The 2006 Clemson University Institutional Effectiveness summary report includes:
Component 1 - General Education
Component 2 - Majors or Concentrations
Component 3 - Performance of Professional Program Graduates on Licensing and Certification Exams
Component 6 - Entry-level Placement and Developmental Education (annual table)
Component 8 - Achievement of Students Transferring from Two to Four Year Institutions. Transmitted under separate cover, 2006
Component 17 - Research: Students Involved in Sponsored Research (annual table)
Programs Eligible for Accreditation and Programs Accredited (annual table)

The following remaining elements will be reported by Clemson University in the annotated year:
Component 5 - Academic Advising (2008)
Component 12 - Procedures for Student Development (2007)
Component 13 - Library Resources and Services (2009)
Alumni Survey Placement (2007)
STATEMENT OF PURPOSE: Clemson University students will demonstrate competence in the use of basic communication and language skills, critical thinking and basic quantitative methodology with special emphasis on problem solving.

Overview
In preparation for the SACS COC reaffirmation, an assessment of the general education program was prepared in light of the proposed *Principles of Accreditation: Foundations for Quality Enhancement*. Provost Helms considered the assessment data, the existing design of General Education and the degree requirements for undergraduate programs. Her conclusion was that Clemson University was in an advantageous position to redefine undergraduate education, the last revision being made in 1994. After the reaffirmation site visit, in 2003, she charged the Undergraduate Curriculum Committee and the academic departments with refining the undergraduate experience in terms of competencies, hours/credits, experiential learning, and other learning opportunities. The academic programs responded by developing revised curricula that integrated the newly defined General Education competencies. The Undergraduate Curriculum Committee adopted these revisions, which were published in the *2005-2006 Undergraduate Announcements*. In Fall 2005 the first class of students entered under these new criteria.

Definitions of General Education
The recently adopted General Education requirements are, in part, novel to Clemson. Historically, students were provided with a list of courses approved by the Undergraduate Curriculum Committee (UCC), which met the criteria for the competency or group of competencies. The current competencies significantly change how Clemson defines general education in several ways. First, not all of the competencies have to be met by courses in the *Undergraduate Announcements*. Disciplines may provide specific courses within the department in which the competencies are embedded; clusters of courses may meet requirements; or experiential opportunities such as “travel abroad” may qualify as fulfilling a requirement. The intent of the UCC is to provide flexibility to academic programs in the administration of general education; however, the standards for the competencies are well defined and uniform across the institution.

The specific competencies for the areas of general education are shown in the following table and include: (a) written and oral communication skills, (b) reasoning, critical thinking and problem solving, (c) mathematical, scientific, and technological literacy, (d) social and cultural awareness, (e) arts and humanities, and (f) ethical judgment.

<table>
<thead>
<tr>
<th>Area</th>
<th>Specific Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written and Oral Communication Skills</td>
<td>1. Demonstrate effective communication skills appropriate for topic, audience, and occasion.</td>
</tr>
<tr>
<td></td>
<td>2. Write coherent, well-supported, and carefully edited essays and reports suitable for a range of different audiences and purposes.</td>
</tr>
<tr>
<td></td>
<td>3. Employ the full range of the writing process, from rough draft to edited product.</td>
</tr>
<tr>
<td></td>
<td>4. Incorporate both print and electronic resources into speeches, presentations, and written documents.</td>
</tr>
<tr>
<td></td>
<td>1. Summarize, analyze, and evaluate fictional and non-fictional texts.</td>
</tr>
</tbody>
</table>
### Reasoning, Critical Thinking, and Problem Solving
1. Differentiate deductive and inductive reasoning processes.
2. Acquire and analyze information to determine its quality and utility.
3. Recognize parallels between and among disciplines and apply knowledge, skills, or abilities learned in one discipline to another.

### Mathematical, Scientific, and Technological Literacy
1. Demonstrate mathematical literacy through solving problems, communicating concepts, reasoning mathematically, and applying mathematical or statistical methods using multiple representations.
2. Develop an understanding of the principles and theories of a natural science and its applications.
3. Explain and apply the methods of a natural science in laboratory or experimental settings.
4. Apply information technologies to intellectual and professional development.
5. Understand the role of science and technology in society.

### Social and Cross-Cultural Awareness
1. Develop an understanding of social science methodologies.
2. Explore the causes and consequences of human actions.
3. Develop an understanding of world cultures in historical and contemporary perspectives.
4. Recognize the importance of language in cultural contexts.

### Arts and Humanities
1. Develop an understanding of the history and cultural contexts of the arts and humanities.
2. Examine the arts and humanities as expressions of the human experience.
3. Experience and evaluate productions of the performing and visual arts.

### Ethical Judgment
1. Demonstrate knowledge of what ethics is and is not, its relation to academic integrity, and its importance as a field of study.
2. Demonstrate understanding of common ethical issues, and construct a personal framework in which ethical decisions can be made in a systematic, reflective, and responsible way.

**Methodologies for instruments to assess the effectiveness of general education**

The assessment of the effectiveness of General Education is a critical part of the implementation of the program. The Office for Institutional Effectiveness and Assessment in conjunction with the University Assessment Committee began the review of nationally-normed instruments that could be used to evaluate the extent to which students are competent or have achieved the acceptable standard of success. The Measure of Academic Proficiency and Progress (Educational Testing Service) and the Collegiate Assessment of Academic Proficiency (American College Testing Program) are two of the instruments reviewed. The extensive review requires mapping the adopted to competencies to the test content to ensure congruency between what is expected and what is being tested. The validity, reliability, and cost (time and money) are other considerations. The University Assessment Committee will make a recommendation to the Provost and the Dean of Undergraduate Education for the use of either or neither of these instruments, an assessment cycle, and standards for success based on the rubrics that Clemson adopted.

The second method of assessment will be the use of electronic portfolios for the collection of data with faculty-led committees examining the artifacts. In fall 2005, an institutional-wide faculty force was appointed to establish rubrics to evaluate student learning related to General Education. This task force used a subcommittee approach to identify criteria for success. Prior to
adoption of the rubrics by the Undergraduate Curriculum Committee in spring 2006, the task force solicited suggestions from the University Assessment committee.

There is a student-led project that is intended to stimulate participation in the use of the portfolios. The University Division of Computing and Information Technology is working on a prototype to help students create the portfolios. The appointment of committees to review artifacts and develop assessment reports will commence in 2006-2007. The process of selecting appropriate artifacts and providing feedback to the faculty of the courses will also remain in the academic department. An inventory of General Education courses offering competencies was initiated in spring 2006. The University Assessment Committee noted that 2311 courses were identified as delivering one or more of the competencies. Department Chairs were asked to note the specific competencies being offered in the courses within their department. This inventory was, for the most part, completed in Spring 2006. During the summer, an analysis of these data is being performed. Based on the findings of the preliminary review, actions will be recommended to the University Assessment Committee which, will in turn, develop recommendations to the Undergraduate Curriculum Committee or the Dean of Undergraduate Education. It is anticipated that further analysis of these data will be necessary and refinements to the General Education program will occur within the academic year.

The University Assessment Committee has been working in concert with the Undergraduate Curriculum Committee on this project. The Assessment Committee notified the Department Chairs that each department needs to collect appropriate artifacts from each section of every course approved for General Education. The Departments will provide assessment reports to the Office of Institutional Effectiveness and Assessment on their findings including how they will use the results of the assessment for improvement. The departmental assessment reports, reports from the portfolio assessment, and other strategies will be used to evaluate the extent to which undergraduate students have gained the knowledge, skills, or abilities defined by Clemson University’s General Education program.

**Major findings or trends from their initial assessments and Actions (taken or plan) as a result of the assessment process to improve the general education program**

The General Education Program is under construction at Clemson University. The assessment of the program is anticipated to commence with the implementation of the portfolio assessment program and the adoption of a specific standardized instrument. The actions to be taken at this time regarding the implementation of the program and reporting to constituencies.

1. Revise the STATEMENT OF PURPOSE for Component 6 to include the general competency areas:
   Clemson University undergraduate students will demonstrate competence in (a) written and oral communication skills, (b) reasoning, critical thinking and problem solving, (c) mathematical, scientific, and technological literacy, (d) social and cultural awareness, (e) arts and humanities, and (f) ethical judgment.

2. The University Assessment Committee will provide recommendations to the Provost and the Dean of Undergraduate Studies regarding the selection of a standardized instrument to evaluate the extent to which students have succeeded in general education.

3. The University Assessment Committee will provide recommendations to the Undergraduate Curriculum Committee or other appropriate bodies the findings of the competency inventory undertaken in spring 2006.

4. Departments will provide assessment reports on the status of student achievement in the courses within their discipline that are approved for the delivery of the general education competencies.
STATEMENT OF PURPOSE
Clemson University assesses designated discipline-based programs leading to undergraduate degree majors or concentrations. This includes – but is not limited to – student command of the basic knowledge of the discipline. Clemson reports on programs coming up for either SACS or discipline-related accreditation visits, or programs, which are being reported on as part of its Clemson’s internal evaluation and program review cycle.

Clemson University continues to evaluate the discipline-based programs leading to undergraduate degree majors or concentrations. The review and reporting of program successes and opportunities are embedded in Section 59-101-350 of the South Carolina Code of Laws, 1976. Since its establishment, mandated reporting protocol has been adjusted. A recent adjustment by the S. C. Commission on Higher Education occurred as it responded to state budget reductions. Concurrently, Clemson University was finalizing its Self-Study in anticipation of its reaffirmation by the Southern Association of Colleges and Schools (SACS) Commission on Colleges. Resulting from these events, the University drafted, adopted, and implemented a Graduate and Undergraduate Program Review outlining the process, content, reporting, and cycle of programs to be examined annually.

Highlights from the Guidelines mimic many of those requirements of both the Commission on Higher Education and those stipulated by many of the selected national discipline accrediting agencies. For instance, each program is to prepare a Self-Study and review in detail the academic program of the students. This information is then used by an appointed Review Committee for making its judgment on the quality of the departmental programs from the viewpoint of scholars. Conclusions are drawn from the following materials provided by the academic department: (1) a statement of the department’s mission and goals, (2) faculty vitae, (3) course listings and program options with appropriate descriptions and assessments, (4) statistical data on enrollment, degrees granted, and total FTE students, (5) financial data and assessment of resources, (6) description of facilities, equipment, space, and library holdings, and (7) description of advising responsibilities, service activities, undergraduate research, honors programs, and study abroad programs.

However, the Review Committee’s report is not limited to the Department’s Self-Study but may include interviews, on-site studies, or reviews of appropriate materials. Once prepared, the report is submitted to the Dean of the college and the Vice Provost for Undergraduate Studies. The department has an opportunity to review the report before its being sent to the Undergraduate Council for deliberation. The Undergraduate Council then prepares a final report and submits it to the Provost.

The 2006 reporting includes Physics, Geology, and Environmental Toxicology. Additionally, Clemson University is providing a follow-up report on actions taken to address the concerns raised by NCATE and the CHE regarding selected programs in the College of Health, Education, and Human Development, Eugene T. Moore School of Education (ETM SoE). The full report is Attachment 1.

Geology is part of the School of the Environment in the College of Engineering and Science. The specific department, Department of Environmental Engineering and Science, offers degrees in Geology of BA, BS, Master’s, and PhD. Additionally, a MS in Hydrology and a MS and ME
in Environmental Engineering and Science are awarded by the department. Clemson University offers four (4) degrees in Physics (BS, BA, MS, and PhD). The college of Agriculture, Forestry, and Life Sciences houses the Environmental Toxicology programs. There is a BS in Environmental and Natural Resources, and a MS and PhD in Environmental Toxicology.

The departments, in which the programs are delivered, began their self-studies in the spring of 2006 and will complete their reviews in fall 2006. Once completed, the self-studies will serve as foundations for the departments to examine their programs, services, and facilities to support the faculty and students. Programmatic adjustments will be made, if warranted. In that the Institutional Effectiveness Report to the SC Commission on Higher Education is due prior to the completion of the self-studies, the annual Assessment Record will serve as an alternative source of program information.

The departments provide to the Office for Institutional Effectiveness and Assessment an annual plan and report for each academic program. These two pieces comprise the Assessment Record for each degree. In the past year, all of the undergraduate programs have implemented modifications to incorporate or align with the new general education requirements. These changes require the disciplines to deliver and assess within their programs competencies such as ethics and information technology. Many of the changes that were made do not occur until the upper division courses; thus, the impact of the changes will not readily assessed for the next several years. In each of the annual assessment reports, the impact of these changes has been noted with specific reference to the need to monitor the scheduling of courses as well as the content and sequence.

Another change includes the emphasis area in environmental geology to better serve the undergraduate students desiring a quantitative environmental science option. The program coordinator reports that 10 students have transferred into the major specifically to acquire the knowledge, skills, and abilities offered in the new emphasis area. The program provides an educational experience designed to master the essentials of geology and proficiency in the field, laboratory and computational aspects of the discipline, which includes an introduction to research methods and techniques.

A learning outcome of the Environmental and Natural Resources program is that undergraduate students recognize the diversity of resource uses that must be accommodated on any given management unit. The department faculty have implemented a panel interview process to examine the extent to which students have achieved this outcome. Due to the success of the panel interview process, this method of evaluation will be used in the conservation law course(s) as well as the senior level conservation issues course(s). Resource management principles with respect to conservation biology, economics and policy, and land management are another group of learning outcomes that the faculty assessed by direct measures. However, enrollment in many of the courses requires several semesters of data to have a reasonable sample size. Since many courses are offered only once a year or every two years, the department is monitoring the students’ performance until there is a reasonable representative sample from which judgments can be made.

The graduate program in environmental engineering and science and hydrology are recruiting graduate students with a desire to have over 80% with an average summed GRE over 1800 and a GPR over 3.3. The Assessment Report notes that this goal was met. And, the record states that 100% of the graduate students taking an oral examination on course work and their engineering special topic, thesis or non-thesis option passed general and specialty area knowledge examinations. The PhD program strives to ensure that its continuing PhD students meet similar performance criteria.
Typically, graduate programs require students to have a foundation in planning and conducting research. The Environmental Toxicology graduate program monitors students’ progress in developing scientific research skills to contribute to the body of scholarly knowledge. The doctoral program is designed for graduates to plan and conduct independent research. These skills are applicable to on-going academic research or professional employment and, to date, no corrective actions have been necessary in meeting expectations.

Clemson University is purchasing a system for electronic filing of Assessment Plans and Reports. This system will allow interface between the Office for Institutional Effectiveness and Assessment and the departments (both academic and academic support). The earliest that the software will be available will be Fall 2006. Each of the academic program assessment coordinators will be trained to use the software as well as taught what information is expected in each of the fields. The training shall focus on strengthening measurable strategies to assess student learning outcomes for all degree programs. For the academic support areas, reporting will include the department’s contributions to student learning outcomes. One unique feature of this software is the ability to link academic programs with the general education competencies that are taught within the department. This unique feature will allow the Office of Assessment to prepare institutional reports, which have been prepared by hand in the past. The investment in the software is a demonstration of the Provost’s commitment to many things including to assessment, evaluation of program quality, enhancement of general education, and resource management. More importantly, it is an illustration of Clemson’s desire to provide the best resources available to become the quality institution that it strives toward.
## INSTITUTIONAL EFFECTIVENESS TABLES

### PROGRAMS ELIGIBLE FOR ACCREDITATION AND PROGRAMS ACCREDITED

#### 2006 ANNUAL REPORT

Clemson University's National Institutional and Specialized Accrediting Bodies Recognized by the SC Commission on Higher Education

<table>
<thead>
<tr>
<th>ACCREDITING AGENCIES &amp; AREAS</th>
<th>Accreditable Program</th>
<th>Fully Accredited Program</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date of last visit</td>
<td>Comments</td>
<td>If in process Accreditation Expected.</td>
<td></td>
</tr>
</tbody>
</table>

### American Assembly of Collegiate Schools of Business
- International Association for Management Education

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business (BUS)- business administration &amp; management</td>
<td>X</td>
<td>2000 Accredited</td>
<td>2010</td>
</tr>
<tr>
<td>Business (BUSA)- accounting</td>
<td>X</td>
<td>4/2000 Accredited</td>
<td>2010</td>
</tr>
</tbody>
</table>

### ACCREDITING BOARD FOR ENGINEERING & TECHNOLOGY, INC.
- Baccalaureate & master's level programs in engineering

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering (ENG)</td>
<td>X</td>
<td>2005 Pending</td>
<td>TBA</td>
</tr>
</tbody>
</table>

### American Council for Construction Education
- Baccalaureate degree programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Education (CONST)</td>
<td>X</td>
<td>2/2001 Accredited</td>
<td>2007</td>
</tr>
</tbody>
</table>

### American Dietetic Association
- Coordinated undergraduate programs
- Post baccalaureate internship programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietetics (DIET)</td>
<td>X</td>
<td>1996 Approved</td>
<td>2007</td>
</tr>
<tr>
<td>Dietetics (DIETI)</td>
<td>X</td>
<td>1996 Approved</td>
<td>2007</td>
</tr>
</tbody>
</table>

### Landscape Architecture Accreditation Board (LAAB)
- Programs leading to the first professional degree

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architecture (LSAR)</td>
<td>X</td>
<td>2002 Accredited</td>
<td>2007</td>
</tr>
<tr>
<td>Landscape Architecture (MLA) - Master's</td>
<td></td>
<td></td>
<td>2008</td>
</tr>
</tbody>
</table>

### Computing Science Accreditation Board, INC.
- Baccalaureate programs in computer science
- This accrediting body is now incorporated as a part of ACCREDITING BOARD FOR ENGINEERING & TECHNOLOGY, INC.

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science (COMP)</td>
<td>X</td>
<td>2005 Pending</td>
<td>TBA</td>
</tr>
</tbody>
</table>

### Council for Accreditation of Counseling & Related Education Programs (CACREP)
- Master's degree programs for community counseling, mental health counseling, marriage & family counseling, school counseling, student affairs practice in higher education,

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CACREP master degree</td>
<td>X</td>
<td>2000 Accredited</td>
<td>2007</td>
</tr>
</tbody>
</table>

### National Association of Schools of Art & Design
- Degree-granting schools & departments & nondegree-granting schools

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art &amp; Design (ART)</td>
<td>X</td>
<td>2002 Accredited</td>
<td>2007</td>
</tr>
</tbody>
</table>

### National Council for Accreditation of Teacher Education (NCATE)
- Baccalaureate & graduate programs for the preparation of teachers & other professional personnel for elementary & secondary schools

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
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</thead>
<tbody>
<tr>
<td>Teacher Education (TED)</td>
<td>X</td>
<td>2005</td>
<td>10/2005 2012</td>
</tr>
</tbody>
</table>

### National Architectural Accrediting Board, INC.
- First professional degree programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture (ARCH)</td>
<td>X</td>
<td>2002 Accredited</td>
<td>2008</td>
</tr>
</tbody>
</table>

### National League for Nursing Accrediting Commission, INC (NLNAC)
- Baccalaureate & higher degree programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing (NUR)</td>
<td>X</td>
<td>1998 Accredited</td>
<td>2006</td>
</tr>
</tbody>
</table>

### Commission on Collegiate Nursing Education (CCNE)
- Nursing education programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing - Baccalaureate-degree</td>
<td>X</td>
<td>4/2005 Accredited</td>
<td>2010</td>
</tr>
<tr>
<td>Nursing - Graduate-degree</td>
<td>X</td>
<td>4/2005 Accredited</td>
<td>2010</td>
</tr>
</tbody>
</table>

### Society of American Forester
- Programs leading to a bachelor's or higher first professional degree

<table>
<thead>
<tr>
<th>Program</th>
<th>Fully Accredited</th>
<th>Details on Program</th>
<th>Next visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry (FOR)</td>
<td>X</td>
<td>2005 Accredited</td>
<td>2012</td>
</tr>
</tbody>
</table>
Courses Taught by Faculty

According to Section 59-101-350, the Commission is responsible for collecting “the percent of lower division instructional courses taught by full-time faculty, part-time faculty, and graduate assistants” from four- and two-year post-secondary institutions to be included in the annual report to the General Assembly.

The Commission will use previously-reported CHEMIS information for data in this table. Institutions will have an opportunity to proof this information prior to the publication of the January 2007 report. Faculty definition will be any faculty, staff or graduate assistant who teach a credit course.

Success of Students in Developmental Courses
Applicable to Four-Year Colleges and Universities

According to Section 59-101-350, the Commission is responsible for collecting “the percent and number of students enrolled in remedial courses and the number of students exiting remedial courses and successfully completing entry-level curriculum courses” from four-year institutions to be included in the annual report to the General Assembly. The following information will be collected from the four-year colleges and universities, but excludes the research universities, as these institutions do not offer these types of courses.

For purposes of counting students who exit developmental courses and successfully complete the appropriate entry level course, a student in more than one developmental course and completing more than one entry level course should be counted once for each developmental course he/she exits and once for each entry level course he/she completes. Appropriate entry-level courses for which successful completion is determined will be defined by the developmental instructor as the course for which the student is being prepared.

<table>
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<tr>
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<tbody>
<tr>
<td>ITEM (1)</td>
<td>ITEM (2)</td>
<td>ITEM (3)</td>
</tr>
<tr>
<td>2998</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Student Involvement in Sponsored Research

According to Section 59-101-350, the Commission is responsible for collecting “the percent of graduate and upper division undergraduate students participating in sponsored research programs” from four-year institutions to be included in the annual report to the General Assembly.

The numbers included here should reflect the graduate and upper division undergraduate students who participate in sponsored research programs. Each institution that receives research dollars generated by external funding (sponsored research) should report the number of students who benefit from these dollars.

The CHE will calculate the percentage using these data and headcount enrollment data from the Fall 2005 IPEDS Enrollment Forms.

<table>
<thead>
<tr>
<th>Upper Division, Undergraduate Students</th>
<th>Number of Students Participating in Sponsored Research (Exclude First Professional Students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Division, Undergraduate Students</td>
<td>99</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>603</td>
</tr>
</tbody>
</table>
Results of Professional Examinations

According to Section 59-101-350, the Commission is responsible for collecting “student scores on professional examinations with detailed information on state and national means, passing scores, and pass rates, as available, and with information on such scores over time, and the number of students taking each exam” from four- and two-year institutions to be included in the annual report to the General Assembly. The Commission on Higher Education also uses this information as the primary source with which to fulfill requirements in Section 59-103-30 for performance funding to collect information on Instructional Quality and Graduates’ Achievements by looking at the scores of graduates on post-undergraduate professional, graduate, or employment-related examinations and certification tests.

Past committee work and the development of performance funding have defined the collection of this information to include only first-time test takers (except the teacher education exams at four-year institutions, which include all test takers) for those students who completed an examination during the period of April 1, 2005 through March 31, 2006. The following list displays the exams that each sector has reported in the past. Please use this list as a guide for the exams you report this year on the table provided. Please be aware that your institution may have students taking certification exams that have not been reported on in the past. This would be the case if students were just beginning to complete a new program.

The Commission will request national and state pass rates and any additional information for these examinations, as it is available, from national and state agencies to be used in the report to the General Assembly. These national and state agencies can be found in “A Closer Look.”

<table>
<thead>
<tr>
<th>Name of Exam</th>
<th>Date(s) Administered</th>
<th># of Examinees</th>
<th># of 1st Time Examinees</th>
<th># of 1st Time Examinees who Passed</th>
<th>% 1st Time Examinees Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESEARCH SECTOR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Council Licensure Exam - Registered Nurse</td>
<td>N/A</td>
<td></td>
<td>Only 1st time examinees</td>
<td>99</td>
<td>82</td>
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<tr>
<td>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (K-6)</td>
<td>4/05,6/05,9/05,1 1/05,1/06,3/06</td>
<td>164</td>
<td>162</td>
<td>141</td>
<td>97%</td>
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REPORT TO
SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION

Clemson University

Doctor of Philosophy -- Educational Leadership
Doctor of Philosophy – Curriculum and Instruction
Master of Education – Elementary Education
Master of Education – Secondary Education
Master of Agricultural Education
Doctor of Education – Career and Technology Education
Master of Career and Technology Education
Master of Human Resource Development
Bachelor of Technology and Human Resource Development

June 30, 2006

Submitted by
Nancy C. Dunlap
Associate Director, Accreditation Coordinator
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Introduction

The faculty and staff of the Eugene T. Moore School of Education (ETM SoE) welcome this opportunity to report on our progress in addressing Dr. Kate Steffens’ Reports to the South Carolina Commission on Higher Education of February 2005 as part of our South Carolina Protocol for the State Partnership with the National Council for the Accreditation of Teacher Education (NCATE).

The South Carolina State Partnership is a three-way partnership with NCATE, the South Carolina Department of Education (SDE), and the Commission on Higher Education (CHE). This Partnership has been in effect since 1995, and we value the strength of the relationship. We are justifiably proud of our Partnership; it allows us periodically the opportunity to review our programs in depth, and it provides affirmation of the quality of our programs, resources (human, material, fiscal, and technological), and graduates.

The Protocol specifies the responsibilities and scope of each of the partners. The program reviews are determined by the Protocol, and the institutions respond to the program standards and reviews that are unique to each of the partners. This report, in response to Dr. Steffens’ report, addresses those programs under the purview of the CHE, including:

- Doctor of Philosophy – Educational Leadership
- Doctor of Philosophy – Curriculum and Instruction
- Master of Education – Elementary Education
- Master of Education – Secondary Education
- Master of Agricultural Education
- Doctor of Education – Career and Technology Education
- Master of Career and Technology Education
- Master of Human Resource Development
- Bachelor of Technology and Human Resource Development

While the unique program-area responses are included in the body of this update, there are some issues that are generic to all programs. For example, as a result of the February 2005 visit, we determined a need for closer coordination and alignment of all of our graduate programs for recruitment and retention, particularly of full-time graduate students and minority students. We also discovered a need for a more centralized mechanism for data collection/monitoring for continued program improvement. While our assessment system is constantly evolving and is becoming more nationally recognized as a model, we had focused our attention during its development on our undergraduate teacher education program, fully aware that our next steps would have to include the implementation of the assessment system at the graduate (advanced) level. We are well into that work, and just as significantly, we have hired a new graduate program coordinator who will have school-wide oversight responsibilities for all graduate programs. We believe that this position will bring us the coherence heretofore missing in our overall graduate programming. We await the arrival from the University of Florida of Dr. David Fleming, our Graduate Coordinator, on 17 July 2006.

I. Doctor of Philosophy
Educational Leadership

The Ph.D. in Educational Leadership was recommended for full approval.

Recommendation 1: The program assessment system should include a systematic process to follow-up with candidates who exit the program.

The ETM SoE has developed as part of its assessment system, a means of tracking candidates beginning with an exit survey administered during the comprehensive examination. We will then follow up after one year, three years, and five years. This set of four data points on each candidate will provide us with significant data and inform decision-making on program improvement.

Recommendation 2: Recruitment efforts should continue with an emphasis on full-time candidates; particularly those from diverse backgrounds.

Faculty are working diligently to achieve these program recommendations. The ETM SoE is creating graduate assistantships to attract full-time students, and with the recent placement of the Charles H. Houston Center for Black Experience in Education within the ETM SoE, we are in a position to collaborate more closely to achieve this goal. Faculty have increased their presence at national, regional, and state conferences and meetings for purposes of recruiting as well. We take this charge very seriously, and we will continue to make recruitment of minority and full-time students a priority.

II. Doctor of Philosophy

Curriculum and Instruction (C&I)

The Ph.D. in Curriculum and Instruction was recommended for full approval.

Recommendation 1: develop and refine assessment system

The assessment system is being refined via a review of the program goals and objectives as they relate to the conceptual framework. The Teacher Education C&I Graduate Committee will be working on this as their number-one priority in academic year 2006-7. They were unable to complete this work during 2005-6 because of the failed search for a School of Education Graduate Coordinator. The investment in this new position is specifically to help address the needs of our School of Education graduate programs, including assessment, recruitment, and monitoring / follow-up. Without the Coordinator, the committee had to assume various admissions, recruitment, and policy development roles that consumed their time and energy. We have now hired a Coordinator; he begins in July, and he will direct this initiative.

Recommendation 2: follow-up studies and tracking

The new Graduate Coordinator has as one of his top objectives to implement fully the formal tracking process for our graduate students. This will extend our assessment system data five years out; it will be grounded in the conceptual framework and aligned with the revised program
goals and objectives. While we have developed the procedures and the instruments, the implementation will involve school-wide coordination.

III. Master of Education
   Elementary Education

The Master of Education in Elementary Education was recommended for full approval.

Recommendation #1: formally align program with conceptual framework and national standards (NBPTS)

The M.Ed.- Elementary Program is now aligned with the conceptual framework as evidenced by the rubrics and products now found in our assessment system (http://www.hehd.clemson.edu/schoolofed/assessment/AElemed-1.htm). We plan for a review of the program for the academic year 2006-7. This review was postponed in 2005-6 because four elementary methods faculty position searches were underway. We are excited to have made four high-quality hires in our four main elementary methods positions and will look to these new faculty for leadership and direction in reviewing our program goals and objectives. The revised program goals and objectives that we establish will align with the conceptual framework and also with the National Board for Professional Teaching Standards (NBPTS).

Recommendation #2: develop and refine assessment system

As the MEd program faculty revise the program goals and objectives (Ref: Recommendation 1 above), they will better identify products and define rubrics that contribute to our assessment system. This will allow faculty to aggregate data and make better data-driven decisions on individual candidates and the program in general.

Recommendation #3: follow-up studies and tracking

Again, the new Graduate Coordinator has as one of his top objectives to implement fully the formal tracking process for our graduate students. This will extend our assessment system data five years out, be grounded in the conceptual framework, and align with the revised program goals and objectives (Ref: Recommendation 1 above).

IV. Master of Education
   Secondary Education

The Master of Education in Secondary Education was recommended for full approval.

Recommendation #1: program goals/objectives consistent with candidate expectations

The M.Ed.- Secondary Program has begun to more clearly define their program’s student objectives below. Due to retirement and new positions, the program’s faculty will increase from four to seven with four new high-quality hires having been made in 2005-6. After these faculty
begin in August, the secondary faculty will use the 2006-7 academic year to revisit their program objectives and requirements, better plan and implement the articulation of these goals/objectives to their students, and assure these goals/objectives align with the assessment system.

**Objectives for the M.Ed. in Secondary Education (May 2006)**

The candidate for a Master of Education in Secondary Education will:

- Further develop content expertise through courses selected for their potential to build connections and deepen understanding.
- Identify a key issue in the selected content area, summarize findings in regard to this issue, and pose a possible solution for the issue.
- Evaluate the effectiveness of various methodologies for accomplishing stated objectives.
- Create lessons that reflect the connections of the content to real life and help all students learn.
- Demonstrate an understanding of a democratic education and reflect a commitment that respects individual rights and recognizes diverse points of view.
- Synthesize curricular theory and use it to address important curricular issues.
- Use technology in a manner that helps students learn and promotes student performance.

During the 2006-7 academic year, we will revisit our objectives/goals, articulate them clearly to our students, and make sure that our assessment system is aligned with them.

**Recommendation #2: develop and refine assessment system**

As the M.Ed. program faculty revise the program goals and objectives (Ref: Recommendation 1 above), they will more clearly identify products and define rubrics that contribute to our assessment system. This will allow faculty to aggregate data and make better data-driven decisions on individual candidates and the program in general.

**Recommendation #3: follow-up studies and tracking**

Again, the new Graduate Coordinator has as one of his top objectives to implement the formal tracking process for our graduate students. This will extend our assessment system data five years out, will be grounded in the conceptual framework, and will align with the revised program goals and objectives (Ref: Recommendation 1 above).

**V. Master of Agricultural Education**

The Master of Agricultural Education was recommended for full approval.

The programs in Agricultural Education (Ag Ed) at Clemson University are housed administratively within the College of Agriculture, Forestry, and Life Sciences (CAFLS), rather than the College of Health, Education, and Human Development. While this presents some unique challenges, we acknowledge and welcome our responsibility for the Unit—the entity that recruits, trains, and places highly qualified teachers in the classrooms of South Carolina and beyond.
We are fortunate to have an excellent relationship between the faculties of the ETM SoE and Agricultural Education; this facilitates our collaborative work. A climate of mutual respect and a commitment to the conceptual framework and assessment system foster continuous improvement.

**Recommendation 1:** An advisory council should be formed to provide an avenue to gain external feedback on program operations and enhance collaboration both on and off-campus.

The Agricultural Education Program formed a 23-member advisory committee for its undergraduate (reviewed by the SDE) and its graduate programs. The advisory committee consists of a diverse group of individuals and includes industry leaders, teacher educators, South Carolina Department of Education Officials, secondary administrators and teachers, and college students. We held our first meeting at Sandhill REC on March 14, 2005 and have had 2 additional meetings since that date, with an ongoing commitment to future development.

**Recommendation 2:** The Master of Agriculture Program should be aligned with national standards and the unit conceptual framework, including NBPTS standards.

The Agricultural Education Graduate Program continues to develop our plan to enable us to align with national standards, the unit conceptual framework and NBPTS standards. We have already determined and implemented the following:

1. Graduate students that enter the program for teacher certification follow the same requirements for teacher certification as undergraduates; these requirements are not counted as the graduate work toward the master’s degree.
2. Agricultural Education graduate-level courses are being redesigned to incorporate the CF and national standards
3. Work continues with the state staff to develop a nationally normed assessment for Agricultural Education candidates. Test items will be based on the CF, NBPTS and state standards. Completion date is projected for Spring 2007.

**Recommendation 3:** Performance assessments within the program should be identified and decision points established so candidates have a clear understanding of the assessment process.

We have developed the following plan for decision points:
1. Graduate student application interview. All potential candidates who have applied and qualified for admission to our program participate in the interview process. During the interview the faculty members will ask questions of the candidate to determine the candidate’s knowledge/background in Agricultural Education. It also allows the candidate the opportunity to ask questions of the faculty.
2. Once accepted into the program, the candidate will be assigned a temporary committee chair to analyze courses needed to meet candidate’s career goals. The temporary chair meets with candidates to review their findings, and this begins the development of the candidate’s course of study.
3. A graduate committee is formed, and the GS2 and the area of professional concentration are approved by the end of the first semester.
4. The graduate committee meets at the end of 1st semester to check on progress and on the candidate’s understanding of his/her graduate program and research project.
5. The committee chair meets with the candidate at beginning of 2nd semester to discuss academic performance and the research project. We recommend that the chair meet with candidate weekly.
6. The committee meets again in mid 2nd semester to ensure progress and to discuss the schedule of events, including oral and written comprehensive examinations and future committee meetings.

**Recommendation 4:** Faculty recruitment efforts should continue to secure a female professor, given the growing number of female candidates pursuing the degree.

We have made no progress in this recommendation; we have received a verbal commitment by the Dean of CAFLS to begin advertising in July 2006 for an additional faculty member.

**Recommendation 5:** Faculty should continue to develop and refine their assessment system to ensure that it is aligned with program goals and objectives, conceptual framework, and the unit assessment system. As performance assessments are identified, scoring rubrics can be developed, and candidate results can be entered into the unit data system. These efforts would allow faculty to aggregate the data and make decisions based on data at the candidate and program level.

We have developed and are currently refining rubrics that will enable us to align the graduate program with the unit’s conceptual framework; however, our progress in this area has been delayed with the military deployment of one faculty member to Afghanistan with no replacement offered. We anticipate a surge of effort in Fall 2006.

**Recommendation 6:** A systematic procedure should be established to conduct follow-up studies with candidates who exit the program. This system could be done at the unit or program level, but should track candidates up to five years. The data collected should be grounded in the conceptual framework, but also address program goals and objectives.

We will be interviewing candidates who complete the program prior to their graduation. This will serve as baseline data for the collection process. Graduates will be mailed a survey instrument, currently in development, at the end of their first, third, and fifth years following graduation. The instrument will address program goals and objectives and curriculum strengths and weaknesses. The data collected from graduates in various positions and at diverse experience levels should enhance our ability to identify the strengths and determine areas for improvement.

**Technology and Human Resource Development**

**An Overview**

In her review of the Clemson University programs, Dr. Steffens discovered significant problems in the areas that follow. We took her report very seriously. Upon receiving it, we launched an in-depth analytical process to determine our course of action.
Dr. Steffens provided the following recommendations for the four THRD program areas covered by this review:

**Recommendation 1:** Faculty within the programs should engage in serious self-study to make the necessary changes within their program to reflect the high expectations of the Eugene T. Moore School of Education.

**Recommendation 2:** All programs should be aligned with national, professional, or state standards. This alignment will provide a foundation for teaching and the development of an assessment system.

**Recommendation 3:** Programs preparing candidates for work related to teaching or involvement in schools should be aligned with the unit’s conceptual framework. The conceptual framework will serve as a philosophical base for decision-making.

**Recommendation 4:** To remain part of the unit, faculty must participate in aligning their programs with the “unit assessment system” and move toward a system of performance-based assessment. Candidate performance expectations should be clearly defined and data collection must be a priority.

**Recommendation 5:** A systematic procedure should be established to conduct follow-up studies with candidates who exit the program. This system could be done at the unit or program level, but should track candidates up to five years. The data collected should be grounded in the conceptual framework, but also address program goals and objectives.

**Recommendation 6:** Diversity must be a priority in terms of integration into the curriculum and assessment process. The expectation for all programs is that candidates are prepared to teach or work in a diverse and global society. Data should be collected to provide evidence that candidates have the knowledge and skills related to diversity.

**Recommendation 7:** Diversity should also be a priority in terms of faculty recruitment. Given the changing demographics and current enrollment data, the recruitment and retention of diverse faculty would be a valuable asset for the programs.

**Recommendation 8:** Given the enrollment data, advising expectations, teaching loads, and committee work involved with four programs, the number of faculty working in the four programs is not sufficient.

**Final Recommendation:**
A final recommendation for these four programs is complex. Because the programs are not complying with expectations of the Eugene T. Moore School of Education in terms of unit or program operations, the organizational pathway through which recommended changes would be supported and implemented remains unclear. In light of the deficiencies within the programs and the reluctance of faculty to engage in adequate self-study, a recommendation of termination is appropriate. However, if the administration is willing to restructure the programs to ensure that programs are embedded within strong structures with appropriate leadership, then a recommendation of provisional approval may be acceptable. Provisional approval would only be acceptable if the institution submitted a strong plan for program change with measurable goals and objectives. Follow-up on an annual basis would be preferred until all expectations are met.

In the spirit of the above recommendations, on 25 May 2005, we notified the faculty of THRD of the following:
After extensive deliberation, reflection, and review of appropriate documents and data, we have decided to take the following action regarding the reorganization of the program area of Technology and Human Resource Development.

We are attempting to revitalize a program area that has received negative external reviews. We want the faculty to have the opportunity to be productive, creative, and vital in the new organization, and we look forward to a bright future together.

1. The program area of THRD will be dissolved.
2. The Industrial Technical Education program will move to Secondary Education. [Note: this program is reviewed through the NCATE SPA Review process]. You will need to prepare the requisite paperwork for the Commission on Higher Education to reflect the name change. Also, we are requesting the leadership in the Eugene T. Moore School of Education to convene a planning committee of the ITE faculty, representatives of the State Department of Education Office of Career and Technology Education, and Tri-County Technical College to map out a strategic plan for curriculum development/revision, aggressive marketing, laboratory/equipment sharing, the formation of an external advisory council, and for program sustainability. Additionally, the ITE faculty will need to address adequately the deficiencies indicated in the ITEA/CTTE SPA report.
3. The Workforce Training program concentration will remain in negotiation until you prepare responses to the CHE Report to address adequately and appropriately program deficiencies identified in that report.
4. The Master of Human Resource Development will move completely to the University Center in Greenville beginning Fall 2006. All courses will be taught in Greenville, and all faculty offices will be at the UCG. The MHRD faculty is charged with likewise developing responses to address adequately and appropriately the deficiencies identified in the CHE Report.
5. The MCTE program will be eliminated. No new students will be admitted. Future plans may include the development of a Master of Education with a concentration in career and technology education, but plans should not commence until Fall, 2007, at the earliest, with an in-depth needs assessment. This will give you time and energy to focus on the undergraduate program while phasing out the MCTE.
6. All technology labs, resources, and staff will be consolidated under Teacher Education in coordination with the Center of Excellence for Instructional Technology Training.
7. Courses will need to be renamed and/or renumbered to reflect program changes and to eliminate the THRD nomenclature.
8. You are to begin phasing out CAD courses beginning Spring 2006. For Fall 2006, we should be down to two (2) courses that can be taught by graduate teaching assistants. You should explore the possibility of coordination with the technical college for future skills development for students.
9. As of now, there is a moratorium on admitting any new students into the doctoral program (EdD). The EdD program revisions need to go back to the full faculty of Educational Leadership before it goes forward. The program revisions have enormous implications for all of them, and they need to approve it as a faculty; once this occurs, the program revisions would need to be reconsidered by the respective and appropriate Curriculum Committees. The entire
faculty need to develop the standards, curriculum, structure, operation, organization, determine student products/artifacts, levels, et alia, for the ETM SoE Assessment System.

10. Personnel
   a. The faculty assignments follow:
      i. Clint Isbell  LCH
      ii. Phil McGee  LCH
      iii. John Duncan  LCH
      iv. Cheryl Poston  Joint appointment for doctoral students; primary assignment, evaluation, PTR, PTAR in Teacher Education
      v. Bill Paige  Joint appointment for doctoral students; primary assignment, evaluation, PTR, PTAR in Teacher Education
   b. The staff assignments follow:
      i. Sally Glenn  Interim Chair, LCH
      ii. Judy Rhinehart  .5 FTE to support Graduate Coordinator

11. The “department” (0707) will need to be renamed to reflect the changes, possibly LHCE (“the Faculty of Leadership, Human Resources, and Counselor Education.”)

12. Office assignments for Fall 2005 will reflect the programmatic changes.

It is critical to note that these changes are being made to enhance program alignment and to provide for appropriate program positioning, to rectify problems that have been identified by external review, to enable faculty to respond creatively to emerging trends in their respective fields, to provide a structure that is forward-looking rather than historically driven, to provide support to enable faculty to focus on research, scholarship, and external grants development, to fully integrate disparate program areas into the mainstream of the Eugene T. Moore School of Education, and to better serve our most valuable resource—our students.

It is in the spirit of the above charge to the THRD faculty that we submit our results to date, being cognizant that three of these programs are still works-in-progress.

### VI. Doctor of Education

#### Career and Technology Education

**Status of the Current Program**
In the organizational restructuring of the ETM SoE, this program was aligned with the Department of Leadership, Counselor Education, Human and Organizational Development. Given the Dr. Steffens’ review and the status of this program, we suspended admissions to the program in July 2005. This degree option has been removed from the online and print admissions applications.

We have completed an analysis of the current students in the program and determined that there are approximately 35 active students. The ETM SoE has communicated with these students to assure them that we will provide them with reasonable support and time for them to complete their degrees. We will be providing between three and four courses each semester to allow these active candidates to complete the curriculum requirements. The letter sent to these students clearly articulates the timeline for completion. Once these students have completed the program,
we will move to eliminate the Doctor of Education in Career and Technology Education. We are presently preparing the requisite paperwork to submit through the Clemson University administration and from there to the Commission on Higher Education to effect this change.

**Future of the Program**
This past year, under the directive of the Interim Chair of Leadership, Counselor Education, Human and Organizational Development, we assembled a doctoral task force to engage in an evaluation of the doctoral program in educational leadership. This task force was comprised of individuals representing various program areas and areas of academic preparation, and the task force met approximately twice a month. This task force collected data from all interested parties regarding doctoral education and opportunities. In May 2005, the task force submitted a report to the interim department chair and Dean of the College of Health, Education, and Human Development. The task force made numerous recommendations, but two are pertinent to this program. One recommendation was to expand the concentration area options within the Educational Leadership degree. Currently, the only concentrations are in K-12 Education and Higher Education. The task force developed guidelines and a mechanism to establish additional concentration areas. For example, if faculty trained in Counselor Education or faculty trained in Career and Technology Education wish to develop a concentration within the Doctor of Philosophy in Educational Leadership, an avenue exists for them to do so. The guidelines are clear, and they specify the process for Educational Leadership faculty to consider additional concentrations. If Career and Technology Education faculty decide to pursue this option, they will be required to prepare a proposal representing quality, alignment of standards, and program assessment criteria.

**VII. Master of Career and Technology Education**

The Master of Career and Technology Education program will be terminated. No new students have been admitted since summer 2005, but current students are being allowed and encouraged to complete their degree. Future plans may include the development of a Master of Education with a concentration in career and technology education, but plans should not commence until Fall, 2007, at the earliest, with an in-depth needs assessment followed by appropriate approvals at the school, college, institutional and state levels.

**VIII. Master of Human Resource Development**

This past year has been one of change for this unit. Based on the CHE report, the areas of concern were organizational structure, curriculum revision, assessment processes, and diversity. In the past year, faculty and administrators have undertaken numerous efforts to redefine this program, its purpose, and its future.

The initial point of change began in May 2005 with a detailed memorandum being distributed by hand to all faculty in the former Technology and Human Resource Development program area. Much of this memorandum focused on the undergraduate components of this program. From that extensive memo, the following items are pertinent.

1. *The program area of THRD will be dissolved.*
2. The Master of Human Resource Development will move completely to the University Center in Greenville beginning Fall 2006. All courses will be taught in Greenville, and all faculty offices will be at the UCG. The MHRD faculty is charged with likewise developing responses to address adequately and appropriately the deficiencies identified in the CHE Report.

Since this initial memo, the faculty of the HRD program have engaged in an extensive self-study. In concurrence with the final recommendation of the CHE Report, the administration has restructured programs to ensure that programs are embedded within strong structures with appropriate leadership. In short, the HRD program has been housed in the Leadership, Counselor Education, Human and Organizational Development (LCH) unit.

Below is the report from the self-study that the HRD faculty have developed to ensure a quality program, training competent candidates.

**Revision and Updating of the Masters of HRD Program at Clemson University**

**History of the Degree**

The current curriculum defining the Masters in Human Resource Development is rooted in the training philosophies and techniques of the early 1980’s and was designed to serve the needs of in-career professionals using classrooms and laboratories located on the Clemson University campus. While the 36-hour program in its current form has been durable for the past twenty-plus years, it was philosophically built around the instructional systems design (ISD) model as advocated by the leading researchers and theoreticians of the period, including Briggs, Gagne, Davies, Mager, Pipe, Gilbert, and Rummler, for example. During this time, human resource development meant training using a systems approach to produce trainees predictably who, at the end of their training, were able to demonstrate their competence to perform a task as measured against external standards of performance.

The MHRD program in its current form consists of a core of six foundation courses designed to provide a common foundation of theory and practice. These courses are:

- HRD 830 (3) Concepts of Human Resource Development
- HRD 845 (3) Needs Assessment for Education and Industry
- HRD 847 (3) Instructional Systems Design
- HRD 849 (3) Evaluation of Training and Development/HRD Programs
- HRD 860 (3) Instructional Materials Development

Along with the above, two research courses are required:

- HRD 897 (3) Applied Research and Development
- CTE 889 (3) Research in Education

The remaining 15 hours of the 36-hour program may be completed by selecting from Application and Cognate courses offered by either the School of Education or by other departments and schools located on campus. Popular application and cognate courses include business management, counseling, organization development, and media production.
A Changing Environment
Over the past ten years, significant changes have occurred that have dramatically affected the environment in which we operate, the content of our curriculum, and the demand for our program. These changes center on (a) competition; (b) a shift in the profession from one that emphasized learning to one that now emphasizes performance; (c) expanding employment opportunities; and (d) the reduction of the MHRD staff.

Competition
Because of the growing importance of hiring and maintaining a competent workforce as a competitive strategy, the Masters in HRD has become a popular degree not only in the business world, but also for those in non-profit organizations and government as well. For this reason, private universities such as Webster and Strayer have established thriving programs in Greenville. Webster University has no fewer than eight campuses located in South Carolina. Webster University, more than likely, trains more South Carolinians in HRD than does Clemson.

In addition to campus-based programs, many outstanding HRD programs are going “on-line” in order to serve the needs of full-time working professionals worldwide. Notable programs include the programs at: Florida State University, University of Illinois (Urbana-Champaign), and Kansas State University not to mention the offerings by for-profit universities such as the University of Phoenix and Jones International University. There are also a number of Corporate Universities that are offering Human Resource Development and Management courses through their internal training systems.

What is our current situation? The day of classrooms filled with in-career, masters’ level, professionals eagerly awaiting a Clemson professor is coming to an end. Our program, our school, our entire university, now operates in a competitive environment in which high-quality students have a choice of schools, programs, and delivery modes that did not exist a mere ten years ago. This situation requires that we change and adapt in order to excel and compete.

Shifting from Learning to Competence to Performance
Over the past twenty years, there has been a shift in the curriculum content of human resource development programs from those based upon the design of instructional systems to those that emphasize performance technologies. In the 70s and 80s, the instructional-systems approach allowed trainers to improve human performance through the acquisition of new knowledge, skills, and attitudes. Depending upon when the program was founded and the technical orientation of the university (a public land grant mechanical and agricultural school versus a private university where emphasis is placed upon the humanities), the nomenclature of the programs can range from “workforce development” (Penn State), to “adult education” (Oregon State University), to “instructional systems design” (Indiana University), to “Human Resource Development” (Western North Carolina).

As the profession matured and clarified its role in modern society, it acquired and adopted philosophies, methods, and techniques from a wide spectrum of fields and disciplines including organization development, cognitive psychology, industrial engineering, ergonomics, safety, quality control, management, and philosophical topics such as ethics. Today, the training and
development field is a multi-billion-dollar industry where return on investment (ROI) and trainee competency are closely scrutinized by employers. Furthermore, as our society moves into the post-modern age where more and more jobs are based upon information, data generation, problem solving, and service, HRD is viewed as a primary mechanism for gaining and maintaining a strategic advantage for organizations competing in a global marketplace. This means that the trainer of the 70s and 80s is evolving into the human performance improvement professional of the 21st century.

Leadership and Staffing
As of July 1, given the restructuring of THRD, the MHRD program is being offered using Phil McGee and John Duncan, along with a limited number of adjunct faculty who are degreed practitioners. Phil is serving as the coordinator of the program, reporting directly to the interim chair of the faculty of Leadership, Counselor Education, Human and Organizational Development.

Recommendations
Given our current situation, it is time that we gave thoughtful consideration to four areas of concern. First, our curriculum needs to be updated to meet the HRD staffing needs of 21st century organizations. Second, we must attract diverse, motivated, academically talented, in-career professionals as students. Third, we need to attract and maintain a core HRD faculty who possess both practitioner experience and appropriate academic preparation. This core faculty would furthermore, be augmented by a cadre of adjunct professors who meet the same high standards as required of the core faculty. And fourth, we must consider alternative delivery modes beyond classroom instruction.

Curriculum
The current MHRD curriculum described above was developed in the early 1980s on the assumption that the program would be delivered using traditional classroom-based teaching methods and strategies using the teaching technologies of the time, i.e. 35mm slide projectors, overhead projectors, flip charts, videos, and of course, the ever faithful blackboard. Students attended class either at Clemson University or at the University Center in Greenville, with research being conducted in the library.

Today, the emphasis in HRD has moved from learning knowledge, skills, and attitudes to improving human performance through a wide variety of intervention strategies that include training, organization development, work re-design, and improving the management of organizations. To meet the emerging skill set of the profession, the following 36-hour program of study is recommended.

Course Titles

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRD 830</td>
<td>Concepts of Human Resource Development</td>
<td>3 Credit Hrs.</td>
</tr>
<tr>
<td>HRD 845</td>
<td>Needs Assessment for Education and Industry</td>
<td>3 Credit Hrs.</td>
</tr>
<tr>
<td>HRD 847</td>
<td>Instructional Systems Design</td>
<td>3 Credit Hrs.</td>
</tr>
<tr>
<td>HRD 849</td>
<td>Evaluation of Training and Development</td>
<td>3 Credit Hrs.</td>
</tr>
<tr>
<td>HRD 870</td>
<td>Consulting for Education and Industry</td>
<td>3 Credit Hrs.</td>
</tr>
<tr>
<td>HRD 880</td>
<td>Human Performance Improvement</td>
<td>3 Credit Hrs.</td>
</tr>
</tbody>
</table>
This curriculum revision was submitted and approved via the university channels this past spring. This is a significant achievement for this program.

Assessment
Under the leadership of Dr. McGee and Dr. Cawthon, the HRD program is participating in the Eugene T. Moore School of Education Assessment system. They have written a SACS assessment plan. This plan follows. Like the other LCH programs, this form/process will be replaced with the HRD faculty completion and submission of their NCATE program assessment report by May 1 of each year.

This plan addresses success and weakness of the program as well as suggested areas for improvements.

Students
In order to attract and retain high-quality graduate students, HRD is looking beyond being an upstate program serving the I-85 industrial corridor. Currently about one-half of our masters-level students are employed by regional organizations, while the other half is composed of inexperienced graduate students working either on or off campus in non-HRD-related jobs. If we are to become a premiere program and add our fair share to Clemson’s becoming a top-20 institution, we must look beyond our region and state for promising students. A strategy used by many schools and departments is to identify those people who are currently in the process of becoming professionally successful. These people are usually fully employed, are between the ages of 25 and 45, have made significant strides into middle management or professional positions, and are looking for educational opportunities to enhance and promote their careers. Typically they have clearly defined goals and work for organizations that are willing to underwrite their graduate education in an effort to entice these people to stay and “up” the professionalism of their workforce. We are of the opinion that our best “hunting ground” for such students may be found within corporate universities and readers of such journals as Chief Learning Officer, Training Magazine, Performance Improvement published by the International Society for Performance Improvement and Training and Development published by the American Society for Training and Development.

Faculty
As stated above, we need to attract and maintain a core HRD faculty who possess both practitioner experience and appropriate academic preparation. We also need to identify adjunct faculty who are able to meet the same strict standards as set for tenure-track faculty. Because the program trains both practitioners and academicians, we feel that the faculty should have a very strong experiential base in which to ground HRD and performance improvement theories, tactics.
and strategies. In order to create such a faculty, as with the students, we must search nationally or internationally for qualified candidates.

**Delivery Mode**

To attract and keep the caliber of student and faculty envisioned, we must become a nationally recognized Masters level program in HRD and performance improvement. To accomplish this, we must look beyond Perimeter Road and the University Center in Greenville. We must do, as other leading programs are doing, and that is to deliver our cutting-edge program of study via the Internet.

We currently have the technology, and we have gained valuable experience over the past five years delivering courses through the Office of Off-Campus Distance and Continuing Education and by working with the Boys and Girls Clubs of America to deliver our MHRD program via the Internet. As of fall 2005, the entire program is being offered on line.

**Conclusion**

Thomas Green Clemson envisioned a “high seminary of learning” located in the lush green rolling hills of the piedmont. Today, President Barker has set forth, in that same spirit, the goal that Clemson become a top-20 university. While no one can accomplish this goal by himself or herself, we can—as collaborating faculty, programs, departments, and schools—through hard work, diligence, vision and a “can-do” attitude, create the environment and foundation for that goal to become a reality that will in turn benefit our state, our nation, and future generations.

**Assessment Plan**

**Human Resource Development**

Masters of HRD (Human Resource Development)
August 2005 to May 2006

**Expanded Statement of Institutional Purpose**

1. University Mission Statement:
   The mission of Clemson University is to fulfill the covenant between its founder and the people of South Carolina to establish a “high seminary of learning” through its land-grant responsibilities of teaching, research and extended public service.

2. College Mission Statement:
   The College of Health, Education, and Human Development will be recognized for innovative, multidisciplinary instruction, research, and service that support and enhance human capabilities in all life stages and environments.

3. Eugene T. Moore School of Education Mission Statement:
   Our Mission of the Eugene T. Moore School of Education is to prepare caring and capable professionals through intellectually engaging experiences in theory, method, and research that connect them to the communities in which they live and serve.

4. Program Mission Statement:
The Human Resource Development faculty is dedicated to educating and training HRD professionals to function in culturally diverse organizational settings. This training utilizes a blended method of distance learning and on-site training. The program is recursive in that it emphasizes methodologies used by practitioners in business, industry, government, and non-profit organizations to deliver program content and skills.

The faculty supports the following principles, embedded into the process of preparing HRD professionals:

A. Emphasizing the value and worth of the individual.
B. Promoting of the concept that the ultimate goal of HRD is to enhance the economic environment
C. Instilling within learners that HRD is dedicated to the development of human potential in all people
D. Emphasizing methods and techniques that produce results that are predictable and productive
E. Maintaining a high level of responsibility for maintaining ethical working environments within the profession
F. Students’ ability to demonstrate the competencies of HRD practitioners.
G. Knowledge of the role and function of HRD professionals.
H. Commitment to assessment, testing, evaluation and other research and inquiry techniques and strategies.

To promote the development of these aforementioned core values, each is incorporated in the HRD curriculum that is based upon standards established for the profession by:

- American Society for Training and Development (ASTD) models for human performance improvement;
- ASTD’s models for learning technologies;
- International Board of Standards for Training, Performance, and Instruction;
- Academy of Human Resource Development’s Standards on Ethics and Integrity.

Currently the MHRD program is based upon the ASTD Human Performance Improvement Process (Rothwell, W. 1996) which consists of:

- Cause and performance analysis;
- Intervention implementation;
- Change management and Leadership;
- Evaluation and Measurement

Specifically, these are reflected in the following curriculum objectives:

Cause and Performance Analysis Skills
1. To prepare professionals to identify effectively performance gaps or opportunities;
2. To prepare HRD practitioners to design and develop needs-analysis tools and techniques;
3. To prepare HRD practitioners to identify the knowledge and skills requirements, teams, jobs, tasks, roles and work (McLagan, 1989);
4. To prepare questioning and data gathering skills;
5. To prepare HRD practitioners to analyze and synthesize data and evidence in order to construct and implement solution strategies.
**Intervention Implementation Skills**
1. To prepare HRD practitioners to interpret performance information;
2. To select appropriate intervention strategies that address the root causes of performance gaps;
3. To forecast and analyze the effects of interventions upon the organization and humans;
4. To assess the relationship and potential outcomes of various intervention strategies;
5. To identify critical business issues and changes;
6. To identify and implement human and organizational performance strategies.

**Change Management and Leadership Skills**
1. To prepare HRD practitioners to determine causes of human performance gaps;
2. To develop remediation strategies;
3. To prepare employees for changes at the following levels: individual, work group and organization;
4. To become effective internal and external consult;
5. To acquire the skills and competencies of effective facilitators;
6. To provide leadership and counsel for organizations.

**Evaluation and Measurement Skills**
1. Evaluating performance gaps to identify opportunities for improving human and organizational performance;
2. Evaluating results against organizational goals to develop organizational strategies and tactics;
3. Using evaluation data a guide for revision of products and programs;
5. Determining the ROI (Return on Investment) of various intervention strategies and techniques;
6. Acquiring skills and competencies related to evaluation instruments;
7. Possessing a working knowledge of statistical concepts and methods.

The chart below provides an overview of our assessment plan of the core curricula areas for 2005-2006.

**Assessment Strategies**

<table>
<thead>
<tr>
<th>Assessment Area</th>
<th>Written Comp. Exams</th>
<th>Alumni Survey</th>
<th>Graduating/Exit Student Survey</th>
<th>Advisory Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause and performance analysis</td>
<td>3 X annually</td>
<td>Annually</td>
<td>3 X annually</td>
<td>On-going</td>
</tr>
<tr>
<td>Intervention implementation</td>
<td>3 X annually</td>
<td>Annually</td>
<td>3 X annually</td>
<td>On-going</td>
</tr>
<tr>
<td>Change management and Leadership</td>
<td>3 X annually</td>
<td>Annually</td>
<td>3 X annually</td>
<td>On-going</td>
</tr>
<tr>
<td>Evaluation and Measurement</td>
<td>3 X annually</td>
<td>Annually</td>
<td>3 X annually</td>
<td>On-going</td>
</tr>
</tbody>
</table>

The following goals for HRD are based on the University goals of excellence in teaching at the graduate level and fostering Clemson’s academic reputation through strong academic programs.
Goal: To educate HRD practitioners in a dynamic program of academic learning designed to fulfill the needs of a wide spectrum of organizations, who have respect for the dignity and worth of the individual and a commitment to the fulfillment of human and organizational potential

Intended Student Outcomes

1: Knowledgeable and Competent HRD Cause and Performance Analysis.
Indicator:
Means of Assessment: Student Knowledge in HRD Cause and Performance Analysis competence will be assessed by successful completion of class and capstone projects, course-related tests, and a written comprehensive examination.

Criteria for Success: 1) Comprehensive Written Examination--90% of students shall receive a passing mark on the Comprehensive Written Exam related to Cause and Performance Analysis; 2) 100% of HRD students will successfully complete the capstone project that demonstrates competencies to solve practitioner-level problems and issues. The capstone project requires that students demonstrate their abilities to apply core competencies taught and acquired throughout the program. 3) 75% of the Alumni/Exit Surveys will indicate satisfaction with the skills and knowledge that were taught related to Cause and Performance Analysis. 4) A consensus of the Advisory Board will endorse the Cause and Performance Analysis content of the program as being appropriate for HRD practitioners.

2. To apply knowledge of Intervention Implementation
Indicator:
Means of Assessment: Student competence to apply knowledge of Intervention Implementation will be assessed by successful completion of class and capstone projects, course-related tests, and a written comprehensive examination.

Criteria for Success: 1) Comprehensive Written Examination-90% of students shall receive a passing mark on the Comprehensive Written Exam related to Intervention Implementation; 2) 100% of HRD students will successfully complete the capstone project that demonstrates competencies to solve practitioners-level problems and issues. The capstone project requires that students demonstrate their abilities to apply core competencies taught and acquired throughout the program. 3) 75% of the Alumni/Exit Surveys will indicate satisfaction with the skills and knowledge that were taught related to Intervention Implementation. 4) A consensus of the Advisory Board will endorse the Intervention Implementation content of the program as being appropriate for HRD practitioners.

3. Change Management and Leadership
Indicator:
Means of Assessment: Student competence to apply knowledge of Change Management and Leadership will be assessed by successful completion of class and capstone projects, course-related tests, and a written comprehensive examination.

Criteria for Success: 1) Comprehensive Written Examination-90% of students shall receive a passing mark on the Comprehensive Written Exam related to Change Management and Leadership; 2) 100% of HRD students will successfully complete the capstone project that demonstrates competencies to solve practitioner-level problems and issues. The capstone project requires that students demonstrate their abilities to apply core competencies taught and acquired throughout the program. 3) 75% of the Alumni/Exit Surveys will indicate satisfaction with the skills and knowledge that were taught related to Change Management and Leadership. 4) A consensus of the Advisory Board will endorse the Change Management and Leadership content of the program as being appropriate for HRD practitioners.

4. Evaluation and Measurement
Indicator:

Means of Assessment: Student competence Evaluation and Measurement will be assessed by successful completion of class and capstone projects, course-related tests, and a written comprehensive examination.

Criteria for Success: 1) Comprehensive Written Examination-90% of students shall receive a passing mark on the Comprehensive Written Exam related to Evaluation and Measurement; 2) 100% of HRD students will successfully complete the capstone project that demonstrates competencies to solve practitioner-level problems and issues. The capstone project requires that students demonstrate their abilities to apply core competencies taught and acquired throughout the program. 3) 75% of the Alumni/Exit Surveys will indicate satisfaction with the skills and knowledge that were taught related to Evaluation and Measurement. 4) A consensus of the Advisory Board will endorse the Evaluation and Measurement content of the program as being appropriate for HRD practitioners.

IX. Bachelor of Technology and Human Resource Development

The bachelor of THRD contains presently two concentrations; the first is Industrial Technology Education, and the second is the Workforce Training Program.

A. Industrial Technology Education

As indicated in the THRD Overview section of this report, the ITE program was moved to Secondary Education in fall 2005. We convened a planning committee of the ITE faculty, representatives of the State Department of Education Office of Career and Technology Education, and Tri-County Technical College to map out a strategic plan for curriculum development/revision, aggressive marketing, laboratory/ equipment sharing, the formation of an
external advisory council, and for program sustainability. That plan is still in development. Faculty are reviewing state-of-the-art programs such as *High Schools That Work* (SREB program specifically addressed in the *Education and Economic Development Act of 2005*), *Making Middle Schools Work*, also from SREB, and *Project Lead the Way*, an innovative approach to pre-engineering.

Faculty were also charged with addressing adequately the deficiencies indicated in the International Technology Education Association/Council on Technology Teacher Education (ITEA/CTTE) SPA Report; the THRD faculty submitted their Conditions Report to (ITEA/CTTE) in February 2006. The program had been approved with conditions, and the conditions were to have been addressed and removed during Spring 2006; to date, we have not heard of its disposition.

Upon SPA approval, the THRD faculty must immediately begin the process of addressing the new ITEA/CTTE standards to assure program compatibility and quality performance of candidates. Industrial Technology Education remains a critical teaching area for our state, and ours is one of only two in SC training teachers in this area.

B. Workforce Training Program

The Workforce Training program concentration will remain in negotiation until the faculty have prepared responses to the CHE Report to address adequately and appropriately program deficiencies identified in that report. To date, these are still pending. In the meantime, however, we have suspended admissions to the program.