Goal 4: Transform Education Into an Evidence-Based Field

Performance Goals

Quality of Education Research
The Department demonstrated a thorough commitment to research quality this year by expanding the use of scientifically based procedures for the evaluation of Department programs, training a new generation of education researchers in rigorous methodologies, and improving the quality of data collections.

In FY 2005, 100 percent of newly funded research proposals were deemed to be of high quality by an independent review panel of qualified scientists.

Relevance of Education Research
The Department prioritizes the needs of education practitioners and policymakers to ensure that we are providing germane information for the improvement of education. In FY 2005, we published relevant research on reliable practices that support learning, improve academic achievement and increase access to educational opportunities for all students; the condition and progress of education in the United States; and the effectiveness of federal and nonfederal education programs.

In FY 2004, the most recent year for which we have data, half of the Department’s newly funded research projects were deemed to be of high relevance by an independent review panel of qualified practitioners.
Goal 4: Transform Education Into an Evidence-Based Field

Key Measures

In FY 2005, the Department administered five distinct programs supporting the objectives of Goal 4. Each program established measures and targets to assess its performance. From this master set of measures, the Department identified two key measures that focus on significant areas of performance related to Goal 4.

See p. 58 for an explanation of the documentation fields for key measures.

Quality of Education Research

The Department has elevated the standards and methodologies for Department-sponsored education research. Funding of research proposals is based on clear criteria for research excellence. As in other scientifically based fields, rigorous research methods in education contribute to reliable and valid conclusions, in this case about the best ways to educate our nation’s children.

The Department demonstrated a thorough commitment to research quality this year by expanding the use of scientifically based procedures for the evaluation of Department programs, training a new generation of education researchers in rigorous methodologies, and improving the quality of data collections. In 2005, the Department accomplished the following:

- The Department set in place a procedure that would give competitive preference to grant applications that propose experimental or quasi-experimental research designs to evaluate the effectiveness of their programs. This action will expand the number of programs and projects funded by Department programs that are evaluated using the most rigorous research methods.

- The Department created new pre- and postdoctoral research training grant programs in the education sciences to support the development of innovative interdisciplinary training programs for students interested in pursuing careers in applied education research. Together these programs will train a total of 266 fellows.

- Focused projects on data quality contributed to the ongoing improvement of education data issued by the Department. By mapping the relationship of incentives and response rates, we will more effectively use incentives to increase response rates. Also, data on timeliness has resulted in Department-wide efforts to reduce the time frame from the end of data collection to the release of a report.

To measure research quality, the Department requires all research proposals to be reviewed by an independent panel of qualified scientists. In FY 2004, 97 percent of newly funded research proposals were deemed to be of high quality.
4.1 Research, Development, and Dissemination. The percentage of new research proposals funded by the Department’s National Center for Education Research that receive an average score of excellent or higher from an independent review panel of qualified scientists.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>88</td>
</tr>
<tr>
<td>2004</td>
<td>97</td>
</tr>
<tr>
<td>2005</td>
<td>100</td>
</tr>
</tbody>
</table>

We met our 2005 target of 100.

Analysis of Progress. Since data on this measure were first collected in FY 2003, the Department has seen a steady increase in the percentage of proposals for newly funded education research that receive an average score of excellent or higher. In FY 2005, all research funded was deemed to be of high quality with a rating of excellent.

Data Quality. The Department has established a system of peer review that is similar in many ways to the process of peer review at the National Institutes of Health. Independent review panels comprise 12 to 20 leading researchers. Panels evaluate the scientific and technical merit of research proposals.

Target Context. The Department did not establish a target for this measure for FY 2004; the measure was newly established for FY 2005. The target of 100 percent for FY 2005 signifies a continued commitment by the Department to ensure that all newly funded research meets high standards of research quality.

Related Information. More information on the National Center for Education Research, its purpose, and study summaries is available at http://www.ed.gov/about/offices/list/om/fs_po/ies/ncer.html and http://www.ed.gov/about/offices/list/ies/programs.html.

Relevance of Education Research

In addition to a focus on sound methodology, education researchers need to address practical problems in powerful ways. The Department aligns its priorities with the needs of education practitioners and policymakers to ensure that we are providing information that is relevant to the improvement of education. In 2005, we provided parents, educators, students, researchers, policymakers, and the general public with reliable information about practices that support learning, the condition and progress of education in the United States, and the effectiveness of federal and nonfederal education programs.

- The Department operates the What Works Clearinghouse, which collects, screens, and identifies studies of the effectiveness of education interventions. In 2005, the clearinghouse reviewed 76 studies on middle school mathematics curricula, 10 of which met its high standards for credible causal evidence of effectiveness.
- During FY 2005, the Department published the Condition of Education 2005 and released other publications including the Digest of Education Statistics, Projections of Education Statistics, and the National Assessment of Educational Progress long-term trend report. By describing all aspects of education in the United States, these reports help inform Americans about the current status of education in the
United States, progress toward improvement, and anticipated trends into the future.

- The Department launched three new program effectiveness studies in 2005. Covering the areas of mentoring, elementary school mathematics curricula, and professional development strategies for mathematics education, these studies will provide scientific evidence on the effectiveness of education programs and practices based on the most rigorous research designs.

The Department ensures the production of relevant education research by having all newly funded research reviewed by an independent panel of qualified practitioners. As the results from Department research projects begin to affect state and federal decisions on discretionary grants and the flow of program funds to schools, we expect that practitioners will want to consider evidence on what works and program developers will produce it. In FY 2004, half of the newly funded research projects were deemed to be of high relevance.

### Analysis of Progress

While FY 2004 results for relevance show a decrease from FY 2003, we met our target that half of all new research projects be deemed as highly relevant.

### Data Quality

To evaluate the relevance of newly funded research projects, a panel of experienced education practitioners and administrators reviews descriptions of a randomly selected sample of newly funded projects and rates the degree to which the projects are relevant to education practice. These panels are convened after the close of the fiscal year to review proposals of the prior year.

### Target Context

The FY 2004 target of 50 percent was based on trend data prior to the availability of actual data for FY 2003 and does not represent an intended decrease in the percentage of new research projects deemed of high relevance. The FY 2005 target of 65 indicates that with time, the Department aims for an increasing majority of funded research projects to be highly relevant to education practice.

### Related Information

More information on the National Center for Education Research, its purpose, and study summaries are available at [http://www.ed.gov/about/offices/list/om/fs_po/ies/ncer.html](http://www.ed.gov/about/offices/list/om/fs_po/ies/ncer.html) and [http://www.ed.gov/about/offices/list/ies/programs.html](http://www.ed.gov/about/offices/list/ies/programs.html).

### Additional Information

Data for FY 2005 will be available in March 2006.
Discontinued Strategic Measures

The following measure was discontinued after FY 2004 but was reported as pending in our FY 2004 Performance and Accountability Report. (See p. 23 for a discussion of why we discontinued measures.)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Fiscal Year</th>
<th>Target</th>
<th>Actual</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.1</td>
<td>2004</td>
<td>75</td>
<td>Not available</td>
<td>Data not collected</td>
</tr>
<tr>
<td>4.2.1 Percentage of new research projects funded by the Department that are deemed to be of high relevance to educational practice as determined by an independent review panel of qualified practitioners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source and Note

4.2.1 U.S. Department of Education, Institute of Education Sciences, panel reviews.

This measure was discontinued and replaced with measures that more precisely identify the universe of projects under consideration.
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Program Performance Summary

Five of our grant programs most directly support Goal 4. These programs are listed below. In the table, we provide an overview of the results of each program on its program performance measures. (See p. 59 for our methodology of calculating the percentage of targets met, not met, and without data.) Individual program performance reports are available at http://www.ed.gov/about/reports/annual/2005report/program.html. We also provide both FY 2005 appropriations and FY 2005 expenditures for each of these programs. (See pp. 24-25 for an explanation of why appropriations and expenditures for a given year are not the same and the effect that difference has on the connection between funding and performance.)

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Appropriations†</th>
<th>Expenditures‡</th>
<th>FY 2005</th>
<th>FY 2004</th>
<th>FY 2003</th>
<th>FY 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY 2005 $ in millions</td>
<td>FY 2005 $ in millions</td>
<td>% Met</td>
<td>% Not Met</td>
<td>% No Data</td>
<td>% Met</td>
</tr>
<tr>
<td>ESEA: Indian Education National Activities</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESRA: Research, Development and Dissemination</td>
<td>164</td>
<td>111</td>
<td>43</td>
<td>0</td>
<td>57</td>
<td>80</td>
</tr>
<tr>
<td>ESRA: Statistics</td>
<td>91</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESRA: Research in Special Education</td>
<td>83</td>
<td>71</td>
<td>///</td>
<td>/// (not funded)</td>
<td>/// (not funded)</td>
<td>/// (not funded)</td>
</tr>
<tr>
<td>RA: National Institute on Disability and Rehabilitation Research</td>
<td>108</td>
<td>105</td>
<td>13</td>
<td>0</td>
<td>88</td>
<td>0</td>
</tr>
<tr>
<td>Administrative and Support Funding for Goal 4*</td>
<td>9</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>460*</td>
<td>390</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† Budget for each program represents program budget authority.
‡ Expenditures occur when recipients draw down funds to cover actual outlays. FY 2005 expenditures may include funds from prior years’ appropriations.
A shaded cell denotes that the program did not have targets for the specified year.
/// Denotes programs not yet implemented (Programs are often implemented near the end of the year they are first funded.)
* The Department does not plan to develop performance measures for programs, activities, or budgetary line items that are administrative in nature or that serve to support other programs and their performance measures.
* Expenditures by program do not include FY 2005 estimated accruals in the amount of $52 million.

ESEA: Elementary and Secondary Education Act
ESRA: Education Sciences Reform Act
RA: Rehabilitation Act
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PART Analysis

In preparation for the FY 2005 budget, the Department conducted reviews on the programs listed below using the Office of Management and Budget’s Program Assessment Rating Tool (PART). (See p. 60 for a discussion of the PART methodology.) Short summaries of the PART results and follow-up actions are on the following pages. OMB’s Web site provides one-page summaries and full detailed PART reviews for all agencies.

**National Institute on Disability and Rehabilitation Research**
Rating: Results Not Demonstrated

**Research in Special Education**
Rating: Results Not Demonstrated

**National Center for Education Statistics**
Rating: Effective
PART Analysis for Programs Reviewed for the FY 2005 Budget

Program: National Institute on Disability and Rehabilitation Research (NIDRR)

Year of Rating: For FY 2005 Budget
Rating: Results Not Demonstrated
Program Type: Research and Development

Recommended Follow-up Action
- Develop strategies to have smaller grant portfolios, such as field-initiated research, reviewed by expert panels starting in 2004.
- Examine its portfolio, using its Long-Range Plan as a guide, to determine whether targeting funds on a smaller number of research priorities would improve the institute’s ability to meet its long-term goals.
- Implement a regular schedule for review by an independent organization to assess overall program quality, coordinated with reauthorizations and the Long-Range Plan cycle.
- Articulate substantive long-term research goals that have measurable outcomes as part of its 2004 update of the 2004 to 2008 Long-Range Plan.

Update on Follow-up Action
NIDRR has established long-term goals, with associated performance measures and targets, in response to PART findings and has established procedures for obtaining data to measure progress towards the goals. NIDRR also plans to conduct reviews of additional grant portfolios so that it will have performance data on a larger portion of its grants; the first reviews were held in the fall of 2005. The draft Long-Range Plan for 2005–2009 was published in the Federal Register on July 27, 2005. NIDRR is working with other agencies to begin a new independent study by the Institute of Medicine. Another PART is being conducted on NIDRR in 2005 for the 2007 budget.

Program: Research in Special Education

Year of Rating: For FY 2005 Budget
Rating: Results Not Demonstrated
Program Type: Research and Development

Recommended Follow-up Action
- Implement a regular schedule for review by an independent organization to assess overall program quality, coordinated with the reauthorization cycle.
• Promote better coordination between the Office of Special Education and Rehabilitative Services and the Institute of Education Sciences in the development and implementation of education research priorities aimed at improving education results for children with disabilities, consistent with the proposed transfer of special education research to the institute in 2005.

• Articulate substantive long-term research objectives that have measurable outcomes and goals by 2005.

• Collect grantee performance data and make them available to the public in a transparent and meaningful manner.

**Update on Follow-up Action**

This program has been transferred to the newly established National Center for Special Education Research in the Institute of Education Sciences, pursuant to amendments made by the Individuals with Disabilities Education Improvement Act of 2004. The Department will consider the best way to conduct an independent evaluation of all education research supported by the Department. The Director of the Institute for Education Sciences recently published a notice in the Federal Register inviting public comments on proposed research priorities, and the institute is working to develop appropriate long-term measures for all of its research programs. New annual measures have been established for the National Center for Special Education Research, and data for these measures will be collected for the first time in 2006.

**Program: National Center for Education Statistics (NCES)**

**Year of Rating:** For FY 2005 Budget

**Rating:** Effective

**Program Type:** Research and Development

**Recommended Follow-up Action**

• The Department of Education will focus on improving the timeliness of NCES products and services.

**Update on Follow-up Action**

The 2005 PART assessment found a weakness in the timeliness of NCES products. In 2005, the Department responded by articulating specific goals for the release of data: in 2006, 90 percent of initial releases of data will occur (a) within 18 months of the end of data collection or (b) with an improvement of two months over the previous time of initial release of data from that survey program if the 18-month deadline is not attainable in 2006. In 2007 through 2010, NCES will reduce by two months each year the deadline for initial release, until the final goal of 12 months is reached.