Technology Challenge Programs: Technology Literacy Challenge Fund, Technology Innovation Challenge Grants, and National Activities - 2002

CFDA Numbers: 84.303 Technology Innovation Challenge Grants
84.318 - Technology Literacy Challenge Fund Grants
84.341A Community Technology Center

Goal 8: To use educational technology as part of broader education reform that will provide new learning opportunities and raise educational achievement for all students.

Objective 8.1 of 5: Students in high-poverty schools will have access to educational technology that is comparable to the access of students in other schools.

Indicator 8.1.1 of 3: Computer access in high-poverty schools: The student-to-computer with Internet access ratio in high-poverty schools will be comparable to that in other schools.

Targets and Performance Data

Student-to-computer ratio (?:1)

Year	Actual Performance		Performance Targets	
	Low-Poverty Schools	High-Poverty Schools	Low-Poverty Schools	High-Poverty Schools
1998	11	17		
1999	8	17	10	15
2000	6	9	10	10
2001	5	7	5	5
2002			5	5

Assessment of Progress

Status: Unable to judge

Progress: Target not met for 2001. Data for 2002 will not be available until August 2003.

Explanation: Student to computer ratios are decreasing toward the goal of one computer for every five students in high poverty schools. However, the gap in access between high-poverty schools and low poverty schools has not been closed.

Sources and Data Quality

Frequency: Annually.
Collection Period: - 2002
Data Available: August 2003
Validated By: NCES.

Limitations: Poverty measures are based on data on free and reduced-price school lunches, which may underestimate school poverty levels, particularly for older students and immigrant students.

Indicator 8.1.2 of 3: Internet access in high-poverty schools: Internet access in high-poverty school classrooms will be comparable to that in other schools.

Targets and Performance Data

Percentage of classrooms with Internet access

Year	Actual Performance		Performance Targets	
	Low-Poverty Classrooms	High-Poverty Classrooms	Low-Poverty Classrooms	High-Poverty Classrooms
1994	3	2		
1995	9	3		
1996	17	5		
1997	33	14		
1998	57	38		
1999	73	38		
2000	82	60	100	100
2001	90	79	100	100

Assessment of Progress

Status: Unable to judge

Progress: Target not met for 2001. Data for 2002 will not be available until August 2003.

Explanation: The number of high-poverty schools with Internet access rose to 97 percent in 2001, up from 94 percent in 2000. As high-poverty schools increasingly obtain access to the Internet, it is likely that their classroom connections will subsequently increase.

Sources and Data Quality

Frequency: Annually.
Collection Period: 2002
Data Available: August 2003
Validated By: NCES.

Limitations: Poverty measures are based on data on free and reduced-price school lunches, which may underestimate school poverty levels, particularly for older students and immigrant students.

Indicator 8.1.3 of 3: High-poverty districts—Technology Literacy Challenge Fund: The number of states that award

at least 66 percent of their TLCF funds to school districts designated as high-poverty will increase.

Targets and Performance Data			Assessment of Progress	Sources and Data Quality
Number of states			**Status:** Unable to judge **Progress:** Positive movement toward target. **Explanation:** The FY 2001 performance covers the period from October 2000 to September 2002. In September 2002, 29 states reported awarding 66 percent or more of their FY 2001 TLCF allocation to districts they designated as high-poverty.	**Additional Source Information:** Performance Report. Final year of Performance Report **Validated By:** No Formal Verification. **Limitations:** Subgrant allocation data are state self-reported and there is no alternative source. Reports on the distribution of funds are estimates (and may be substantially inaccurate) until the year following the end of their period of availability. Thus, state awards of FY 2001 funds are reported in 2003, following the end of their period of availability in September 2002. Corrections to 1998 data were made in March 2001.
Year	**Actual Performance**	**Performance Targets**		
	# of States	# of States		
1997	27			
1998	28	32		
1999	30	35		
2000	30	37		
2001	29	39		
2002		50		

Objective 8.2 of 5: Provide teachers and other educators with the professional development and support they need to help students learn through the use of educational technology.

Indicator 8.2.1 of 3: Staff training and support: Increasing percentages of teachers will indicate that they feel very well prepared to integrate educational technology into classroom instruction.

Targets and Performance Data			Assessment of Progress	Sources and Data Quality
Percentage of Teachers			**Status:** Unable to judge **Explanation:** In 2000, 27 percent of teachers reported that they were fully prepared to integrate technology in their instruction. Federal resources for training for teachers to use technology (including the Technology Literacy Challenge Fund and the Technology Innovation Challenge Grants) as well as state and local funds continue to support professional development in the use of educational technology for teachers and, correspondingly, progress toward the targets for this indicator.	**Additional Source Information:** Teacher Preparation of Professional Development. **Frequency:** Biennially. **Collection Period:** 2002 **Data Available:** January **Validated By:** NCES. **Limitations:** The data are self-reported by teachers. The cost and burden to regularly gather data other than self-report data on teacher preparedness for a nationally representative sample are prohibitive.
Year	**Actual Performance**	**Performance Targets**		
	% of Teachers	% of Teachers		
1998	20			
2000	27	40		

Indicator 8.2.2 of 3: District professional development: The percentage of TLCF subgrantees that report professional development as a primary use of funds will increase.

Targets and Performance Data	Assessment of Progress	Sources and Data Quality

Percentage of TLCF districts

Year	Actual Performance	Performance Targets
	% of districts	% of districts
1997	55	
1998	60	60
1999	69	65
2000	77	70
2001	81	75
2002		80

Status: Unable to judge

Progress: FY 2001 target exceeded.

Explanation: The FY 2001 performance covers the period from October 2000 to September 2002. States conduct competitions under the Technology Literacy Challenge Fund and have wide discretion to set priorities for those competitions. Districts also have considerable discretion (depending on the state) to direct the use of funds. States have been encouraged to devote at least 30 percent of funds to professional development related to educational technology beginning in 1998.

Additional Source Information: Performance Report - Final year for performance report.

Validated By: No Formal Verification.

Limitations: District data are self-reported by districts to states that self-report to ED. Data are estimates from district technology coordinators for the most part.

Indicator 8.2.3 of 3: Professional development models: An increasing percentage of TICG projects will develop models of professional development that result in improved instructional practice.

Targets and Performance Data	Assessment of Progress	Sources and Data Quality

Percentage of projects in their 4th or 5th year

Year	Actual Performance	Performance Targets
	% of projects	% of projects
2000	44	10
2001	51	15
2002	87	50

Status: Target exceeded

Explanation: Based on the rationale that it would take at least 3 years for projects to develop and implement professional development models that could result in improved instructional practice, a target of 50 percent was set for projects in their 4th and 5th year. Third-year data show that more than half of these projects provided data indicating improved instructional practices. Data for 2002 published previously was incorrect.

Source: ED Evaluation
Evaluation: Education Reform.
Section: Technology Connections for School Improvement Planners' Handbook and Teacher's Guide.

Additional Source Information: Technology Connections for School Improvement Planners Handbook and Teachers Guide

Frequency: Annually.

Data Available: January 2003
Validated By: No Formal Verification.

Limitations: Data are supplied by grantees. A 2-tier data collection, review, and analysis process is used, involving program staff and team leaders. Each review stage examines and analyzes the reported results for quality and validity of data and methodology. The

		Department will continue to assess the quality of the data and develop plans for improvement, if needed.

Objective 8.3 of 5: Promote the availablility and use of educational technology as part of a challenging and enriching curriculum in every school.

Indicator 8.3.1 of 3: Classroom use: Students will increasingly use educational technology for learning in core academic subjects.

Targets and Performance Data

Percentage of students that ever use a computer to solve math problems

Year	Actual Performance		Performance Targets	
	Age 13	Age 17	Age 13	Age 17
1996	74	70		
1999	71	66	75	75

Percentage of students using computers in writing

Year	Actual Performance		Performance Targets	
	Eighth Grade	Eleventh Grade	Eighth Grade	Eleventh Grade
1996	91	96		
1998			98	98

Assessment of Progress

Status: Unable to judge

Progress: No NCES update yet.

Explanation: Computer use is fairly ubiquitous in writing. As computers become more available and knowledge about how to integrate computer use into instruction increases, computer use in mathematics also likely will increase

Sources and Data Quality

Additional Source Information: National Assessment of Educational Progress

Frequency: Other.

Validated By: NCES.

Limitations: No NCES update yet available. Questions yielding this data do not fully capture the extent to which computers are regularly used in classrooms to support instruction. For mathematics, NAEP asks students if they have ever used a computer to solve math problems. (For changes in the mathematics measure between 1996 and 1999, NCES indicates a certainty level of less than 95 percent that the difference is significant). For writing, NAEP asks students if they use a computer to write stories or papers.

Indicator 8.3.2 of 3: Progress on State Goals—Technology Literacy Challenge Fund: An increasing percentage of states will report progress on state goals related to integrating online and other technology resources into the curriculum.

Targets and Performance Data

Percentage of states

Year	Actual Performance	Performance Targets
	% of States	% of States
1996	91	
1998	98	
1999	63	50

Assessment of Progress

Status: Unable to judge

Progress: FY 2001 target exeeded.

Explanation: States report progress on state goals related to the national goals in annual performance reports. Most states (46 of 50) have goals that relate

Sources and Data Quality

Additional Source Information: Performance Report. Final year for TLCF Performance Report.

Validated By: No Formal Verification.

2000	49	55
2001	68	60
2002		65

to national ET goal that concerns integrating ET resources into the curriculum. States that have met earlier goals have adopted new ones.

Limitations: States report on their own goals and information cannot be added across states. There are currently no plans to establish common measures, although the consolidated application includes performance indicators.

Indicator 8.3.3 of 3: Classroom impact: The percentage of TICG projects that demonstrate positive impacts on curriculum and student achievement will increase.

Targets and Performance Data	Assessment of Progress	Sources and Data Quality

Percentage of projects in 3rd, 4th, or 5th year

Year	Actual Performance	Performance Targets
	% of projects	% of projects
2000	44	25
2001	84	50
2002		50

Status: Unable to judge

Progress: FY 2001 target exceeded.

Explanation: Evaluation reports from projects provide necessary data to respond to this indicator. For the purposes of this assessment, positive impacts on student achievement may include improved attendance and discipline, acquisition of technology and telecommunications skills, problem-solving skills, performance or portfolio assessments, state assessment tools, or standardized tests.

Source: ED Evaluation
Evaluation: Education Reform.
Section: Technology Connections for School Improvement Planners' Handbook and Teacher's Guide.

Additional Source Information: Technology Connections for School Improvement Planners Handbook and Teachers Guide

Frequency: Annually.

Data Available: January
Validated By: No Formal Verification.

Limitations: Data are supplied by grantees. A 2-tier data collection, review, and analysis process is used, involving program staff and team leaders. Each review stage examines and analyzes the reported results for quality and validity of data and methodology. The Department will continue to assess the quality of the data and develop plans for improvement, if needed.

Objective 8.4 of 5: Help improve students' information technology literacy skills in all states.

Indicator 8.4.1 of 2: Standards for students in educational technology: The number of states that have standards for student proficiency in the use of technology will increase.

Targets and Performance Data	Assessment of Progress	Sources and Data Quality

Number of states

Year	Actual Performance	Performance Targets
	# of States	# of States
1998	38	
1999		42
2000	35	45
2001	35	46
2002	37	46

Status: Target not met

Progress: Although the target was not met, there is positive movement toward the target.

Explanation: As States increasingly devote resources to educational technology, they also increasingly focus on measuring the impact of educational technology. Setting standards is a precursor to that measurement of student proficiency.

Additional Source Information: Education Week

Frequency: Annually.
Collection Period: 2002
Validated By: No Formal Verification.

Limitations: Education Week provides no detail on the rigor or comprehensiveness of standards. Data are based on State Report.

Indicator 8.4.2 of 2: Student proficiency in technology: In states that assess student proficiency in technology, the percentage of students that are proficient will increase.

Targets and Performance Data	Assessment of Progress	Sources and Data Quality
- No Targets And Performance Data -	**Progress:** No data were collected for this indicator; therefore, we cannot measure progress.	

Objective 8.5 of 5: Through the creation or expansion of Community Technology Centers in disadvantaged areas, improve access to computers, the internet, and educational technology.

Indicator 8.5.1 of 1: Customer reports on value of access: There is an increase in the number of sites where economically disadvantaged individuals can secure access to education technology and the Internet through the establishment and expansion of community technology centers.

Number of new or expanded Community Technology Center Sites

Year	Actual Performance	Performance Targets
1999	40	
2000	93	
2001	148	
2002	56	

Status: Unable to judge

Progress: 337 new or expanded Community Technology Center Sites have been established as of FY 2002. The program awarded its first grants in 1999. For 1999-2001, performance focused substantially on measures of "access." For FY 2002, the definition of access was expanded. The number published previously was incorrect.

Explanation: The mission of the Community Technology Centers Program is to establish or expand community centers that increase access to computers, the Internet, and educational technology for residents of economically distressed communities.

Additional Source Information: Survey responses from grantees.

Frequency: Annually.
Collection Period: 2002
Data Available: January 2004
Validated By: No Formal Verification.
Data supplied by grantees. Questionable information resulted in telephone follow-up by CTC Team staff. Data supplied by grantees through surveys will be verified through close examination of Annual Performance Reports.

Improvements: More extensive follow-up communication with grantees will be done to increase response rate to

		80-90%.