s)
 - The program's effectiveness in achieving these purposes
 - The program's overall quality
 - The faculty's vision for the program

Key Elements of a Successful Program Review

- Surveys/Questionnaires
 - Surveys from current students, faculty, alumni, and employers
 - Factors to be considered:
 - Time and expense to develop, distribute and collect responses
 - Likely response rate
 - Additional burden on respondents
 - Uniqueness of information to be gained

Key Elements of a Successful Program Review

- Student Participation
 - Complete confidential questionnaires
 - Provide input into self-study
 - Be interviewed collectively and individually by review team
 - Serve on review teams and standing committees

Key Elements of a Successful Program Review

■ Review Committee

- On-Campus Representation
 - A representative of the Graduate School
 - Internal reviewer from a field that gives him/her some understanding of the program(s) being reviewed
- External Reviewer(s)
 - Number of reviewers depends on scope and kind review
 - Selection process can vary – programs can have input but should not make the final decision

Key Elements of a Successful Program Review

- Final Report by Review Team
 - Brief overview of program
 - Strengths of program
 - Areas for improvement
 - Recommendations for improvement

Key Elements of a Successful Program Review

- Program Faculty's Response to Report
 - Clear up errors or misunderstandings
 - Respond to the recommendations (have implemented, will implement, will consider implementing, cannot implement and why)

Key Elements of a Successful Program Review

■ Implementation

- One or more meetings of key administrators (department, college, graduate school, and university) to discuss recommendations
- An action plan or memorandum of understanding drawn up and agreed on by all participants
- Discussion of the recommendations with program faculty for implementation
- Integration of the action plan into the institution's long-range planning and budget process

Key Elements of a Successful Program Review

■ Follow Up

- An initial report on progress toward implementation of action plan (1 or 2 years out)
- Follow-up reports until action plan is implemented or priorities change
- Discussion of recommendations and implementation in self-study for next review

Outcomes Based Assessment

- What is outcomes assessment?
- Benefits of outcomes assessment
- Issues to be addressed before beginning
- Outcomes assessment: A 5 step process

What is Outcomes Assessment?

- It is a process that engages program faculty in asking three questions about their programs
 - What are our expectations for the program?
 - To what extent is our program meeting our expectations?
 - How can we improve our program to better meet our expectations?
- It is a process that provides program faculty the means to answer these questions
 - By creating outcomes for their program
 - By gathering and analyzing data to determine how well the program is meeting the outcomes
 - By applying the results of their assessment toward improving their program

Features of Successful Outcomes Assessment

- It should give faculty full ownership of the process
- It should make clear who will see assessment results and why
- It should lead to program improvement
- It should be integrated into the institutional culture

Benefits of Outcomes Assessment

- It gives faculty a greater sense of ownership of their programs
- It provides stakeholders a clearer picture of the expectations of programs
- It helps institutions meet accreditation requirements

Issues to be Addressed Before Beginning

- Locus of control
- Coordination with other assessment efforts
- Administrative resources
 - Planning
 - Training
 - Data management
 - Reporting
 - Operational support
 - Program improvement support

Outcomes Assessment: 5 Step Process

1. Establish objectives and outcomes
2. Identify data for assessing outcomes
3. Create an assessment plan
4. Implement assessment plan
5. Report results of assessment at regular (relatively short) intervals

Summary: Keys to Success of Program Review

- The faculty should want to do this process
- The faculty must use the information collected
 - Demonstrate change as a result of findings
- The institution must use the information collected
 - It should somehow tie to resource decisions
- Use participation in the process as part of faculty reviews

Questions & Discussion

Three Common Objectives

- Developing students as successful professionals in the field
- Developing students as effective researchers in the field
- Maintaining/enhancing the overall quality of the program

Example for Outcome 1 – Professional Development

1. To enable students to develop as successful professionals for highly competitive positions in industry, government, and academic departments, the program aims to provide a variety of experiences that help students to:
 - a. achieve the highest level of expertise in XXXX, mastery of the knowledge in their fields and the ability to apply associated technologies to novel and emerging problems
 - b. present research to local, regional, national, and international audiences through publications in professional journals and conference papers given in a range of venues, from graduate seminars to professional meetings
 - c. participate in professional organizations, becoming members and attending meetings
 - d. broaden their professional foundations through activities such as teaching, internships, fellowships, and grant applications

Managerial Tools Created for Program Review - Website

NC State Graduate School Program Review Homepage - Microsoft Internet Explorer provided by Network & Client Services

File Edit View Favorites Tools Help

Address http://www.fis.ncsu.edu/grad_publicns/program_review/ Go Links

Degree Programs
Student Organizations
Program Review
International Admissions
Calendar
Funding
Diversity
Research

Program Review

- ▶ [Description of the Graduate Program Review Process](#)

Formal Review of Graduate Programs

- ▶ [Graduate Program Review Schedule 2003-2012](#)
- ▶ [Purpose and Process of Formal Reviews](#)
- ▶ [New self-study guidelines](#)
- ▶ [Self-Study Faculty CV's: Template](#)
- ▶ [Agenda Guidelines](#)
- ▶ [Graduate Program Review Committee: Responsibilities](#)

Continuous and Ongoing Assessment of Graduate Programs

- ▶ [Biennial Reporting Guidelines](#)
- ▶ [Graduate Program Assessment Pilot: Objectives and Outcomes](#)
- ▶ [Developing Objectives and Outcomes for Graduate Programs](#)
 - ▶ [Assessing Graduate Programs: Outcomes-Based Assessment](#)
 - ▶ [Procedure for Developing Outcomes](#)
 - ▶ [Questions for Brainstorming](#)
 - ▶ [Creating an Assessment Plan](#)
 - ▶ [Assessment Data, Plans, and Rubrics](#)

Presentations

- ▶ [Graduate Program Review: Where we are, where we are headed and where we are going](#)

Alumni Association, Campaign for NC State Students, Related Info

Internet

Start | N.. | M.. | N.. | D.. | E:\ | M.. | M.. | M.. | I... | N...

1:54 PM

Managerial Tools Created for Program Review - Website

NC State Graduate School Program Review Homepage - Microsoft Internet Explorer provided by Network & Client Services

File Edit View Favorites Tools Help

Address http://www.fis.ncsu.edu/grad_publicns/program_review/ Go Links

Degree Programs
Student Organizations
Program Review
International Admissions
Calendar
Funding
Diversity
Research

Program Review

- ▶ [Description of the Graduate Program Review Process](#)

Formal Review of Graduate Programs

- ▶ [Graduate Program Review Schedule 2003-2012](#)
- ▶ [Purpose and Process of Formal Reviews](#)
- ▶ [New self-study guidelines](#)
- ▶ [Self-Study Faculty CV's: Template](#)
- ▶ [Agenda Guidelines](#)
- ▶ [Graduate Program Review Committee: Responsibilities](#)

Continuous and Ongoing Assessment of Graduate Programs

- ▶ [Biennial Reporting Guidelines](#)
- ▶ [Graduate Program Assessment Pilot: Objectives and Outcomes](#)
- ▶ [Developing Objectives and Outcomes for Graduate Programs](#)
 - ▶ [Assessing Graduate Programs: Outcomes-Based Assessment](#)
 - ▶ [Procedure for Developing Outcomes](#)
 - ▶ [Questions for Brainstorming](#)
 - ▶ [Creating an Assessment Plan](#)
 - ▶ [Assessment Data, Plans, and Rubrics](#)

Presentations

- ▶ [Graduate Program Review: Where we are, where we are headed and where we are going](#)

Alumni Association, Campaign for NC State Students, Related Info

Internet

Start | N.. | M.. | N.. | D.. | E:\ | M.. | M.. | M.. | I... | N...


1:54 PM

Managerial Tools Created for Program Review - Website

NC State Graduate School: Program Review Schedule - Microsoft Internet Explorer provided by Network & Client Services

File Edit View Favorites Tools Help

Address http://www.grad.ncsu.edu/program_review/reviewschedule.aspx Go Links



Graduate Program Review Schedule - with Colleges

| Intercollege Reviews | | | | | | | |
|----------------------|---------------------------------|-------------------|---|-------------------------|-----------------------------|-------------------------|----------------------|
| Program Review Name | Program Name | Colleges Involved | Notes | Last Onsite Review Date | Next Onsite Review Semester | Next Onsite Review Date | DGP Name |
| Microbiology | Microbiology (est. 1970) | 11,19 | Coordinate with CALS comprehensive review | 4/12/1993 | 04 - Spring | 3/17/2004 | Dr. Michael R. Hyman |
| Genomic Sciences | Bioinformatics (est. 1999) | 11,14,15,17,19 | Review Bioinformatics and Functional Genomics together. | | 05 - Spring | 1/1/2005 | Dr. Barbara Sherry |
| Genomic Sciences | Functional Genomics (est. 1999) | 11,14,15,17,19 | Review Bioinformatics and Functional | | 05 - Spring | 1/1/2005 | Dr. Barbara Sherry |

Done Internet

Start | N.. | M.. | N.. | D.. | E:\ | M.. | M.. | M.. | I... | N... | 1:57 PM

Managerial Tools Created for Program Review - Website

NORTH CAROLINA STATE UNIVERSITY

The Graduate School

Graduate Degree Program Review

Revised Format for the Self-Study Report

Instructions: Designed for the eight-year review of graduate degree programs, the self-study described below should be completed by each department undergoing program review. The completed self-study should be submitted to the Graduate School and Program Review Committee three weeks before the Review Committee site visit. The information submitted should be completed in narrative or table form as applicable. The *Annual Graduate Program Profiles* for the past ten years are provided to aid in completion of your self-study. Please introduce any additional information that you feel would be helpful in this review.

A major purpose of the eight-year review is to engage program faculty, other faculty inside and outside the University, and the Graduate Dean in thoughtful and creative study and evaluation of the program's academic performance in relation to North Carolina State University's mission and to the program's mission and vision, including the student learning outcomes that the program is designed to foster.

Managerial Tools Created for Program Review - Website

NORTH CAROLINA STATE UNIVERSITY

The Graduate School

Graduate Degree Program Review

Revised Format for the Self-Study Report

Instructions: Designed for the eight-year review of graduate degree programs, the self-study described below should be completed by each department undergoing program review. The completed self-study should be submitted to the Graduate School and Program Review Committee three weeks before the Review Committee site visit. The information submitted should be completed in narrative or table form as applicable. The *Annual Graduate Program Profiles* for the past ten years are provided to aid in completion of your self-study. Please introduce any additional information that you feel would be helpful in this review.

A major purpose of the eight-year review is to engage program faculty, other faculty inside and outside the University, and the Graduate Dean in thoughtful and creative study and evaluation of the program's academic performance in relation to North Carolina State University's mission and to the program's mission and vision, including the student learning outcomes that the program is designed to foster.

Managerial Tools Created for Program Review – Review Document Management

NCSU GRADUATE SCHOOL: PROGRAM REVIEW - Microsoft Internet Explorer provided by Network & Client Services

Address http://www.grad.ncsu.edu/program_review/ManageObjectives.aspx

4. Document Naming Conventions - Please use the following naming conventions for your Program Review documents. This will ensure consistency across Program Reviews and minimize the potential for accidentally overwriting another program's files.

- o **Self Study** - [Program Name] Self Study - Year. Ex. *Food Science Self Study-2004*
- o **Review Team Report** - [Program Name] Review Team Report - Year. Ex. *Food Science Review Team Report-2004*
- o **Program Response** - [Program Name] Program Response - Year. Ex. *Food Science Program Response-2004*
- o **Action Plan** - [Program Name] Action Plan - Year. Ex. *Food Science Action Plan-2004*
- o **Assessment Plan** - [Program Name] Assessment Plan - Year. Ex. *Food Science Assessment Plan-2004*

Document Templates can be found at [Program Review Resources](#)

| Self Study | Review Team Report | Program Response | Action Plan | Assessment Plan |
|--|--|---|--|-----------------|
| 73_MAE_graduate_program_selfstudy_feb_2003.pdf | 73_NCSU_Report-final.pdf | 73_Departmental response to MAE Graduate Program Review.pdf | 73_MAE_executive_summary.pdf | |

[Add Documents](#)

Program Review Objectives and Outcomes

Instructions

1. [Add Objectives](#) - Enter Objectives for this Program Review.
2. [View Outcomes & Objectives](#) - Printer friendly view of the objectives and outcomes.

Start | Internet | 2:02 PM

Managerial Tools Created for Program Review – Review Document Management

NCSU GRADUATE SCHOOL: PROGRAM REVIEW - Microsoft Internet Explorer provided by Network & Client Services

Address http://www.grad.ncsu.edu/program_review/ManageObjectives.aspx

[Add Documents](#)

Program Review Objectives and Outcomes

Instructions

- [Add Objectives](#) - Enter Objectives for this Program Review.
- [View Outcomes & Objectives](#) - Printer friendly view of the objectives and outcomes.

| Objective Description | Priority | Effective Date | Program (s) | | | |
|--|----------|------------------------|-------------|--------------------------------|----------------------------------|-------------------------------|
| To enable students to develop as successful professionals for highly competitive positions in industry, government, and academic departments | 1 | 10/12/2004 12:00:00 AM | 70,44 | Edit Objective | Delete Objective | View Outcomes |
| To prepare students to be effective researchers in the fields of mechanical or aerospace engineering | 2 | 10/12/2004 12:00:00 AM | 70,44 | Edit Objective | Delete Objective | View Outcomes |
| To enhance visibility of the doctoral programs in mechanical and aerospace engineering nationally | 3 | 10/12/2004 12:00:00 AM | 70,44 | Edit Objective | Delete Objective | View Outcomes |

Start | Internet | 2:06 PM

Managerial Tools Created for Program Review – Review Document Management

The screenshot shows a Microsoft Internet Explorer browser window. The title bar reads "NCSU GRADUATE SCHOOL: PROGRAM REVIEW - Microsoft Internet Explorer provided by Network & Client Services". The address bar shows the URL "http://www.grad.ncsu.edu/program_review/ObjectivesOutcomes.aspx?ID=73". The main content area displays the following text:

**Program Review: Mechanical and Aerospace Engineering
Objectives and Outcomes**

Objectives and Outcomes

Objectives for the program are:

1. To enable students to develop as successful professionals for highly competitive positions in industry, government, and academic departments
2. To prepare students to be effective researchers in the fields of mechanical or aerospace engineering
3. To enhance visibility of the doctoral programs in mechanical and aerospace engineering nationally

Outcomes for each of the program's objectives are:

1. To enable students to develop as successful professionals for highly competitive positions in industry, government, and academic departments:
 - a. Provide a variety of experiences that help students achieve the highest level of expertise in mechanical or aerospace engineering, mastery of the knowledge in their fields and the ability to apply associated technologies to novel and emerging problems.
 - b. Provide a variety of experiences that help students present research to local, regional, national, and international audiences through publications in professional journals and conference papers given in a range of venues, from graduate seminars to professional meetings.
 - c. Provide a variety of experiences that help students participate in professional organizations, becoming members and attending meetings.

The browser's status bar at the bottom shows "Done" and "Internet". The Windows taskbar at the very bottom includes the Start button, several open application windows (Internet Explorer, Word, Excel, PowerPoint, Outlook, etc.), and the system clock showing "2:07 PM".