

U.S. Department of Education

Principal Programs Providing Funds for Technology in Education

Funding for educational technology is available through various programs administered by the U.S. Department of Education. In a few cases, funds are appropriated specifically for educational technology. Other funds are obligated for technology projects through existing program areas. And some funds are used for technology activities by recipients of grants and awards that are not designated specifically for educational technology (e.g., grants to States, districts, educational research laboratories and centers). Federal block grants and other grants to States and school districts, such as those for compensatory education for the disadvantaged, mathematics and science education, bilingual education, special education, vocational and adult education, and teacher training, support use of technology at the discretion of States and school districts. Under some programs, grants are awarded and budget decisions are made based on priorities of the Secretary of Education and department administrators.

The following table provides an estimate of levels of funding and support for educational technology within programs administered by the Department of Education.¹ Because funding for educational technology is not closely monitored and data on local use of Federal grants is limited, most figures are estimated. Where Federal grants to States, districts, schools, or individuals are sources of funding for technology and may be used for technology at local discretion, total appropriations are given (e.g., Chapter 2 block grants, magnet schools assistance). A question mark (?) indicates that OTA was not able to estimate the amount of funding for technology.

Since outlays for technology are often not known until several years after the original appropriation, most figures are *estimates* of obligations or expenditures for educational technology for the designated fiscal year. The figures for fiscal year 1989 are department appropriation requests or program estimates based on pending legislation and awards.

| | 1987 Appropriation ² (in millions) | Technology Estimate (in millions) | 1988 Appropriation (in millions) | Technolog Estimate (in millions) | 1989 Request (in millions) | Technology Estimate (in millions) |
|--|---|---|--|--|----------------------------------|---|
| Education Consolidation and Improvement Act: | | | | | | |
| Chapter 1 Block Grants | 3,453.50 | ? | \$3,829.60 | ? | \$4,060.20 | ? |
| Chapter 2 Block Grants | 500.00 | \$150.00 ³ | 478.70 | \$143.60 ³ | 540.50 | \$162.20 ³ |
| Secretary's Discretionary Fund: | | | | | | |
| National Diffusion Network | 10.70 | 0.31 | 10.20 | 0.15 ⁴ | 10.20 | ? |
| Other discretionary programs ⁵ | 1.50 | ? | 4.70 | ? | 9.50 | ? |
| Elementary and Secondary Education Act of 1965: | | | | | | |
| Title VII—Bilingual Education Act: | | | | | | |
| State and Local Grants | 99.20 | ? ⁶ | 101.20 | ? | 13.10 | ? |

(continued on next page)

Abbreviations: OB = Obligation; EO = Estimated Obligation

¹This table is based on review of budget documents, lists of grants and awards, published research and documents, conversations with program staff at the U.S. Department of Education, and estimates provided by various programs in the Department of Education.

²Figures are appropriations or budget requests as indicated unless otherwise noted.

³OTA estimates based on a study finding 30 percent of all local Chapter 2 expenditures in the 1984-85 school year were used for technology-related activities. SRI International and Policy Studies Associates, "The Educational Block Grant at the Local Level: The Implementation of Chapter 2 of the Education Consolidation and Improvement Act in Districts and Schools," prepared for the U.S. Department of Education, January 1986, p. 45.

⁴Seven projects were funded in 1987 and several are in their final year. OTA estimates that awards for technology-related projects will decrease in 1989.

⁵Educational technology could be a priority area but currently is not. Priorities for 1989 include teacher certification and recruitment and early childhood education.

⁶Of the 628 grants awarded to districts in 1987, 228 (or 36 percent) included a technology component.

| | 1987 Appropriation (in millions) | Technology Estimate (in millions) | 1988 Appropriation (in millions) | Technology Estimate (in millions) | 1989 Request (in millions) | Technology Estimate (in millions) |
|--|--|---|--|---|----------------------------------|---|
| Education for Economic Security Act: | | | | | | |
| Title 117—Mathematics and Science Programs | | | | | | |
| State Grants | 72.80 | ? | 108.90 | ? | 108.90 | ? |
| Secretary's Discretionary Fund: | | | | | | |
| Technology Competition | 0 | 0 | 1.00 | 1.00 (EO) | ? | ? |
| Mathematics, Science and Critical Foreign Language | | | | | | |
| Competitions | 3.70 | 0.53 (OB) | 6.60 | 0.97 (EO) | ? | ? |
| Educational TV | 3.25 | 3.25 (OB) | 2.25 | 2.25 ⁹ (EO) | ? | ? |
| Title VII—Magnet Schools Assistance | 75.00 | ? | 71.80 | ? | 115.00 | ? |
| Continuing Resolution—1987 | | | | | | |
| Star Schools | 0 | 0 | 19.10 | 19.10 | 0 | 0 |
| Small Business Innovation | | | | | | |
| Research | 1.70 | 1.70 (OB) | 1.70 | 1.70 (EO) | 1.70 | 1.70 (EO) |
| Higher Education Act: | | | | | | |
| Title V-C—Leadership in Educational Administration | | | | | | |
| | 7.20 | ? | 8.20 | ? | 4.40 | ? |
| Title V-D—Christa McAuliffe Fellowships for Outstanding Teachers | | | | | | |
| | 2.00 | ? | 1.90 | ? | 1.90 | ? |
| Fund for the Improvement of Post-Secondary Education | | | | | | |
| | 12.20 | ? ¹¹ | 11.60 | ? | 13.60 | ? |
| Education for the Handicapped Act: | | | | | | |
| State Grants | 1,568.00 | ? | 1,699.80 | ? | 1747.70 | ? |
| Special Purpose Programs: | | | | | | |
| Technology for Special Education | | | | | | |
| | 4.67 | 4.67 | 4.79 | 4.79 | 4.79 | 4.79 |
| Early Childhood Education | | | | | | |
| | 24.50 | 0 | 23.40 | 0 | 23.40 | 0.30 (EO) |
| Media and Captioning Services | | | | | | |
| | 13.80 | 13.80 | 13.20 | 13.20 | 13.20 | 13.20 |
| Personnel Development | | | | | | |
| | 67.70 | 2.29 (OB) | 66.40 | 1.81 (EO) | 66.40 | 1.2? (EO) |
| Vocational Education Act (Perkins Act): | | | | | | |
| Title II—State Grants | | | | | | |
| | 802.90 | ? | 791.80 | 0 | 835.20 | ? |
| Vocational Education Research Center | | | | | | |
| | 6.00 | 0.19 (EO) | 6.00 | ? | 6.00 | ? |
| High Technology | | | | | | |
| Demonstrations | 0 | 0 | 9.60 | 9.60 (EO) | 9.60 | 9.60 (EO) |
| Job Skills Education Program | 0 | 0 | 0.13 | 0.13 (EO) | | ? |

⁷The Elementary and Secondary School Improvement Amendments of 1988 (Public Law 100-297) revises Title II, authorizes a new program for foreign language education, and eliminates the restriction on the use of Title II funds for computer education only after mathematics and science needs have been met. Now, in addition to using Title II funds for preservice training, inservice training, teacher retraining, and minority recruitment, Local Education Agencies (LEAs) may use Title II funds for teacher training in technology as part of a mathematics and science program. LEAs may also use Title II funds to purchase computers and other telecommunications equipment and to provide grants to individual teachers for innovative projects in mathematics and science. In addition, States may use their share of Title II funds for demonstrations and exemplary programs for instructional materials and equipment in mathematics and science, as well as to provide technical assistance.

Grants for programs of national significance in mathematics, science, computer education, and critical foreign languages are also appropriated under Title II. The new law gives the Secretary of Education discretion to award grants to support foreign language education separately and focuses the programs of national significance on mathematics and science. Budget figures reflect Title II as originally enacted.

⁸The Department of Education estimates that 18 to 20 percent of funds for field-initiated competition and 10 percent of funds for critical foreign language are used for applications of technology.

⁹Includes \$1 million for *Square One TV*, currently under review.

¹⁰No data on the percent of magnet school funds used for technology is available, although a recent OTA estimate suggests that 25 percent is used for mathematics and science magnet schools. Technology could be a component in these and other magnet school programs. See U.S. Congress, Office of Technology Assessment, *Educating Scientists and Engineers: Grade School to Grad School*, OTA-SET-377 (Washington, DC: U.S. Government Printing Office, June 1988).

¹¹Funding is based on a percentage of the U.S. Department of Education's external research budget.

¹²Some awards support curriculum development and teacher training activities that could be applied to elementary and secondary education. While educational technology was one of the Fund for the Improvement of Post-Secondary Education's (FIPSE) priorities from 1981 to 1985, it is no longer a priority area. Of 176 new and continuing projects funded by FIPSE in 1987, 41 (23 percent) revolved technology.

| | 1987 Appropriation (in millions) | Technology Estimate (in millions) | 1988 Appropriation (in millions) | Technology Estimate (in millions) | 1989 Request (in millions) | Technology Estimate (in millions) |
|---|--|---|--|---|----------------------------------|---|
| Adult Education Act: | | | | | | |
| Grants to States | 106.00 | ? | 115.40 | ? | 148.20 | ? |
| State Grants to Local Education Agencies ¹³ | | 2.86 | | 3.11 | | 3.99 |
| State Discretionary Grants ¹³ | | 1.51 | | 1.65 | | 2.11 |
| Field Initiated Research | 0 | 0 | 1.90 | 0.90-1.25 (EO) | 2.00 | .90-1.25 (EO) |
| Office of Educational Research and Improvement: | | | | | | |
| Field Initiated Research | 0.60 | 0.06 (OB) | 0.50 | ? | 1.00 (EO) | |
| National Research and Development Centers ¹⁴ | 17.50 | | 17.50 | | 17.50 ¹⁶ | |
| All Centers excluding Educational Technology Center ¹⁵ | | 1.00 (EO) | | 1.00 (EO) | | 1.00 |
| Educational Technology Center | | 2.00 | | 0.90 (EO) | | .00 (EO) |
| Regional Educational Laboratories | 17.00 | 1.8 (EO) | 17.00 | 1.23 (EO) | 17.00 | .15 (EO) |
| Technology Conference and "What Works" | 0 | 0 | 0 | 0 | 0.10 | 0.10 |
| Educational Resources Information Network (ERIC) ¹⁷ | 5.70 | 0.29 (OB) | 5.70 | 0.30 | 5.70 | |
| Center for Statistics | 9.10 | ? | 13.40 | ? | 20.00 | ? |

¹³A minimum of 10 percent of the grants awarded to States must be set aside for training, research, demonstration, and evaluation. The remaining State grant goes to LEAs, post-secondary institutions, and community organizations.

¹⁴The award for the Educational Technology Center is included in the total center appropriation of \$17.5 million.

¹⁵Estimates were provided by the research centers and the U.S. Department of Education. Amounts do not reflect other research in learning that may relate to the use of technology in the future.

¹⁶Two new centers are proposed in the Secretary's 1989 budget. One center will study the needs of at-risk students. A second smaller center will study a range of educational issues including the teaching and learning of civics and citizenship, examination and assessment of education reform initiatives, research into student motivation, and studies of costs and productivity in education.

¹⁷One of the 16 ERIC clearinghouses focuses on educational technology. It is based at Syracuse University and its budget is reflected in the technology estimate column.