# **Archived Information**

## PREPARING TOMORROW'S TEACHERS TO USE TECHNOLOGY PROGRAM

Goal: To improve the knowledge and ability of future teachers to use technology in teaching practices and student learning opportunities, and to improve the quality of	Funding History (\$ in millions)			
teacher preparation programs.	Fiscal Year	Appropriation	Fiscal Year	Appropriation
Legislation Title III, Part A, SubPart 1, of the Elementary and Secondary Education Act	1985	\$0	2000	\$75
(ESEA) of 1965, as amended by the Improving America's Schools Act of 1994 (20 U.S.C. 6832.).	1990	\$0	2001	\$125
0.5.C. 0632.).	1995	\$0	2002 (Requested)	\$0

### **Program Description**

The goal of Preparing Tomorrow's Teachers to Use Technology (PT3) is to support high-quality reforms in teacher preparation programs for the purpose of increasing the knowledge, skills, and abilities of prospective teachers to use technology efficiently in their future teaching practices. This program provides grantees—consisting of consortia of two or more members of schools of education, schools of arts and sciences, state educational agencies, local educational agencies, nonprofits and/or other partners—with the resources to make fundamental reforms in the way prospective teachers are trained to use technology in the classroom.

As technology becomes an increasingly vital component of student learning and success in school, teachers must be adequately prepared to use technology and effectively integrate modern learning tools into classroom instruction. By supporting teacher preparation programs in changing how they prepare future teachers to use technology, the PT3 program can help ensure that (1) future teachers know how to use new technologies to improve learning; and (2) future teachers know how to meet the digital learning needs of low-income communities, rural areas, minorities, and special populations.

In its first year of funding, FY 1999, PT3 awarded three types of grants: (1) Capacity-building, (2) Implementation, and (3) Catalyst. Capacity-building grants were one-year grants (funded only in FY1999) intended to lay the initial groundwork for a teacher preparation reform strategy through activities such as faculty development, curriculum redesign, and the formation of cross-disciplinary courses among departments and between institutions of higher education and K-12 schools. Implementation grants are three-year grants funded to consortia to engage in systemic reform of teacher preparation programs through activities such as in-depth faculty training in technology use, enhanced clinical experiences in technology for student teachers, and development of web-based activities. Catalyst grants are intended to stimulate large-scale, innovative improvements for preparing technology-proficient teachers through activities such as technical assistance to teacher preparation programs, support for alternative teacher development career paths, development of new standards in the use of technology, evaluation of teacher training reform efforts, and other activities.

In FY 1999, the program awarded 138 Capacity-building grants averaging \$138,000 for one year, 64 Implementation grants averaging \$390,000 per year for three years, and 23 Catalyst grants averaging \$640,000 per year for three years. Late notification in FY1999 led to shortened period of activity in some cases. In subsequent years, successive cohorts of grants will be at different stages of progress, due to the different start dates of each cohort. Also in FY1999, GPRA indicators were developed after projects were funded. Grant projects varied in terms of how many and which of the GPRA indicators were selected as goals for their grant activities.

**TERMS:** Program = PT3 Program overall; Project = recipient of either a Capacity Building, Implementation, or Catalyst grant (*Note: The recipient is a consortium of two or more members*); Teacher Preparation Program = individual partner institution or program participating in the consortium making up a grant project (*Note: A project may include more than one teacher preparation program. As a result, some calculations are based on the total number of teacher preparation programs participating as a consortium member across all grant types. This number is 330.)* 

For more information, please visit the program Web site at: <a href="http://www.ed.gov/offices/OPE/PPI/teachtech/">http://www.pt3.org/</a>

### **Program Performance**

OBJECTIVE 1: STRENGTHEN TEACHER PREPARATION PROGRAMS SO THAT THEY PROVIDE HIGH-QUALITY TRAINING IN THE USE OF TECHNOLOGY FOR INSTRUCTIONAL PURPOSES

Indicator 1.1 Curriculum redesign: The percentage of funded teacher preparation programs that redesign their curriculum to incorporate best practices in the use of technology in teacher education will increase.

use or	ase of technology in teacher education with mercuse.				
	Targets and Perform	mance Data	Assessment of Progress	Sources and Data Quality	
Year	Actual Performance	Performance Targets	Status: Unable to judge because data first	Sources: Project Performance Reports.	
1999:	New program for 1999	New program for 1999	collected in 2000.	Frequency: Annually.	
2000:	- 78% of Capacity Building	Data first collected in 2000	]	Next collection update: December 2001.	
	projects		<b>Explanation:</b> Forty- six percent (46 percent) of	Date to be reported: February 2002.	
	- 82% of Implementation		teacher preparation programs in Catalyst projects		
	projects		had faculty that redesigned curriculum to	Validation Procedures: Evaluation data	
2001:	1 3		integrate technology.	collection will be verified through on-site	
				monitoring and review and through survey and	
2002			Curriculum redesign is not the purpose of all	analyses performed by an experienced data	
2002:			Catalyst projects.	collection agency with internal review	
				procedures.	
				Limitations of Data and Planned	
				Improvements: Performance report data will be	
				self-reported from program grantees. ED does	
				not collect national level baseline data for this	
				indicator.	
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Indicator 1.2 Technology-proficient faculty: The percentage of faculty members in funded teacher preparation programs that effectively use technology in their teaching will increase.

teachir	teaching will increase.						
	Targets and Perform		Assessment of Progress	Sources and Data Quality			
Year	Actual Performance	Performance Targets	Status: Unable to judge because data first	Sources: Project Performance Reports.			
1999:	New program for 1999	New program for 1999	collected in 2000.	Frequency: Annually.			
2000:	<ul> <li>56% of faculty in</li> </ul>	Data first collected in 2000		Next collection update: December 2001.			
	Capacity Building		<b>Explanation:</b> The performance figure represents	Date to be reported: February 2002.			
	projects		the percentage of faculty assessed to be	W.P.J.C. Donal on F. d. Condet			
	- 53% of faculty in		proficient by the 104 teacher preparation programs with Capacity Building and	Validation Procedures: Evaluation data collection will be verified through on-site			
	Implementation projects		Implementation grants that conducted	monitoring and review and through survey and			
2001:			assessments in the first year.	analyses performed by an experienced data			
2002:			assessments in the first year.	collection agency with internal review			
			While not all teacher preparation programs	procedures.			
			assessed the technology proficiency of faculty in	1			
			the first year, many provided professional	Limitations of Data and Planned			
			development opportunities. Eighty-seven	Improvements: Performance report data will be			
			percent (87 percent) of Capacity-Building	self-reported from program grantees. ED does			
			projects and 88 percent of Implementation	not collect national level baseline data for this			
			projects provided professional development as	indicator.			
			part of their grant activities. (Catalyst grants	T			
			generally had a broader focus and only 55	Twenty-eight percent (28 percent) of grantees that assessed faculty proficiency did not have			
			percent offered professional development as a grant activity.)	data available to report on these items, and they			
			grant activity.)	were excluded from the analysis.			
			Twenty-two percent (22 percent) of all education	were excitated from the analysis.			
			faculty in the Capacity-Building teacher	Only 45 percent of the teacher preparation			
			preparation programs and 25 percent of all	programs assessed their faculty at this point, and			
			educational faculty in the Implementation	only some of the faculty were assessed. It is			
			programs received professional development in	anticipated that assessments will be take place			
			integrating technology into the curriculum in the	more frequently in years 2 and 3 of the grant.			
			first year.				
			Of those assessing level of proficiency, 590				
			education faculty in programs with Capacity-				
			Building grants and 349 education faculty with				
			Implementation grants were rated as				
			"technologically proficient."				

Indicator 1.3 Graduation requirements: The number of funded teacher preparation programs that will require teacher candidates to demonstrate proficiency in the effective use of technology in teaching and learning will increase. Targets and Performance Data Assessment of Progress Sources and Data Quality **Actual Performance** Performance Targets Status: Unable to judge because data first **Sources:** Project Performance Reports. Year collected in 2000. 1999: New program for 1999 New program for 1999 *Frequency:* Annually. Next collection update: December 2001. 16% of Capacity Building Data first collected in 2000 2000: **Explanation:** The performance reported reflects Date to be reported: February 2002. projects the percentage of Capacity Building and 16 % of Implementation Implementation projects that added or expanded Validation Procedures: Evaluation data projects a graduation requirement for preservice students collection will be verified by on-site monitoring 2001: to demonstrate proficiency in the use of and review as well as survey and analyses 2002: performed by an experienced data collection technology in teaching or learning. agency with internal review procedures. Eight percent (8 percent) of teacher preparation programs in Catalyst grants added or expanded a **Limitations of Data and Planned** graduation requirement for preservice students to Improvements: Performance report data will be demonstrate proficiency in the use of technology self-reported from program grantees. in teaching or learning. This activity is not a focus of many Catalyst projects. Five percent (5 percent) of grantees did not have data available to report on adding or expanding It must be noted that the PT3 Program does not graduation requirements, and they were excluded expect 100% of award recipients to undertake from the analysis. Within grant type, 1 to 12 this activity. Some states already require percent of grantees did not have data available to technology as part of their certification/licensure report on adding or expanding graduation requirements, thus prompting institutions of requirements, and they were excluded from the higher education to have already made analysis. technology proficiency a requirement, either upon graduation or upon entry to a degree program. Some respondents indicated that this activity was undertaken, but not as a grant activity. Also, the first year of a three-year project is often not the time that most institutions make such a change in graduation requirements. Among those programs that did not add or expand graduation requirements, 62 % stated

they plan to do so in the next two years.

Indicator 1.4 Learning resources: The percentage of teacher preparation programs that use Web-based, multimedia learning resources, course materials, and teaching tools will increase.

teachi	teaching tools will increase.					
	Targets and Perform	mance Data	Assessment of Progress	Sources and Data Quality		
Year	Actual Performance	Performance Targets	Status: Unable to judge because data first	Sources: Project Performance Reports.		
1999:	New program for 1999	New program for 1999	collected in 2000.	Frequency: Annually.		
2000:	- 84% of Capacity Building	Data first collected in 2000		Next collection update: December 2001.		
	projects		<b>Explanation:</b> A total of 237 teacher preparation	Date to be reported: February 2002.		
	- 84% of Implementation		programs in 307 reporting programs funded at all			
	projects		levels (Capacity Building, Implementation, and	Validation Procedures: Evaluation data		
2001:			Catalyst) had education faculty that integrated	collection will be verified by on-site monitoring		
2002:			technology in their courses in new ways as a	and review as well as survey and analysis		
			grant activity.	performed by an experienced data collection agency with internal review procedures.		
			Sixty-three percent (63%) of Catalyst programs	agency with internal review procedures.		
			had faculty that integrated technology in their	Limitations of Data and Planned		
			courses in new ways as a grant activity.	<b>Improvements:</b> Performance report data will be		
				self-reported from program grantees. ED does		
			Some examples of ways that technology was	not collect national-level baseline data for this		
			integrated into courses include using	indicator.		
			the Web as an online resource for syllabi, lesson			
			plans, and course materials; requiring students to	Six percent of grantees did not have data		
			use the Web to conduct research; using video for	available to report on faculty integrating		
			students to observe K-12 teachers modeling	technology in new ways after participating in the		
			integration of technology in classroom	grant and they were excluded from the analysis.		
			instruction; using presentation software and	Of those that did have faculty integrating		
			multi-media to develop presentations and demonstrations; and requiring students to use	technology in new ways, 5 to 17 percent did not have data available to report on specific		
			presentation software and multi-media to	integration technologies, and they were excluded		
			develop presentations and demonstrations.	from the analysis.		
			(This list does not include all ways that	and the straights.		
			technology was integrated into courses.)			

OBJECTIVE 2: INCREASE THE TECHNOLOGY SKILLS AND PROFICIENCY OF NEW TEACHERS FOR IMPROVED CLASSROOM INSTRUCTION.

	Indicator 2.1 Technology-proficient new teachers: The percentage of new teachers who are proficient in using technology and integrating technology into				
instructional practices will increase.					
Targets and Performance Data			Assessment of Progress	Sources and Data Quality	
Year	Actual Performance	Performance Targets	Status: Unable to judge because data first	Sources: Project Performance Reports.	
1999:	New program for 1999	New program for 1999	_ collected in 2000.	Frequency: Annually.	
2000:	<ul> <li>42% of students assessed at</li> </ul>	Data first collected in 2000		Next collection update: December 2001.	
	Capacity Building projects		<b>Explanation:</b> Fifty-one percent (51 percent of	Date to be reported: February 2002.	
	<ul> <li>32% of students assessed at</li> </ul>		students assessed at Catalyst projects		
	Implementation projects		demonstrated proficiency in using technology.	Validation Procedures: Evaluation data	
2001:			The manager and act the manager of	collection will be verified by on-site monitoring	
2002:			The percentages reflect the percentage of graduating students who demonstrated	and review as well as and survey and analysis performed by an experienced data collection	
			proficiency in using technology in the 120	agency with internal review procedures.	
			teacher preparation programs that assessed the	agency with internal review procedures.	
			level of proficiency prior to graduation.	Limitations of Data and Planned	
			process processors processors grammations	Improvements: Performance report data will be	
			Overall, only 33 percent of programs required	self-reported from program grantees.	
			preservice teachers to demonstrate technology		
			proficiency prior to graduation as a grant	Of those grantees that had preservice students	
			activity; another 36 percent assessed proficiency	demonstrating proficiency, 25 to 33 percent did	
			but not as a grant activity.	not have data available to report on the numbers	
				of such students, and they were excluded from	
			Only 65 percent of the programs provided	the analysis	
			specific data on the technology proficiency of	Massachus et aftacha alaman Gaisa an in	
			their students. Some did not require all their preservice students demonstrate their	Measurement of technology proficiency in	
			proficiency; for example, only graduating	graduating students is a better measurement of program outcomes. (Technology assessment of	
			students or students in a particular class may	all students by reporting programs was only 16	
			have been assessed.	percent.)	
			nave occii assesseu.	percent.)	

#### OBJECTIVE 3: CREATE INSTITUTIONAL CHANGE IN THE PREPARATION OF FUTURE TEACHERS TO USE TECHNOLOGY.

Indicator 3.1 Inter-disciplinary partnerships: The percentage of teacher preparation programs that communicate, collaborate and partner together with schools of arts and sciences on a regular and formal basis will increase.

of arts	of arts and sciences on a regular and formal basis will increase.					
Targets and Performance Data			Assessment of Progress	Sources and Data Quality		
Year	Actual Performance	Performance Targets	Status: Unable to judge because data first	Sources: Project Performance Reports.		
1999:	New program for 1999	New program for 1999	collected in 2000.	Frequency: Annually.		
2000:	<ul> <li>47% of Capacity Building</li> </ul>	Data first collected in 2000		Next collection update: December 2001.		
	projects		<b>Explanation:</b> 139 of 329 programs at all levels	Date to be reported: February 2002.		
	<ul> <li>44% of Implementation</li> </ul>		(Capacity Building, Implementation, and			
	projects		Catalyst) partnered with schools of arts and	Validation Procedures: Evaluation data		
2001:			sciences for grant activities.	collection will be verified by on-site monitoring		
2002:			Third air man and (26 man and ) a Could at	and review; and survey and analyses performed		
			Thirty-six percent (36 percent) of Catalyst	by an experienced data collection agency with		
			projects partnered with schools of arts and	internal review procedures.		
			sciences for grant activities.	Limitations of Data and Planned		
			Some examples of such activities include teacher	Improvements: Performance report data will be		
			preparation programs partnering with colleges of	self-reported from program grantees. ED does		
			arts and sciences for faculty development	not collect national-level baseline data for this		
			workshops in technology; curriculum redesign to	indicator. In some programs the College of		
			incorporate best practices in the use of	Education and Arts and Sciences faculty are		
			technology for preservice students; integration of	intermingled		
			Web-based, multi-media resources in preservice			
			education courses; development of student			
			assignments reflecting the use of technology; and			
			providing technical consultants/educators for the			
			SCDE. (This list does not include all ways that			
			participating teacher preparation programs			
			partnered with colleges of arts and sciences.)			

community on a regular and formal basis will increase.						
	Targets and Perform		Assessment of Progress	Sources and Data Quality		
Year	Actual Performance	Performance Targets	Status: Unable to judge data first collected in	Sources: Project Performance Reports.		
1999:	New program for 1999	New program for 1999	2000.	Frequency: Annually.		
2000:	<ul> <li>88% of Capacity Building</li> </ul>	Data first collected in 2000		Next collection update: December 2001.		
	projects		<b>Explanation:</b> Seventy-one percent of teacher	Date to be reported: February 2002.		
	<ul> <li>80 % of Implementation</li> </ul>		preparation programs (233 of 329 programs, at	X		
	projects		all grant levels,) partnered with K-12 schools for	Validation Procedures: Evaluation data		
2001:			grant activities.	collection will be verified by on-site monitoring		
2002:			Forty four paraent (440/) of too har propagation	and review, as well as survey and analysis		
			Forty-four percent (44%) of teacher preparation	performed by an experienced data collection agency with internal review procedures.		
			programs in Catalyst projects partnered with K- 12 schools for grant activities.	agency with internal review procedures.		
			12 schools for grant activities.	Limitations of Data and Planned		
			Some examples of such activities include teacher	Improvements: Performance report data will be		
			preparation programs partnering with K-12	self-reported from program grantees. ED does		
			schools to provide technology-rich clinical	not collect national level baseline data for this		
			opportunities for preservice students; to provide	indicator.		
			professional development opportunities for	marcator.		
			current teachers to improve their technology	Of those grantees that partnered with K-12		
			skills through the training at the	schools, 3 to 13 percent did not have data		
			school/college/department of education; to	available to report on specific partnering		
			model effective use of technology in instruction	activities, and they were excluded from the		
			by K-12 teachers for education faculty; and to	analysis.		
			design and develop competencies with rubrics.			
			(This list does not include all ways that teacher			
			preparation programs partnered with K-12			
			schools.)			
			, in the second			
			Note: These activities may vary from year to			

#### INDICATOR CHANGES

From Annual Plan (FY 2001)

Adjusted—None.

#### Dropped

• 3.1 Sustained program activities: At least 35 percent of program consortia members will continue to implement reform in pre-service teacher training for at least 2 years following termination of Federal funding.

year and grant to grant.

- ❖ 3.3 K-16 partnerships: The percentage of teacher preparation programs that communicate, collaborate, and partner together with the K-12 community on a regular and formal will increase.
- 4.1 State teacher certification standards: The number of states that include technology proficiency as a component of their initial certification standards will increase.

New-None.