

## Educational Technology, Media, and Materials

### National activities: Educational Technology, Media, and Materials

(Individuals with Disabilities Education Act, Part D, Subpart 3, Section 674)

#### PROGRAM PERFORMANCE INFORMATION

##### Performance Measures

This section presents selected program performance information, including, for example, GPRA goals, objectives, measures, and performance targets and data; and an assessment of the progress made toward achieving program results. Achievement of program results is based on the cumulative effect of the resources provided in previous years and those requested in FY 2014 and future years, as well as the resources and efforts invested by those served by this program.

Seven performance measures have been developed for the Educational Technology, Media, and Materials program. Three of these measures are annual measures, two are long-term, and the last two are measures of efficiency.

##### Annual Measures

The three annual measures deal with the relevance, quality, and usefulness of products and services provided by the program.

**Goal: To promote the development, demonstration, and use of accessible technology and media services to improve results for infants, toddlers, children, and youth with disabilities.**

**Objective:** *Improve the quality of products produced by projects in the Special Education Educational Technology, Media, and Materials program.*

**Measure:** The percentage of Educational Technology, Media, and Materials projects judged to be of high quality.

Year	Target	Actual
2009	82	100
2010	83	97
2011	97	97
2012	97	92
2013	98	
2014	98	

**Additional Information:** The percentage of products judged to be of high quality decreased and fell below the target in fiscal year 2012. However, a high percentage of products were still reported to be of high quality. The reviewers judged 24 of the 26 products in the sample to be of high quality. The decrease may have been caused by the issuance of new, more detailed

instructions to this year's expert panel reviewers. The Department set higher targets starting in fiscal year 2011 based on the high percentages achieved in prior years. Fiscal year 2013 data are expected for this program in October 2013.

The scores appearing in the actual data column were produced by a panel of six to eight special education scientists, who reviewed a sample of products from 26 of the program's projects. Each project submitted a product or multiple products that represents the primary or typical products/services released by that grantee during the prior fiscal year. All of the selected products are reviewed and scored on whether the product content is evidence-based, valid, complete, and up-to-date. The quality dimensions measured are (1) Substance – Does the product/service description reflect the best of current research and theory or policy guidance, as demonstrated by a scientifically- or evidence-based approach, a solid conceptual framework, appropriate citations and other evidence of conceptual soundness?; and (2) Communication – Does the product/service description have clarity in its presentation, as evidenced by being free of editorial errors, appropriately formatted, and well organized? OSEP reports that the measured inter-rater reliability of the panel members has been excellent during the last few years, indicating substantial agreement among the experts about the quality of the sampled products.

**Measure:** The percentage of Educational Technology, Media, and Materials projects judged to be of high relevance to improving outcomes of infants, toddlers, children and youth with disabilities.

Year	Target	Actual
2009	93	100
2010	95	97
2011	97	91
2012	97	100
2013	98	
2014	98	

**Additional information:** In fiscal year 2012, the percentage of products judged to be of high relevance for this measure increased and exceeded the target level. The reviewers judged all 26 of the products in the sample to be highly relevant for the intended users. The Department set higher targets for this measure starting in fiscal year 2011 based on the consistent results obtained during the 3 prior years of data. In recent years, a large majority of the projects funded under this authority scored highly on this measure.

The scores appearing in the actual data column were produced by a panel of six to eight special education external experts who reviewed a sample of products from 26 Educational Technology, Media, and Materials projects, selected so as to be representative of the program's topical portfolio of grants. Each project submitted a product or multiple products that represents the primary or typical products/services released by that grantee during the prior fiscal year. All of the selected products were assessed on whether the product content was responsive to priority issues and challenges confronting the target groups and judged on three dimensions of relevance: (1) Need – Does the content of the material attempt to solve an important problem or critical issue?; (2) Pertinence – Does the content of the material match the problem or issue facing the target group or groups?; and (3) Reach – Is the content of the material applicable to diverse populations within the target group?

**Measure:** The percentage of Special Education Educational Technology, Media, and Materials projects that produce findings, products, and/or services that contribute to improving results for infants, toddlers, children and youth with disabilities.

Year	Target	Actual
2009	83	100
2010	84	97
2011	97	97
2012	97	92
2013	98	
2014	98	

**Additional information:** The actual percentage for fiscal year 2012 did not meet the target and decreased from the prior year. The decrease may have been caused by the issuance of new, more detailed instructions to this year's expert panel reviewers. The last few years of data indicate that the projects are doing a reasonably good job of creating useful products or services for their target populations. Data for fiscal year 2013 are expected in October 2013.

The percentages in the actual data column were produced by a panel of six to eight special education external experts, who reviewed 26 samples of technology products. Each project submitted a product or multiple products that represents the primary or typical products/services released by that grantee during the prior fiscal year. All selected products were reviewed and scored on whether the product content could be easily and quickly adopted or adapted by the target group and produce the desired result. The products were judged on three dimensions of usefulness: (1) Ease – Does the content of the product or service description address a problem or issue in an easily understood way, with directions or guidance regarding how a problem or issue can be addressed?; (2) Replicability – Is it likely that the information derived from the product or service will eventually be used by the target group to achieve the benefit intended?; and (3) Sustainability – Is it likely that the information derived from the product or service will eventually be used in more than one setting successfully over and over again to achieve the intended benefit?

### **Long-Term Measures**

The following two long-term measures have been developed for the program to provide information about the potential impacts of the projects' products and services on the target population.

**Objective:** *Investments in the Educational Technology, Media, and Materials program will develop and validate current and emerging technologies that incorporate scientifically- or evidence-based materials and services.*

**Measure:** The percentage of Special Education Educational Technology, Media, and Materials projects that validate their products and services.

Year	Target	Actual
2009		73
2010		63
2011		50
2012	50	70
2013	52	
2014	54	

**Additional information:** The Department set targets for this measure after reviewing trends in data from prior years. For this measure, a panel of six to eight special education external experts reviews evidence submitted by each project that their products or services improve outcomes for the target population, are evidence based, and are validated by empirical findings. This measure only includes projects that have entered the dissemination phase of their grants or completed the final year of their grants and submitted a final report. Of the ten projects that were rated in fiscal 2012, seven submitted acceptable evidence of validity; the other three projects struggled with collecting sufficient evidence of validity within the 1 year time frame. Evidence about outcomes of the target population may take more than 1 year to become available. Fiscal year 2013 data for this long term measure are expected in October 2013.

**Objective:** *Investments in the Educational Technology, Media, and Materials program will make validated, evidence-based technologies to improve results for infants, toddlers, children and youth with disabilities available for widespread use.*

**Measure:** The percentage of Special Education Educational Technology, Media, and Materials projects that make validated technology products and services available for widespread use.

Year	Target	Actual
2009		94
2010		100
2011		100
2012	100	83
2013	100	
2014	100	

**Additional information:** A panel of six to eight special education external experts reviews and scores the extent to which each project rated in the measure above as “validated” has submitted evidence of the availability of, and customer support for, their technology-based products and services. In fiscal year 2012, the panel reviewed evidence from six centers that entered the dissemination phase of their projects or completed the final year of their grants and submitted a final report. Five centers that were rated as “validated” submitted sufficient evidence of the availability of their products or services to the target population. Fiscal year 2013 data for this long term measure are expected in October 2013.

## Efficiency Measures

The Department has established two efficiency measures for the Educational Technology, Media, and Materials program. The two measures provide data on accessible book distribution and video captioning and description projects, respectively. The Department recently eliminated a measure on the efficiency of research projects due to concerns about the transparency and validity of the measure's calculation methodology.

**Measure:** The Federal cost per download from the accessible educational materials production and distribution project funded by the Educational Technology, Media, and Materials program.

Year	Target	Actual
2011		\$7.0
2012		5.5
2013	TBD	
2014	TBD	

**Additional Information:** One of the major activities supported by this program is the development, production, and distribution of educational books and materials in accessible formats to students with visual impairments and other print disabilities. The current grantee performing activities under the Department's accessible educational materials priority is Bookshare, Inc. This measure, new in 2011, is calculated as the annual amount of Federal funding for the project divided by the number of files downloaded from the project by eligible students or teachers and sponsors on behalf of eligible students (In 2012:  $\$6,515,185 / 1,184,126 = \$5.50$ ). After downloading these files, eligible students can access the content in specialized formats, such as audiobooks or braille. Bookshare is the most widely used accessible book producer and distributor in the country. This project works in conjunction with other Department funded projects, such as the National Instructional Materials Access Center (NIMAC), to ensure that eligible students have appropriate materials needed to access the general curriculum. The Department will establish targets for this new measure when another year of data become available in November 2013.

**Measure:** The Federal cost per hour of video description funded by the Educational Technology, Media, and Materials program.

Year	Target	Actual
2009		\$1,393
2010		2,255
2011		2,258
2012		1,962
2013		
2014	\$1,669	

**Additional information:** The educational media measure is calculated as the total amount of funding provided for description activities (\$2,499,066 in 2012) divided by the total number of hours of accessible described media produced (1,274 hours in 2012). The cost of an hour of media description decreased from fiscal years 2011 to 2012. Recent advances in technology

have increased automation in the descriptioning process and may continue to bring down costs. Actual values for 2011 and 2010 have been corrected. In those years, the amount of funding used in the numerator was incorrectly reported and the number of hours in the denominator inappropriately included some media captioning hours. The updated values shown above include the accurate amount of funding and only media description activities. No target is shown for 2013 because the target in that year was based on the incorrectly reported data. Targets in 2014 and subsequent years are based on the corrected data. We anticipate that fiscal year 2013 data for this measure will be available by October 2013.