Archived Information

Objective 4.4: Our information technology investments are sound and used to improve impact and efficiency.

Our Role. The Education Department is implementing the Clinger-Cohen Act; the Paperwork Reduction Act (PRA); the Paperwork Elimination Act; and Presidential Executive Directives about such topics as federal electronic government, electronic commerce, and electronic-working groups. The Education Department is committed to working with states and localities to enhance its IT infrastructure and information systems in order to increase the use of current high-quality data for local decision making.

Our Performance

How We Measure. The following measures represent the Education Department's performance for this objective. The Education Department's goal is to institute a balanced scorecard for measuring customer satisfaction and sound business management in a manner that will incorporate subordinate process measures.

Indicator 4.4.a. IT investment assessments indicate that major information systems are mission-driven, cost-effective, consistent with our information technology architecture, and supported by performance-based management systems.

Assessment of Progress. Unable to judge; baseline established in 2000. Most of the work toward meeting this indicator was in developing and implementing a repeatable Capital Planning and Investment Management process, taking the initial steps in designing an Enterprise Architecture, and enhancing skill levels and business management tools and processes.

The Education Department published an IT Investment Management Guide, outlining the roles, responsibilities, and procedures of the IT Investment Management Process. The Investment Review Board (IRB) determined which major IT projects to assess in the formulation of the 2002 budget. As part of control phase activities, the IRB monitored the progress of a previous decision, the integration of a new general ledger package into the Education Department's financial management system. The Education Department's measure of this indicator is that 80 percent of all major IT projects will be within a ten percent variance of its cost, schedule, and performance goals by FY2002. Baseline measurement began 2000, with documentation of the EDCAPS financial system plan.

Progress on the Information Enterprise Architecture (a blueprint of the business processes, data, applications, and technology necessary to meet the Education Department's mission) included updating the Department of Education's Architecture Principles; adopting a Technical Reference Model; and developing a Standards Profile and a Standards Lifecycle Management Process.

In June 2000, the Education Department awarded a performance-based task order for Wide Area Network management and related services, under which the CIO will hold the contractor team accountable for achieving performance standards and objectives that enhance employees' capability to meet the Education Department's key strategic goals and objectives.

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In 2000, the Education Department created a "Policies and Procedures" manual for managing its technology assets and developed a database to allow for continuous updates of these assets to ensure an accurate accounting of their disposition.

Nearly all of the Education Department's employees took the Security Awareness course sponsored by OCIO. Training was also provided in IT Investment, Clinger-Cohen Act Basics, Project Planning and Management, and Information Technology Management

Indicator 4.4.b. Employees will assess productivity as "significantly improved" as a result of available technology, as shown by the employee survey in 2000.

Assessment of Progress. Employee evaluations remained high, although improvement could not be measured due to changes in survey administration. According to the 1996 employee survey, 70.2 percent of Education Department employees mostly agreed or strongly agreed that their productivity had improved as a result of available technology. Another survey was conducted in 2000. The questions in 2000 were phrased differently by OPM; however, satisfaction remained just above the 70 percent range. Employees predominantly believed they had electronic access to information needed to do their jobs.

The survey also addressed the adequacy of provisions for disabled employees. As a result of the assistive technology services offered within the Education Department, all employees' identified needs are met in this area. The Education Department's Assistive Technology Team continued to serve the Federal government as a role model in this service. It exhibited at several Federal events and continued to assist in the development of contract language for Federal information technology acquisitions, assuring that software developed or procured would be accessible to disabled employees and customers alike.

Types and Quantities of Assistive Technology Provided to Education Department Employees Type Description Year 1995 1997 1999 2000 Blinds Includes screen readers. Braille 12 23 embossers, OCR scanners Low Vision Includes screen magnification, 15 25 29 27 large format monitors, CCTV Ergonomic Includes alternative input 4 28 57 31 devices (primarily trackballs) and keyboards Speech Input Includes voice recognition 3 8 30 46 software, Dragon Dictate (various versions), Via Voice Includes deafness measures, Other 34 word prediction, telephone

Figure 4.4.b.1

Source: Assistive Technology Program of OCIO. *Frequency:* Biennial. *Next Update:* 2001. **Validation procedure:** Data are validated by the internal review procedures of an experienced data collection agency. **Limitations of data and planned improvements:** Limitations are few as a result of the straightforward bookkeeping. One limitation is that this is a quantitative measure only and does not measure how much an impact it has on the recipient employees. A user survey will need to be developed to identify this impact.

headsets, and any other

miscellaneous.

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The Education Department's Intranet, ConnectED, was introduced in November 1998. The fiscal year 2000 was devoted to gathering requirements and developing a major redesign that will be launched in April 2001. The redesign incorporates the findings of the 1999 user testing, which showed that the site organization could be improved and that users expected expanded features. Four improvements were incorporated into the redesign statement of work: the ability to personalize the user's home page; the ability for all users to add and update their own content without any programming skills; dynamic, database driven content; discussion groups; and expanded navigation.

Statistics indicating extraordinary growth for the second and third quarters of 1999 reflect an upgrade to the Department's browser that set the connectED homepage as the default for all staff. A second update to the browser in the fall of 1999, which set the www.ed.gov homepage as the default, decreased actual usage of connectED. In addition, during the transition to a new technical support contract during the third quarter of 2000, the collection and reporting of statistics was not initially supported. To exacerbate the situation, the server collecting web usage log files crashed, and all historical data was lost. Subjective analysis of usage since January 2000 indicates an average monthly statistic of between 54,000 and 59,000 page views. Once the connectED redesign launches, the tools will be in place to capture and report site usage statistics in a more reliable fashion. OCIO expects average usage to increase once the reengineered site is launched.

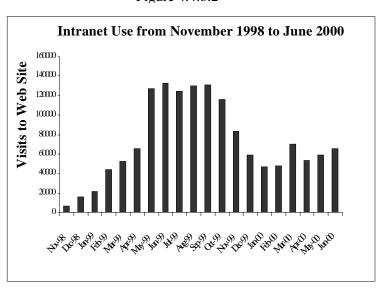


Figure 4.4.b.2

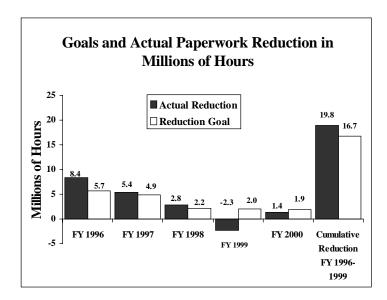
Source: OCIO Intranet Project Manager's analysis of the Web usage log. Frequency: Monthly. Next Update: N/A. Validation procedure: Data validated by internal review procedures of an experienced data collection agency. Limitations of data and planned improvements: It is a quantitative measure at this point; customer surveys and usability testing will be done in the future to measure the quality of content and services.

Indicator 4.4.c. Data reporting burden on public will be reduced annually.

Assessment of Progress. The cumulative goal was exceeded; however, the FY 2000 goal was not met. The Paperwork Reduction Act (PRA) of 1995 set a ten percent burden reduction goal for FY 1996 and FY 1997, and five percent for FY 1998 through FY 2001. In fiscal years 1996 through FY 1998 the goals were exceeded. Statutory changes and the unexpected introduction of new programs prevented the Education Department from meeting its FY 1999 through 2001 reduction goals. For FY 1999, the Education Department's total burden hours actually increased by one million hours (2.3 percent). For FY 2000, the total burden hours were reduced by 1.4 million hours (3.3 percent).

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Figure 4.4.c.1



Source: Information Collection Budget of the Department of Education, FY 2000 submission dated December 2000. Frequency: Annual. Next Update: December 2001. Validation procedure: Data validated by internal review procedures of an experienced data collection agency. Limitations of data and planned improvements: Burden hours are estimated for all information collections. Based on experience, estimated burden hours tend to be more accurate for older collections, which are renewed on numerous occasions. Burden hour estimates for newer collections are probably less accurate. However, all information collections are subject to the Information Management Group of OCIO, OMB, and public reviews, and all comments made must be addressed by law.

Indicator 4.4.d All major information systems needing repair will be converted to Year 2000 compliance by March 1999 (giving time for testing during 1999) and validated through operation into March 2000.

Assessment of Progress. The goal for 2000 was met. Each Federal agency was required by the Office of Management and Budget (OMB) to ensure that its information systems were fully compliant by March 31, 1999. OMB and the Government Accounting Office (GAO) assisted agencies in planning, managing, and evaluating the Year 2000 programs through a four-phase process: assessment, renovation, validation, and implementation. The Education Department met its goal and received a grade of "A" from the House Subcommittee on Government Management, Information and Technology.

The Education Department established a Year 2000 project team and implemented technical solutions. The chart below illustrates the Education Department's 14 mission-critical systems and their progress. All of the Education Department's 161 non-critical systems successfully completed the four-phase process. None of these systems experienced Y2K problems in 2000.

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Figure 4.4.d.1

Status of U.S. Department of Education Year 2000 Conversions for Mission-Critical Systems, as of January 1, 2000 Y2K Phases **Implement** Validate Assessment Renovate Status (target **Mission Critical System** date) **Student Financial Aid Systems** Central Processing System (CPS) Completed 2 Direct Loan Central Database Completed Direct Loan Origination System Completed Direct Loan Servicing System Completed Postsecondary Education Participants System (PEPS) Completed Multiple Data Entry System (MDE) Completed 7 Title IV Wide Area Network (TIVWAN) Completed 8 Campus-Based System (CBS) Completed Federal Family Education Loan Program System (FFEL) Completed Pell Recipients and Financial Mgmt System (PELL) Completed National Student Loan Data System (NSLDS) Completed Other Program Systems Impact Aid Payment System Completed **ED Administrative Systems** Education Department Central Automated Processing System Completed (EDCAPS)

Source: Monthly and Quarterly Progress Reports to OMB, based on the Education Department's inventory of systems, Y2K assessments, and subsequent monitoring of the renovation, validation, and implementation phases. *Frequency:* Monthly and quarterly. *Next Update:* N/A. **Validation procedure:** Data validated by internal review procedures of an experienced data collection agency. All mission-critical systems were independently verified and validated by a third-party contractor. **Limitations of data and planned improvements:** Until the revised systems are active in a live environment, with data exchanges from external customers, Y2K compliance cannot be established with certainty. The New Year began with all systems "green," and systems are being monitored in real operation through March 2000 to validate that the status is certain.

Completed

Education's Local Area Network (EDLAN)

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