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## The Status of "Project Link-to-Learn" and Other Educational Technology Initiatives

June 2003

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# Report Summary and Recommendations

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## Summary

Integrating the latest technology into all aspects of the educational process is important to ensure that students are “technology literate” and prepared for life in the 21<sup>st</sup> Century. To this end, legislators, government officials, educators, and the technology community have made a variety of educational technology initiatives available to the nation’s schools. In this context, the term “initiatives” is used to refer to targeted programs and funding sources that are intended to assist schools in integrating and implementing technology into the educational environment and enhancing the abilities of teachers to use technology effectively in their classrooms.

This report presents the results of an LB&FC review of both state and federal educational technology initiatives available to Pennsylvania schools, with an emphasis on the implementation and status of the state’s “Project Link-to-Learn (L2L) Initiative.”<sup>1</sup> The responsibility for administering such educational technology initiatives in the Commonwealth resides in the Pennsylvania Department of Education, primarily in the Pennsylvania Office of Educational Technology (POET). Pennsylvania’s educational technology development efforts are guided by a comprehensive statewide plan that was adopted in 2002.

Actions taken by the Governor and the General Assembly in 1996 signaled a recognition by the state that many Pennsylvania schools did not have sufficient financial resources to provide students with access to advanced technology resources. Moreover, even when technology was available, teachers and staff often did not have sufficient training to utilize it effectively in the schools.

In 1996, the Governor proposed and the General Assembly approved funding support for a comprehensive educational technology initiative that targeted state funding to expand and improve the technology infrastructure<sup>2</sup> of Pennsylvania’s schools. With this initiative, known as “*Project Link-to-Learn*,” the Governor and Legislature sought to transform the education model in Pennsylvania from “one limited by traditional institutional and geographic boundaries to a ‘classroom of the future’ where students are provided with virtually unlimited access to information and expertise in nearly limitless subject areas.”

When initiated in FY 1996-97, the Link-to-Learn Initiative was established as a three-year entitlement grant project through which public school districts would receive state grants to acquire technology equipment, establish connectivity,

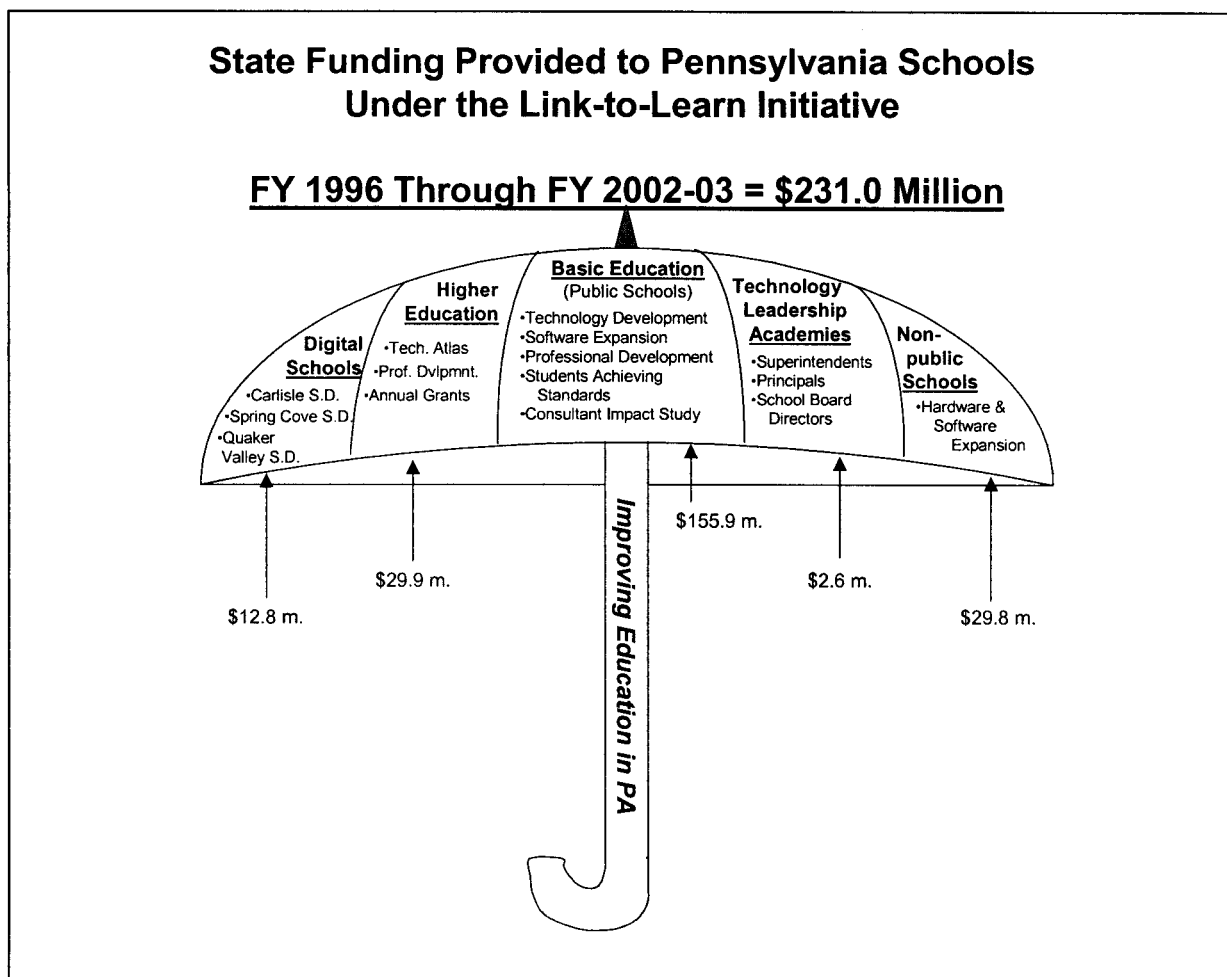
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<sup>1</sup>When initiated in 1996, this state funding initiative was referred to as “Project Link-to-Learn.” In this report, the terms “Project Link-to-Learn,” “Link-to-Learn,” the “Link-to-Learn Initiative,” and “L2L” are used synonymously.

<sup>2</sup>Defined as including hardware, software, telecommunications, and professional preparedness.

and train teachers in technology use. The concept, however, evolved into a broader-based project covering additional components of the state’s education system and was extended in duration. Under the “umbrella” of the L2L Initiative, state assistance was provided in the form of competitive “Students Achieving Standards” grants, higher education technology project grants, nonpublic school grants, and funding for Technology Leadership Academies and Digital Schools, in addition to the original basic education entitlement grants for public schools.

Between FY 1996-97 and FY 2002-03, the Department of Education awarded \$231.0 million in state General Fund monies to Pennsylvania schools for the various components of the L2L Initiative. As shown below, about two-thirds of this funding was for basic education grants for public schools.



***Basic Education Entitlement Grants.*** A primary objective of Link-to-Learn was to help schools acquire computers, software, networks, distance learning equipment, and other technologies that can improve education. Another objective was to give teachers the skills, resources, and incentives to use educational technologies effectively in the classroom. To promote such skill development, the Link-to-Learn Initiative also included a professional development component.

During the four-year entitlement grant phase of the project (FY 1996-97 through FY 1999-00), \$124.2 million in state L2L funds were granted to public schools, vocational technical schools (also referred to as career technology centers), and charter schools. The schools used these grant monies to, for example, purchase more than 22,000 computers and connect nearly 45,000 classrooms to the Internet. In FY 1998-99 alone, an estimated 800,000 students benefited from the technology acquisition. During the same period, L2L provided funding support for 835,408 hours of computer training for public school teachers. The various purposes for which L2L basic education grants could be used are listed on the chart on the next page.

*Students Achieving Standards (SAS)*. SAS was a \$31.7 million extension of the original L2L Initiative. This was a competitive grant program that moved the emphasis from acquiring technology to using technology to assist students in attaining academic standards and mastering basic skills. Under SAS, schools received funding for programs that included curriculum management, instructional management, and integrated learning systems. The success of this initiative was to be based not upon the amount of technology provided to schools, but rather the improvements in academic achievement realized through the use of this technology. The Department has commissioned an educational research firm to study the impact of L2L on test scores and a report is expected by spring 2004.

*Nonpublic School Technology Grants*. Another \$29.8 million in L2L funds were provided in the form of Nonpublic School Technology Grants. Similar in design to the Act 89 Auxiliary Services and the Textbook Programs for nonpublic schools, the funds were awarded to Pennsylvania's 29 Intermediate Units for the purchase of equipment and services to allocate to the Commonwealth's K-12 nonpublic schools. The awards were used for the acquisition of technology items, for connectivity to the Internet, and for professional development opportunities for nonpublic school teachers to ensure the effective integration of technology into their classrooms.

*Higher Education Grants*. From FY 1996-97 through FY 2001-02, the Department of Education allocated a total of \$29.9 million in L2L funds for six specific higher education initiatives. These Higher Education Grants, which were available to any Commonwealth institution that offers a higher education degree, addressed the need for improved technological resources in higher education institutions and for enhanced technology skills in the educational environment and in the workplace. K-12 students, in-service teachers, and pre-service teachers also benefited from these programs. See page S-5 for examples of activities and purposes for which L2L grants were expended for higher education.

*Digital School Districts*. PDE also provided \$12.8 million in funding over three years to create three Digital School District models. These schools were established to serve as resource and demonstration centers to all K-12 institutions by providing tangible examples of how technology can improve education, achieve cost savings, and deliver education in ways not previously thought possible. The

Examples of Activities and Purposes for Which Link-to-Learn Grants Were Expended for K-12 Education							
Education Component	FY 1996-97	FY 1997-98	FY 1998-99	FY 1999-00	FY 2000-01	FY 2001-02	FY 2002-03
Basic Education (K-12)	<ul style="list-style-type: none"> <li>• Computers</li> <li>• Software</li> <li>• Distance Learning Equipment</li> <li>• LANs</li> <li>• Professional Development</li> </ul>	<ul style="list-style-type: none"> <li>• WANs</li> <li>• Internet Connections</li> <li>• Distance Learning Equipment</li> <li>• Professional Development</li> <li>• Y2K Compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Expand High-Speed Connections</li> <li>• Software to Achieve Standards</li> <li>• Professional Development</li> <li>• Y2K Compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Equipment Costs</li> <li>• Software to Achieve Standards</li> <li>• Professional Development</li> <li>• Y2K Compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Students Achieving Standards (SAS)</li> <li>- Software and Equipment</li> <li>- Professional Development</li> <li>- Consultant Study</li> <li>- Standardized tests only for SAS Project.</li> </ul>	<ul style="list-style-type: none"> <li>• Students Achieving Standards (SAS)</li> <li>- Software and Equipment</li> <li>- Professional Development</li> <li>- Consultant Study</li> <li>- Standardized tests only for SAS Project.</li> </ul>	<ul style="list-style-type: none"> <li>• Students Achieving Standards (SAS)</li> <li>- Consultant Study</li> <li>- Standardized tests only for SAS Project.</li> </ul>
Nonpublic Schools	NA	NA	<ul style="list-style-type: none"> <li>• Computers</li> <li>• Software</li> <li>• Internet Connections</li> <li>• Professional Development</li> </ul>	<ul style="list-style-type: none"> <li>• Computers</li> <li>• Software</li> <li>• Internet Connections</li> <li>• Professional Development</li> </ul>	<ul style="list-style-type: none"> <li>• Computers</li> <li>• Software</li> <li>• Internet Connections</li> <li>• Professional Development</li> </ul>	<ul style="list-style-type: none"> <li>• Computers</li> <li>• Software</li> <li>• Internet Connections</li> <li>• Professional Development</li> </ul>	<ul style="list-style-type: none"> <li>• Computers</li> <li>• Software</li> <li>• Internet Connections</li> <li>• Professional Development</li> </ul>
Other Projects	NA	NA	NA	NA	<ul style="list-style-type: none"> <li>• Digital School Districts</li> </ul>	<ul style="list-style-type: none"> <li>• Digital School Districts</li> <li>• Technology Leadership Academy</li> </ul>	<ul style="list-style-type: none"> <li>• Digital School Districts</li> <li>• Technology Leadership Academy</li> </ul>

**Examples of Activities and Purposes for Which Link-to-Learn Grants Were Expended for Higher Education**

<p>FY 1996-97 Technology Testbeds (\$4.0 Million)</p> <ul style="list-style-type: none"> <li>• Study on benefits of online resources to improve writing skills</li> <li>• Establish Internet connections</li> <li>• Establish computer labs</li> <li>• Acquire Internet service provider system</li> <li>• Evaluate hardware/software for school use</li> <li>• Evaluate video conferencing for distance learning capabilities</li> </ul>	<p>FY 1997-98 Infrastructure Investment (\$5.8 Million)</p> <ul style="list-style-type: none"> <li>• Develop web-based software to be used as teacher tool</li> <li>• Establish video conference courses</li> <li>• Develop educational CD-ROM</li> <li>• Develop online educational modules</li> <li>• Purchase hardware/software for computer labs</li> <li>• Increase number of computer courses offered</li> </ul>	<p>FY 1998-99 Integrate Technology in Teacher Preparation (\$5.4 Million)</p> <ul style="list-style-type: none"> <li>• Add technology courses to pre-service curriculum</li> <li>• Require technology integration practicum for pre-service teachers</li> <li>• Develop inservice/pre-service teacher mentoring program</li> <li>• Provide education majors with technology integration training</li> </ul>
<p>FY 1999-00 IT Workforce Development (\$5.6 Million)</p> <ul style="list-style-type: none"> <li>• Offer summer workshops in IT fields for high school students</li> <li>• Establish computer programming competition</li> <li>• Develop new IT courses</li> <li>• Purchase hardware/software for computer labs</li> <li>• Revise curriculum of some courses to reflect use of new technologies</li> </ul>	<p>FY 2000-01 I-Grad (\$5.0 Million)</p> <ul style="list-style-type: none"> <li>• Create and implement IT courses</li> <li>• Design high school IT curriculum framework</li> <li>• Offer professional development</li> <li>• Develop GIS modules for environmental studies courses</li> <li>• Establish GIS internship partnership with colleges and Pennsylvania businesses</li> </ul>	<p>FY 2001-02 Improving Technology at Colleges and Universities (\$4.1 Million)</p> <ul style="list-style-type: none"> <li>• Create courses in e-commerce and workforce development</li> <li>• Subscribe to additional online research databases</li> <li>• Purchase wireless desktop computers for libraries</li> <li>• Implement Internet videoconferencing</li> <li>• Implement "virtual reference desk"</li> </ul>



participating school districts, Carlisle Area, Quaker Valley, and Spring Cove, were chosen through a statewide competitive proposal process in which interested schools had to detail a plan and their proposed methodology for accomplishing the mission of a Digital School District.

*Technology Leadership Academies (TLAs).* Under the umbrella of L2L projects, the Department of Education also sponsors Technology Leadership Academies for principals, superintendents, and school board directors. The Department describes TLAs as a series of intensive, multi-faceted, technology-rich professional development programs designed specifically for school leaders.

The Office of Educational Technology anticipates that all superintendents will attend a Superintendent TLA, and approximately 80 percent of the state's public and nonpublic principals will participate in a regionally administered Principal TLA. Public school board directors and business managers also attend regional conferences geared specifically to their positions. A total of approximately \$2.6 million in state funds was appropriated for TLAs during FY 2001-02 and FY 2002-03 to match a grant from the Bill and Melinda Gates Foundation.

Link-to-Learn has been the primary educational technology initiative available to Pennsylvania schools and has played an important role in fostering the development and expansion of the information technology infrastructure in Pennsylvania schools. The Office of Educational Technology does not, however, have a formal evaluation component and, to date, relatively little formal research has been conducted of the actual results of Link-to-Learn and other initiatives, especially in terms of their impacts on student achievement. To monitor program outcomes, staff of the Department of Education's Office of Educational Technology have relied on periodic site visits and annual and semi-annual reports from the recipient schools.

Although relatively little formal research has been conducted on the impacts of the Link-to-Learn Initiative on student achievement, the state funds provided appear to have been instrumental in expanding technology in Pennsylvania classrooms and improving instructional resources and methods for both students and teachers.

Grant recipients give the L2L Initiative high ratings and cite numerous positive outcomes and specific benefits that have resulted from the availability of this state funding. More than 70 percent of the educators who responded to an LB&FC study questionnaire rated L2L as being "highly effective" as a means of expanding and enhancing the use of technology in Pennsylvania's schools.

The tone of commentary submitted by grant recipients who responded to the questionnaire is reflected in a statement by a technology supervisor at a public school. This individual stated that Link-to-Learn has been very successful in accelerating the implementation of technology across the state, especially in installing

networking, connecting schools to the Internet, and providing valuable technology resources directly to the classroom. Another educator commented that L2L provided a means for their school to lay the foundation for an effective technology program while also providing critical staff training. Negative commentary on the Initiative focused exclusively on the changeover from entitlement grant to competitive grant funding that occurred in FY 2000-01.

When assessing the L2L Initiative and the technology acquisition it supported, it is useful to examine the ratio of the number of students per instructional use computer and the change in this ratio over time. This measure, referred to as “computer intensity,” represents a basic measure of a school’s success in providing students with adequate access to technology. For example, a computer intensity of 10 would be 10.0 students per computer.

Based on national technology market research, Pennsylvania ranks slightly better than the national average on computer intensity and several other benchmarks that are used to judge the progress of technology adoption and use in the nation’s public schools:

<b>Selected Measures of Educational Technology Development</b>		
2001-02		
<u>Measure</u>	<u>Pennsylvania</u>	<u>National Average</u>
# of Students Per Computer .....	3.5	3.8
Percentage of High-End Computers.....	45.5%	43.3%
# of Students Per Multi-Media Computer .....	5.4	5.9
# of Students per Internet Computer .....	5.4	5.6
# of Laptop Computers Per School .....	22.2	13.6

(See pp. 48 to 54 for a further explanation of these measures.)

Using this national technology market research and data from the Department of Education, we determined that Pennsylvania improved its computer intensity index from 11.7 students per computer in FY 1996-97 to 3.5 students per computer in FY 2001-02. (This measure takes into account all computers regardless of their age and functionality.) While this gain cannot be attributed solely to the L2L Initiative, it was, at a minimum, an important contributing factor.

As shown on the next page, total Link-to-Learn funding peaked at \$45.9 million in FY 1998-99. Thereafter, overall state funding declined primarily as a result of significant reductions in the Basic Education portion of the Initiative as a changeover from entitlement grants to competitively-awarded grants occurred. By 2002-03, L2L appropriations had decreased to \$14.4 million.

**L2L Funding Breakdown, by Fiscal Year**  
(\$ Millions)

	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	FY 02-03 Approp.	Total
Basic Education .....	\$33.0	\$35.6	\$35.7	\$19.8	\$14.7	\$13.7	\$ 3.4	\$155.9
Higher Education .....	4.0	5.8	5.4	5.6	5.0	4.1	4.5 <sup>a</sup>	29.9
Nonpublic Schools .....	0.0	0.0	4.8	3.8	5.9	7.2	8.0	29.8
Digital Schools .....	0.0	0.0	0.0	0.0	4.4	6.7	1.7	12.8
Tech. Leadership Academies .....	0.0	0.0	0.0	0.0	0.0	1.3	1.3	2.6
Total L2L .....	\$37.0	\$41.5	\$45.9	\$29.2	\$30.0	\$33.1	\$14.4	\$231.0

<sup>a</sup>This appropriation was subsequently transferred to budgetary reserve.

(Note: Certain administrative costs incurred by the Department of Education are not included in these figures (e.g., for program evaluation, workshops, and system development.))

L2L funding, in all but one of its forms, appears to have ended with the FY 2002-03 appropriations. With the exception of Technology Leadership Academies, which will receive a \$1.3 million appropriation, no other aspect of the L2L Initiative was included in the Governor's FY 2003-04 budget. According to the Director of the Pennsylvania Office of Educational Technology, new technology initiatives, although not yet defined, will be forthcoming under the Student Achievement Fund portion of the Governor's "Plan for a New Pennsylvania."

New federal funding for educational technology provided under the No Child Left Behind Act will, at least partially, offset the discontinuation of state L2L funding. Under the federal "Enhancing Education Through Technology Initiative," or EETT, federal financial assistance became available to school districts in FY 2002-03 to encourage the effective integration of technology into education.

In the first year of EETT funding, 558 Pennsylvania schools are to receive a total of \$11.0 million in federal formula grants and 87 "high need" schools will receive \$10.8 million in competitive grants. While helpful in offsetting state technology funding previously available to the schools, the amount of federal formula grants is about one-third of the average amount that was available in state formula grant funding under Link-to-Learn. The annual amount of federal EETT competitive grants available (\$10.8 million) is more comparable to the average amount of state L2L competitive grants (\$14.2 million) but far fewer schools qualify for funding under EETT.

Two documents currently provide direction for the development of educational technology in Pennsylvania schools. These include the Commonwealth's *State Education Technology Plan, 2002 to 2005*, and the EETT provisions of the federal No Child Left Behind Act. In addition to numerous other objectives and activities, the State Plan calls for "full integration of technology into the curricula and instruction of all Pennsylvania schools by December 31, 2006." Through EETT, the goal of the No Child Left Behind Act is to have all students demonstrate computer literacy by the end of the eighth grade.

## **Recommendations**

**The Department of Education’s Office of Educational Technology (POET) should:**

- 1. Identify and make any required revisions and adjustments to the State Education Technology Plan made necessary by the phase-out of the L2L Initiative, the initiation of federal EETT funding, and any planned technology initiatives that may result from the Governor’s “Plan for a New Pennsylvania.”**
- 2. As is required by the State Education Technology Plan and the federal No Child Left Behind Act, (a) ensure that all technology grant programs contain an evaluation component that is measurable and can be aggregated at the state level, and (b) employ research-based practices to evaluate the effectiveness of educational technology initiatives in terms of their impact on student achievement.**

# I. Introduction

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Since 1996, the General Assembly has provided funding for a broad-based initiative to expand and enhance educational technology resources in Pennsylvania's schools. Known as "Link-to-Learn" (L2L), this initiative is administered and coordinated by the Pennsylvania Department of Education (PDE), primarily by the Department's Office of Educational Technology.

For legislative oversight purposes, the Legislative Budget and Finance Committee (LB&FC) directed its staff to conduct a review of Link-to-Learn and other educational technology initiatives in order to assess their implementation, costs, and current funding status.

## Scope and Objectives

The objectives of this review were:

1. To identify educational technology initiatives currently available to Pennsylvania's public and nonpublic schools and institutions of higher education.
2. To document the origin and operation of the Link-to-Learn Initiative, determine how it is funded, how program funds are allocated and distributed, and how funds have been spent to date.
3. To examine program results and identify program measures to assess the impact the Link-to-Learn Initiative has had on Pennsylvania's education technology infrastructure.
4. To assess the current status of Link-to-Learn and other related education technology initiatives, including projected state funding requirements.
5. To develop findings and recommendations, as appropriate.

## Methodology

This review examined education technology initiatives available to Pennsylvania schools since 1996 with particular emphasis on the Link-to-Learn Initiative (L2L). The review period was FY 1996-97, the year the Initiative began, through FY 2002-03 including related FY 2003-04 budgetary developments through May 2003.

Review activities assessed the Pennsylvania Department of Education's (PDE) administration and operation of the Link-to-Learn Initiative, both by the Pennsylvania Office of Educational Technology and the Division of Nonpublic and Private School Services. LB&FC staff examined state funding for L2L and associated expenditures but did not audit the expenditure of Link-to-Learn grants by individual recipients.

To document the origin and operation of the Link-to-Learn Initiative, we researched pertinent state statutes and program materials and reports and conducted a series of meetings and interviews. Meetings included current and former staff of the Office of Educational Technology; staff of PDE for basic education, higher education, and nonpublic schools; and representatives of a research/consulting firm (Interactive Inc.) that is studying the impacts of L2L competitive grants on student achievement.

Using budget and appropriation materials along with PDE financial reports, we determined total state funding for each of the component parts of the L2L Initiative. These include: L2L Basic Education Entitlement Grants; Students Achieving Standards Competitive Grants; L2L Higher Education Grants; Nonpublic Education Grants; Digital School Districts; and Technology Leadership Academies. We examined the methods used to allocate and disburse L2L funds and computed annual expenditure figures for each component. We also determined the amounts of L2L grant monies received by individual schools and institutions of higher education and the purposes for which these monies were spent.

In reviewing the implementation and status of L2L, we considered the staffing and operation of the Office of Educational Technology and the status of the *State Education Technology Plan* that was adopted in 2002. The relationship of the L2L Initiative to the plan and its overall objectives was discussed with PDE officials.

We also identified funding sources for other federal and state education technology initiatives that were available to Pennsylvania schools during the period under review. Primary among these is the "Enhancing Education Through Technology" (EETT) Initiative now available to the states under the provisions of the federal No Child Left Behind (NCLB) Act.

The study also compares the state of technology in Pennsylvania's K-12 schools to schools in other states on several selected technology measures. Using a 2002 report by a leading provider of information on the education technology market (Market Data Retrieval), we compared Pennsylvania to other states and national averages in terms of computer intensity (i.e., the ratio of students to instructional-use computers), the number of high-end computers in the schools, multi-media computers, and Internet computer intensity.

In conjunction with the review activities described above, LB&FC staff made on-site visits to two school districts, the Carlisle Area School District (one of the Commonwealth's three Digital School Districts) and the Daniel Boone Area School District. These visits included meetings and a school tour with District Superintendents and Business Managers as well as Information Technology staff to discuss and observe the schools' use of L2L Initiative funding. We also conducted site reviews for an accounting and inventory of technology equipment obtained and activities conducted with Link-to-Learn monies.

To supplement these activities, we sent a questionnaire survey to L2L grant recipients to obtain their perspectives on the L2L Initiative. Questionnaires were distributed to public school district superintendents, nonpublic school administrators, and recipients of higher education Link-to-Learn funds.<sup>1</sup> Key elements of the survey instrument were a rating of the effectiveness of the program to expand and enhance technology in education and a listing of outcomes and specific benefits that resulted from the availability of funding through this initiative.

## Acknowledgments

LB&FC staff acknowledges the cooperation and assistance of the Pennsylvania Department of Education during the course of this study. We thank the Honorable Vicki Phillips, and, in particular, the staff of the Office of Educational Technology, including L. Michael Golden, Director; Dorothy Hajdu, Former Acting Director; and Nicole Nokovich, Executive Policy Specialist. We would also like to extend our thanks to staff in the Department of Education's Division of Nonpublic and Private School Services, including Eugene Heyman, Chief; and Judy Green, Program Specialist.

We also acknowledge the input and assistance provided by John Bailey, the former Office of Educational Technology Director, and Temple University Assistant Dean Sandy Kyrish, Ph.D., the former administrator for the higher education component of the Link-to-Learn Program. Additionally, Dale Mann, Ph.D., Managing Director of Interactive, Inc., provided valuable information and assistance to the study team.

Additional thanks are extended to Dr. Gerald L. Fowler, Ph.D., Superintendent of the Carlisle Area School District, as well as his colleagues Craig Williams and Debra Ferguson, and to Ann Marie Traynor, Assistant Superintendent of the Daniel Boone Area School District.

## Important Note

*This report was developed by Legislative Budget and Finance Committee staff. The release of this report should not be construed as an indication that the Committee or its individual members necessarily concur with the report's findings and recommendations.*

*Any questions or comments regarding the contents of this report should be directed to Philip R. Durgin, Executive Director, Legislative Budget and Finance Committee, P.O. Box 8737, Harrisburg, Pennsylvania 17105-8737.*

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<sup>1</sup>LB&FC staff distributed 384 questionnaires to public school superintendents, higher education administrators, and nonpublic school administrators. A total of 184 completed questionnaires were returned, a 48 percent response rate.

## II. Promoting Technology in Pennsylvania Schools

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### A. The Office of Educational Technology

With more than 5,700 schools and 1.8 million students, the successful integration of technology into the state's educational environment is an important and substantial task for state education administrators. In 1997, the Pennsylvania Department of Education created a special Pennsylvania Office of Educational Technology (POET) to guide the integration of technology into the state's educational system. This Office reports directly to the Secretary of Education.

The Office of Educational Technology is responsible for the ongoing integration of technology into school curricula and instructional strategies in all Pennsylvania schools. In this capacity, POET administers education technology initiatives and, since its inception, has had primary responsibility for the state's "Project Link-to-Learn Initiative."<sup>1</sup> POET also coordinates an annual on-line collection of administrative and instructional technology data on Pennsylvania schools known as the "Pennsylvania Technology Inventory" (see Appendix A) and administers the Commonwealth's *State Education Technology Plan*.

As of May 2003, POET had an authorized complement of 10 full-time positions and one part-time wage position. At that time, eight of these positions were filled. (See Exhibit 1.) Funding for the administration and operations of POET is derived from the Department's General Government Operations appropriation. In FY 2001-02, this amount was approximately \$392,000. Administrative costs incurred to administer federal programs are paid from federal grant monies.

### B. The State Education Technology Plan

In spring 2002, a technology plan advisory team and Pennsylvania Office of Educational Technology staff developed the *Pennsylvania State Technology Three-Year Plan* as a guide for integrating and implementing technology into the educational environment. Pennsylvania's *eTechPlanner* provided a model for the state technology plan. The *eTechPlanner* is an on-line planning tool that must be used by all Pennsylvania school districts.<sup>2</sup>

The mission and vision of the state's Education Technology Plan are shown on Exhibit 2.

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<sup>1</sup>Except that during the first year of its operation, the L2L Initiative was administered through the Department's Bureau of State Library. Also, the Department's Division for Nonpublic and Private School Services is responsible for some portions of the L2L Initiative.

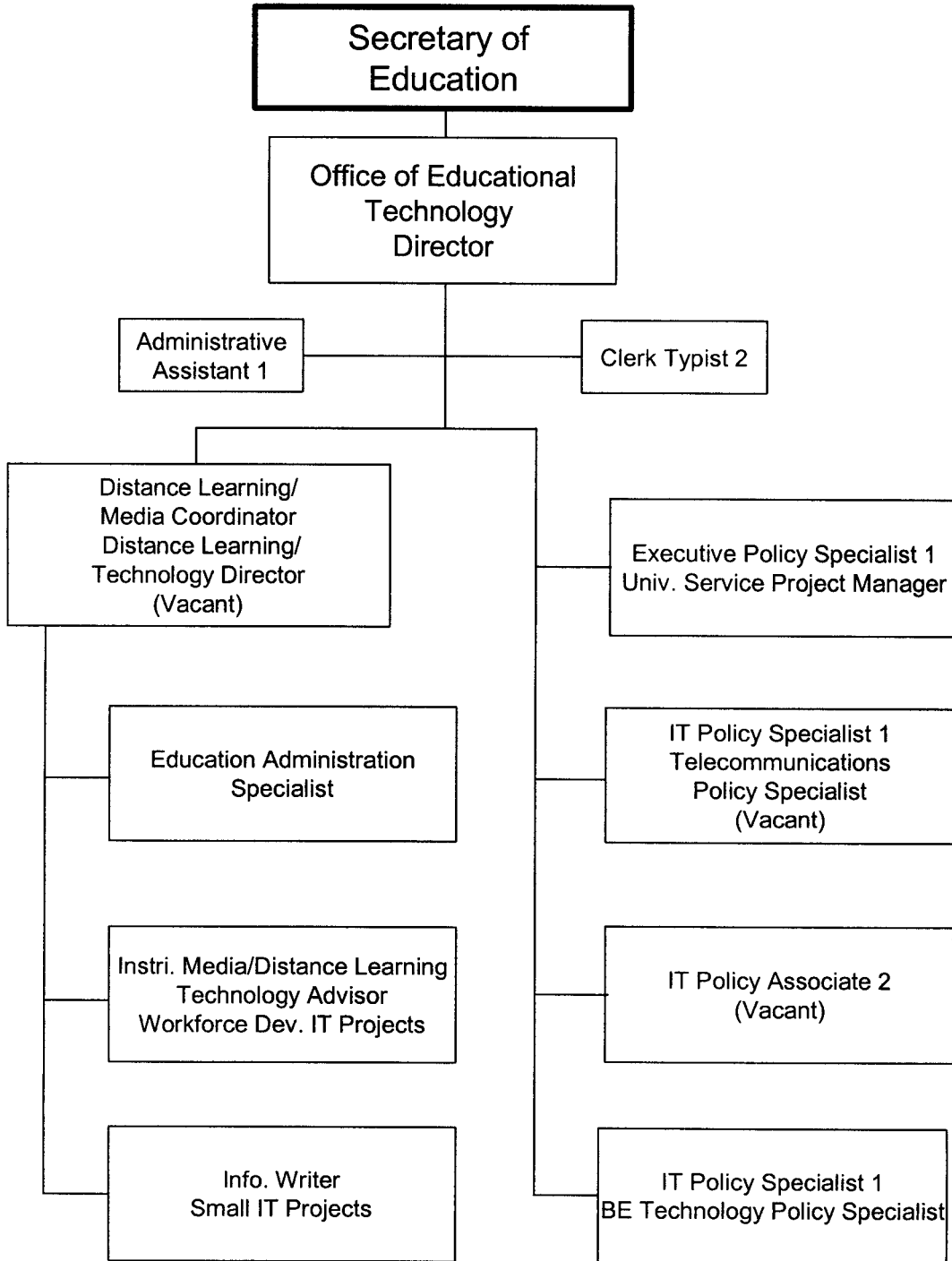
<sup>2</sup>Before awarding any Link-to-Learn grant monies to schools, the Office of Educational Technology required each school to develop an education technology plan. By the 2000-01 school year, the schools were required to submit their technology plans on-line using the Department's *eTechPlanner*.



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**Pennsylvania Office of Educational Technology (POET)  
Organizational Chart**

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Source: Pennsylvania Department of Education, May 2003.

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**State Education Technology Plan Mission and Vision Statement**

**Mission**

- to ensure the effective utilization of technology throughout the educational environment;
- to foster high-quality professional development programs for technology applications in education; and
- to graduate students capable of thriving as productive citizens in a high-tech society.

**Vision**

- for the successful integration of technology into all aspects of the educational process—administratively, pedagogically, and scholastically;
- for the mastery of academic standards via enhanced education through technology applications; and
- for the universal adoption of technology into the culture of the educational community.

Source: *Pennsylvania State Education Technology Plan*, July 1, 2002, to June 30, 2005.

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To accomplish the stated mission and vision, the Plan includes 31 specific objectives within broad goals in the following seven categories: Leadership, Teaching, Learning, Infrastructure, Resources/Content, Accountability, and Support. These goals and objectives are listed in Exhibit 3.

The *State Technology Plan* states that the Plan “will be evaluated and amended throughout its implementation to ensure the Plan addresses and meets the (stated) goals and strategies.” To accomplish this, the Plan specifies a multi-stage evaluation process of six-month intra-office meetings and annual formal assessments. The State Plan also says that technology is to be “fully integrated into the curricula and instruction of PA schools” by December 31, 2006.

The Director of POET, who assumed his position in April 2003, told LB&FC staff that he has not yet formally assessed the extent of Plan implementation to date. He also stated that it may be necessary to reexamine certain of the Plan’s provisions and overall objectives in light of funding considerations and recent program management changes.

**C. The Link-to-Learn (L2L) Initiative**

**Origin and Statutory Basis**

In his FY 1996-97 budget proposal, Governor Tom Ridge requested initial funding for an education technology initiative which later became known as “Link-to-Learn” (L2L). The General Assembly subsequently enacted *Act 1996-107* and provided funding for this Initiative.

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## Strategic Objectives of Pennsylvania's State Education Technology Plan

### Leadership

Goal: All school administrators will demonstrate leadership reflective of a common vision for the integration of technology into all aspects of the school environment.

- Objective 1:* Provide high-quality, sustained training and outreach to school administrators on technology leadership.
- Objective 2:* Provide tools and resources to school leaders on ways technology improves education and drives decisions.
- Objective 3:* Facilitate the creation of and access to effective technology leadership models.
- Objective 4:* Encourage increased collaboration between schools and external entities such as communities, organizations, businesses, and parents.
- Objective 5:* Ensure administrator certification programs contain technology related course work.
- Objective 6:* Promote educational technology standards and competencies for teachers and administrators.

### Teaching

Goal: All teachers will integrate technology to enhance student achievement, to assist students with mastering the Academic Standards, and to maximize instructional productivity.

- Objective 1:* Promote educational technology standards and competencies for teachers.
- Objective 2:* Identify and provide technology resources to assist teachers in the implementation of the Academic Standards.
- Objective 3:* Provide opportunities for educators to participate in high-quality professional development.
- Objective 4:* Ensure that pre-service teachers are receiving appropriate technology instruction prior to classroom placement.
- Objective 5:* Facilitate the creation of effective teaching models, and ensure educators have access to such models.

### Learning

Goal: All students will use technology in attaining the Academic Standards, and have access to learning opportunities that will prepare them for a knowledge-based society.

- Objective 1:* Provide information to educators and students on distance-learning opportunities.
- Objective 2:* Ensure students are provided the technology skills necessary to thrive in a high-tech society.
- Objective 3:* Provide venues for students to demonstrate their mastery of technology.

### Infrastructure

Goal: All schools will have an infrastructure that supports dedicated, high-speed connections to the point of learning.

- Objective 1:* Facilitate the continued development of a statewide telecommunications infrastructure.
- Objective 2:* Encourage all schools to maximize federal E-Rate funding.
- Objective 3:* Research methods by which state-of-the-art telecommunications, such as Internet 2, can assist schools.

## **Exhibit 3 (Continued)**

### **Resources/Content**

Goal: All students and staff will have access to high-quality technology resources.

- Objective 1:* Provide information on technology resources that will assist teachers in implementing the Academic Standards and staff in performing administrative functions.
- Objective 2:* Provide current information to all schools regarding funding opportunities for technology resources and content.
- Objective 3:* Maximize schools' purchasing powers of technology resources by aggregating statewide demand.
- Objective 4:* Ensure students and teachers in high-need local education agencies have an increased access to technology.
- Objective 5:* Encourage development and use of innovative strategies to meet the curricular needs existing due to geographical isolation or insufficient resources.

### **Accountability**

Goal: Schools will be accountable for the effective utilization of technology resources.

- Objective 1:* Provide schools with tools that enable them to analyze current technology resources and plan for future technology investments.
- Objective 2:* Evaluate the effectiveness of all technology grants and initiatives.
- Objective 3:* Provide local education agencies research on the effective utilization of technology.
- Objective 4:* Implement a system of rewards and incentives.
- Objective 5:* Facilitate the creation of effective models, and ensure educators have access to such models.
- Objective 6:* Provide tools and resources to schools to promote Total Cost of Ownership (TCO).

### **Support**

Goal: All schools will provide "just-in-time" technology support to educators and students.

- Objective 1:* Provide training and outreach on "just-in-time" technology support methods to all LEAs especially to those with the greatest need.
- Objective 2:* Assist school districts in identifying proper roles of technology support staff.
- Objective 3:* Identify support resources for technology components and services.

The stated intent of Act 107 was to provide for a “widely accessible statewide telecommunications infrastructure in order to enable Pennsylvania schools to receive and benefit from existing and expected educational services and applications.” The act established a basic education grant program for school districts and authorized nonpublic schools, area vocational-technical schools, intermediate units, or local libraries to participate in the process through a partnership with a school district. Grants could be used to:

- improve the quality and quantity of technology within the school by purchasing technology and software in accordance with standards developed by the Department and the Office of Administration;
- provide for the training of teachers and staff in ways to effectively integrate the technology with the curriculum; and
- equip schools with appropriate local area networking (LAN) and wide area network (WAN) technology so that schools could connect to a proposed “Pennsylvania Education Network” (PEN).

As established in Act 107, the Pennsylvania Education Network was described as:

. . . the statewide telecommunications network which will be developed by building upon and integrating, where appropriate, existing telecommunications infrastructures and resources. Educational institutions will be able to connect to this network to be linked to other teachers, administrators, students, experts and other information resources.<sup>3</sup>

The act established a process for the research, planning, and development of PEN. It also established management teams to provide direction and oversight and to distribute funds for the network. These teams were comprised of representatives of state-owned institutions, state-related institutions, community colleges, and independent colleges and universities in Pennsylvania, intermediate units, and pertinent state agencies. Funds were to be distributed through a request for proposal process scored on the basis of merit, with priority given to applications consisting of partnerships serving multiple school districts.

*Act 1997-30* amended the original program legislation by expanding the purposes for which the basic education grants could be used. The expanded purposes included implementing regional action plans that were developed as part of the program’s “shared vision and action plan project activities,” and improving the quality of technology services at the State Library of Pennsylvania.

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<sup>3</sup>Act 107 and initial Link-to-Learn Program objectives referred to the establishment of a “Pennsylvania Education Network” (PEN). Subsequent development of the Internet rendered the development of a duplicate education network unnecessary.

The act maintained basic education grants at the same level as in the 1996-1997 school year but appropriated additional funds for area vocational-technical schools to be awarded in the same manner as the grants to the school districts. Allocations were to be proportionately reduced if grants to qualifying vocational-technical schools exceeded the appropriation.

Additionally, the amendment required school districts or area vocational-technical schools to form partnerships with one or more of the following in order to receive funds: (1) a political subdivision, (2) a school district, (3) an area vocational-technical school, (4) an intermediate unit, (5) a nonpublic school, (6) a local library, (7) an independent institution of higher education, (8) a state-owned institution, (9) a state-related institution, (10) a community education council, or (11) any other entity approved by the Department of Education. Exceptions could be requested with justification of the need for the applicant to apply as a separate entity.

Act 30 also authorized higher education funding for infrastructure and investment grants (to be distributed through a grant application process) and for developing methods and resources to ensure that educators are able to use the technology effectively with the curriculum. The act expanded membership on management teams to include representatives from community education councils and representatives from other public and nonprofit organizations in Pennsylvania.

*Act 1998-46* continued Link-to-Learn Program funding for public schools at the level of their eligibility in the 1996-1997 school year, and for area vocational-technical schools at the amount they were eligible for in 1997-1998. Act 46 also added a section to provide technology grants for equipment and services. This section was directed at improving educational resources for nonpublic and private school students. This provision authorized the state's 29 Intermediate Units to purchase computer hardware, software, connectivity, and related technology and to loan them to nonpublic and private schools to serve children in grades Kindergarten through 12.

*Act 1999-36* amended the process for basic education grants to authorize the Secretary to establish matching requirements for grant recipients but not requiring that such be established and deleted the reference to grant recipients with a market value/income ratio less than .4000. The basic education grants were no longer limited to that received in the 1996-1997 school year for school districts or 1997-1998 for area vocational-technical schools. Additionally, school districts and area vocational-technical schools were authorized to collaborate or form partnerships with other organizations but were not required to do so in order to receive funds.

*Act 2000-16* authorized schools to use basic education grants to acquire software systems, to assess individual student learning needs, customize instruction for

individual students, correlate Pennsylvania’s academic standards to local school curriculum resources, automate teachers’ administrative responsibilities, and track individual student progress through assessments and reports to teachers and parents. The grant process was also changed to a competitive grant review process and authorized school districts, charter schools, area vocational-technical schools, and intermediate units to apply for grants as prescribed by the Department. Market value/income ratio requirements and the maximum grant for which school districts of the first class and first class A were eligible were eliminated. The Department of Education continued to be authorized to establish matching requirements for grant recipients. The use of higher education funding was expanded to include implementing a web-based application that makes all articulation agreements among higher education institutions available on the Internet.

Thus, as used in this report, the title “Link-to-Learn” is an umbrella term used to refer to several separate education-based technology projects. The Initiative targeted three segments of the education community: Basic Education, Higher Education, and NonPublic Schools. Separate components include the following:

- Link-to-Learn (L2L) Basic Education Entitlement Grants,
- Students Achieving Standards (SAS) Competitive Grants,
- L2L Higher Education Grants,
- Nonpublic Education Grants,
- Digital School Districts, and
- Technology Leadership Academies.

## **Administration and Goals**

In announcing the Link-to-Learn Initiative in 1996, the Governor stated that it was intended to “bring vital technologies into [Pennsylvania] schools and communities” and to “keep Pennsylvania educationally and economically competitive in a world that increasingly relies on technology.” To implement the Initiative, the Department of Education and the Office of Administration’s Office of Information Technology (OIT), jointly established the initial goals stated on Exhibit 4.

The Department of Education’s Office of Educational Technology administers the Basic Education, Higher Education, Technology Leadership Academies, and the Digital School Districts components of L2L. The Department’s Division of Nonpublic and Private School Services, within the Bureau of Community and Student Services, administers the Nonpublic Schools component.

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### Initial Goals of the Link-to-Learn Initiative

- Help schools acquire computers, software, networks, distance-learning equipment, and other technologies that can improve education.
- Promote the transformation of the educational model from one limited by the traditional institutional and geographic boundaries to one with virtually unlimited access to information and expertise.
- Give teachers the skills, resources, and incentives to use educational technologies effectively in the classroom.
- Help schools and libraries become technology resource centers for their communities.
- Encourage community networks and a statewide Pennsylvania Education Network.
- Promote standards based on open systems to ensure interoperability and accommodation to technological changes.
- Promote collaborative development and acquisition of shared educational applications and database.
- Develop lasting partnerships<sup>a</sup> between schools, business, and communities that provide sustainable, long-term support for the Pennsylvania Education Network.

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<sup>a</sup>See Appendix B for a listing of partnerships between PDE and technology stakeholder groups.

Source: Link-to-Learn Progress Report, PA Department of Education, May 1998.

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The Link-to-Learn Initiative is funded primarily by annual appropriations from the General Fund. From the inception of the program in FY 1996-97 and June 30, 2003, the General Assembly appropriated a total of \$231,461,121 from the state General Fund for all segments of the Link-to-Learn Initiative. These segments include: entitlement and competitive grants for basic education (see Section III); Link-to-Learn higher education grants (see Section IV); and other components of the Link-to-Learn Initiative, including Grants to Nonpublic Schools, Digital School Districts, and Technology Leadership Academies (see Section V).



### **III. Link-to-Learn Basic Education Grants**

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The Link-to-Learn Initiative began in FY 1996-97 as an entitlement program under which all public school districts and area vocational-technical schools were eligible to receive funding. Through subsequent amendments, eligibility was extended to career technical centers and charter schools and funding was extended beyond the original three-year time frame. Beginning in FY 2000-01, the Initiative was modified to a competitive grant format referred to as “Students Achieving Standards.”

#### **A. Link-to-Learn Entitlement Grants**

##### **Grant Purposes and Eligibility**

As originally established in 1996, the primary objective of the Link-to-Learn Initiative was to help schools acquire computers, software, networks, distance learning equipment, and other technologies that can improve education. At that time, Governor Ridge announced that Link-to-Learn was intended to “make computers as commonplace in the classroom as the chalkboard.”

While technology acquisition was a primary objective of Link-to-Learn, another was to give teachers the skills, resources, and incentives to use educational technologies effectively in the classroom. To this end, the Link-to-Learn Initiative also included a professional development component.

The Department of Education established an annual grant application process to give each school district an opportunity to request Link-to-Learn funds. The instructions for each annual grant application provided guidelines for the expenditure of L2L grants. This guidance was in the form of expenditure “focus areas” for schools to follow in using their annual grants. For example, for FY 1996-97, the schools were to focus the use of their L2L funding for computers and peripherals for instructional use, for educational software, to establish Local Area Networks (LANs), for staff development and training, and for one computer for use in a school district’s administrative office. (Exhibit 5 lists the specified expenditure focus areas for L2L grants, by fiscal year.)

School districts interested in receiving a Link-to-Learn grant were required to submit an application in a format specified by the Department of Education.<sup>1</sup> In completing this application, interested schools had to document the following, including budgeted costs:

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<sup>1</sup>Beginning in FY 1999-00, the Link-to-Learn grant application process was converted to electronic format, and all schools were required to submit their grant applications through the Department’s on-line *eGrant System*.

Exhibit 5

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**L2L Basic Education Grant Expenditure Focus Areas**

FY 1996-97:

- Computers and Peripherals for Instructional Use
- Educational Software
- Local Area Networks to Connect Technology Resources in a Building
- Staff Development Training in Integrating Technology Into the Curriculum
- One Computer For Use in a School District's Administrative Office

FY 1997-98:

- Staff Development Training in Integrating Technology Into the Curriculum
- One Computer For Use in a School District's Administrative Office
- Wide Area Networks to Connect Technology From School District to Unlimited Networks Outside the District
- High-Speed Internet Connections in Classrooms, Library, and Labs
- Educational Content, Including Distance Learning Courses and Software
- High-Speed Internet Connectivity to the School District Administrative Office
- Address Year 2000 Compliance

FY 1998-99:

- Staff Development Training in Integrating Technology Into the Curriculum
- One Computer For Use in a School District's Administrative Office
- Educational Content, Including Distance Learning Courses and Software
- High-Speed Internet Connectivity to the School District Administrative Office
- Address Year 2000 Compliance
- Software and Other Technology Resources Geared Toward Academic Standards

FY 1999-00:

- Educational Content, Including Distance Learning Courses and Software
- Address Year 2000 Compliance
- Software and Other Technology Resources Geared Toward Academic Standards
- Professional Development
- Network Equipment, Such as Wiring, One-Time Installation Costs, Distance Learning Equipment, Servers, Modems
- Services Including Consultant Fees for the Configuration and Installation of Networks and Year 2000 Compliance

FY 2000-01 and FY 2001-02:

- "Students Achieving Standards"<sup>a</sup>

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<sup>a</sup>Beginning in FY 2000-01, the focus of the Link-to-Learn Program changed from formula grants for technology equipment acquisitions to competitive "Students Achieving Standards" (SAS) grants for the improvement of academic standards using technology. SAS grants were not funded in FY 2002-03, although funding was provided for standardized testing needed for an ongoing consultant study of the impact of SAS on student achievement.

Source: Developed by LB&FC staff from "Project Link-to-Learn Grant Application Instructions."

- how the technology to be purchased with L2L funds would be integrated into the curriculum;
- how the new technology would improve student learning; and
- how the grant funds would meet local needs.

Each applicant school district also had to complete a technology survey detailing the technology equipment in place in the school district, and describe how staff would be trained to use the technology, integrate it into the curriculum, and share it with the community.

The maximum L2L entitlement grant an individual school district could receive was based on the school district's wealth and size. School district wealth is based on an "aid ratio" which takes into consideration the market values and personal income of the local community. The aid ratio results in a number less than zero. The lower the number, the wealthier the school district is considered to be. Using these factors, the maximum L2L grant amount an individual school district could receive based on its average daily membership and aid ratio is shown on Table 1.

Table 1

Average Daily Membership of the School District	Determining Maximum Funding Eligibility for Basic Education Link-to-Learn Grants (FY 1996-97)		
	Aid Ratio Less Than .4000 <sup>a</sup>	Aid Ratio of .4000 to .6999	Aid Ratio Equal to or Greater Than .7000
0 – 3,750.....	\$ 22,000	\$ 44,000	\$ 60,000
3,751 – 6,250.....	44,000	88,000	120,000
6,251 – 8,750.....	66,000	132,000	180,000
8,751 – 11,250.....	88,000	176,000	240,000
11,251 – 13,750.....	110,000	220,000	300,000
13,751 – 16,250.....	132,000	264,000	360,000

<sup>a</sup>School districts with an aid ratio less than .4000 were required to contribute 100 percent matching funds.

Source: FY 1996-97 Project Link-to-Learn Basic Education Grant Application Instructions.

The grants were allocated through a grant review process which included matching requirements established by the Secretary of Education for grant recipients with an aid ratio (as defined in §2501 of the Public School Code) less than .4000. Grant recipients with an aid ratio equal to or greater than .7000 were eligible for larger grants. A school district of the first class was eligible for up to a \$3 million grant and a school district of the first class A was eligible for up to a \$600,000 grant, unless the grant awards included a partnership. Priority was given to applications which included a partnership.

Following application review and grant determination, the Department of Education entered into a service purchase contract with each recipient school to formalize the grant award. This contract listed the equipment and training services to be purchased at the amounts stated in the grant application. The application package contained the minimum configurations and standards that had to be met when using Link-to-Learn funding to purchase technology.

## Entitlement Grant Awards and Expenditures

During the first four years of the L2L Initiative, the Department of Education awarded a total of \$124.2 million in state entitlement grants. As shown on Table 2, the vast majority of this funding went to the Commonwealth's 501 public school districts. The grant amounts individual school districts received was based on its aid ratio as previously outlined on Table 1.

Table 2

<b>State Funding for L2L Basic Education Entitlement Grants</b>										
<b>"Project Link-to-Learn" Entitlement Grants</b>										
Fiscal Year	Public Schools		Vocational Technical		Career Technology Center		Charter Schools		Total	
	Total	Amount	Total	Amount	Total	Amount	Total	Amount	Total	Amount
1996-97 ...	501	\$ 32,985,907	1	\$ 38,944	0	\$ 0	0	\$ 0	502	\$ 32,997,851
1997-98 ...	501	32,958,907	43	1,695,674	27	992,320	0	0	571	35,646,901
1998-99 ...	501	32,958,907	44	1,719,174	27	992,320	0	0	572	35,670,401
1999-00 ...	501	<u>17,985,300</u>	44	<u>1,064,080</u>	27	<u>598,660</u>	35	<u>200,500</u>	607	<u>19,848,540</u>
Total .....		\$116,889,021		\$4,517,872		\$2,583,300		\$200,500		\$124,163,693

Source: Developed by LB&FC staff using information obtained from the Pennsylvania Office of Educational Technology.

In FY 1996-97, the first year of L2L funding, all 501 school districts and one vocational technical school received Link-to-Learn funding. In that fiscal year, the school districts were to make implementing local area networks a priority and ensure that the schools' libraries were connected to a local area network. In the following year, grants were also extended to other vocational technical schools and to career technical schools. The Department extended eligibility to charter schools in FY 1999-00. (Appendix C lists the amounts each school district received from the L2L Basic Education funding stream.)

In the second year of Link-to-Learn, FY 1997-98, first-year efforts were expanded by focusing on building information technology connections. The Link-to-Learn grant application for FY 1997-98 stated that since grant funds were limited, the primary use of the funds was to be WANs and high-speed Internet connections. Applicants were to explore different methods of connectivity in order to identify the most cost-effective approach. Applicants were also encouraged to purchase any basic equipment and LANs that they could not purchase the first year with funds other than the Link-to-Learn grants.

The third year of Link-to-Learn built on the investments made in the previous two years by again focusing on the development of technology to build computer networks. The Link-to-Learn grant application for FY 1998-99 stated that since grant funds were limited, the primary uses of funds were to be the development of WANs for high-speed Internet connections and distance learning. Applicants were encouraged to purchase any basic equipment and LANs that they could not purchase in prior years with funds other than the Link-to-Learn grants. If an applicant wanted to use Link-to-Learn funds for basic equipment, it had to be used to support a wide area network or Internet connection.

The FY 1999-00 budget included a one-year extension of the Link-to-Learn Initiative. This year's Basic Education Grant was limited to \$20 million, and the funds were to focus on one-time costs and investments. Recurring costs were to be paid from school district monies or federal funds.

The Link-to-Learn grant application instructions for FY 1999-00 encouraged applicants to use part of their Link-to-Learn funds to assist them with managing the Year 2000 conversion challenge. They were also encouraged to acquire technology tools, especially software, to assist teachers and students with achieving the newly implemented academic standards.

Because the Basic Education appropriation for FY 1999-00 was reduced from \$36 million to \$20 million, school districts did not receive the same amounts as they had in the first three years of the program. Rather, the amount all schools received was calculated using the formula that considers school size and aid ratio. Additionally, all applicants had to provide a 20 percent match for the professional development portion of their projects.

## **Outcome Measures**

The first three years of the public school element of the L2L Initiative focused on technology acquisition. Based on reports the schools submitted to the Department, we determined that during FY 1996-97 through FY 1998-99, Link-to-Learn funds were responsible for the purchase of 22,049 computers for public schools. During this same period, 44,826 classrooms were connected to the Internet and nearly 2 million students had access to these technologies. (See Table 3.) The Department did not compile this data for FY 1999-00 since the focus of the L2L Initiative for public schools was no longer on equipment acquisition.

During FY 1996-97, a project team was formed to establish a professional development strategy for K-12 educators (at both public and private schools) in the Commonwealth. The purpose of this project was to develop a means to train teachers on computer and other technology equipment and how to effectively incorporate technology into the daily curriculum. The project team also wanted to create a single location where teachers could turn for more resources on any educational subject.

This project resulted in a website containing more than 3,000 pages of lesson plans, case studies, tutorials, and resources to assist teachers incorporate and integrate technology in their classrooms. Prior to the establishment of the website, the project team disseminated this information to each K-12 teacher in the state via CD-ROM.

Table 3

<b>L2L-Related Technology Acquisition for Public Schools</b>			
<u>Measure</u>	<u>FY 1996-97</u>	<u>FY 1997-98</u>	<u>FY 1998-99</u>
Number of Computers Purchased.....	7,600	6,834	7,615
Number of Classrooms Connected to the Internet.....	6,710	15,458	22,658
Number of Students Who Benefited From These Technologies .....	446,731	678,743	833,728

Source: Developed by LB&FC staff using information obtained from the PA Office of Educational Technology.

Also, during the first three years of the L2L Initiative, each public school district used L2L funding to provide annual professional development opportunities for their teachers to address rapidly changing technology and new teacher hires. As shown on Table 4, L2L provided funding support for 835,408 hours of training for a total of 203,057 teachers during the first three years of the Initiative. During the three years that nonpublic schools have been part of the Initiative, L2L funding supported training for 3,982 nonpublic school teachers.

Table 4

<u>Fiscal Year</u>	<u>Professional Development</u>	
	<u>Number of Hours Offered</u>	<u>Number of Teachers Trained</u>
1996-97.....	153,883	35,913
1997-98.....	242,763	81,889
1998-99.....	438,672	85,255

Source: Developed by LB&FC staff using information obtained from the Office of Educational Technology and the Division of Nonpublic and Private School Services.

In 1999, the Department of Education conducted an assessment of the technology infrastructure in the Commonwealth in light of the funding provided through L2L. A part of this “Educational Technology Impact Analysis” included a classroom level study to evaluate the perceived impact of the L2L Initiative. While this study (*Technology and the Classroom: Current Practices in the Pennsylvania School System*) was not intended to measure the impact of technology on academic achievement as a result of L2L, it did assess whether and how information technology was being used in Pennsylvania schools so that administrators could better manage and target available technology funding.

As part of a survey conducted by the Office of Educational Technology in 2001, public school teachers in K-12 classrooms were asked to rate their skill level regarding use of technology in the classroom. The options from which they could choose were: basic (learning the basics); intermediate (uses a variety of applications); advanced (uses technology in the curriculum); or innovator (leader and instructs others). For FY 2000-01, the teachers in Pennsylvania's public K-12 schools rated themselves as follows: beginner, 21.4 percent; intermediate, 45.5 percent; advanced, 24.5 percent; innovator, 7.2 percent; and did not respond, 1.3 percent. Comparable self-ratings are not available for prior years.

## **B. Competitive Grants – “Students Achieving Standards”**

### **Grant Purposes and Eligibility**

In FY 2000-01, the focus of the Link-to-Learn Initiative changed from providing schools with technology equipment and connectivity to using technology in helping students achieve the Commonwealth academic standards, master basic skill sets, and realize the benefits of smaller class size in grades 3 to 5. The Governor's FY 2000-01 budget proposed a three-year extension of the Link-to-Learn Initiative entitled “Students Achieving Standards” (SAS).

The Department of Education developed SAS, at least in part, in response to teachers' concerns that it was taking significant time to correlate the state academic standards with their curricula and lesson plans. At the same time, many teachers were reporting to the Department the success they had with academic software that they purchased with prior years' Link-to-Learn funds. Thus, the Department created SAS in order to help schools acquire academic software and, in turn, help students achieve academic standards. The goals for the Students Achieving Standards component of the Initiative are as listed in Exhibit 6.

#### Exhibit 6

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### **Goals of Students Achieving Standards**

- Build a vision for improved student achievement through effective use of technology.
- Measure the effectiveness of technology in teaching, learning, and administration.
- Increase parental involvement through online tools.
- Provide technology tools, resources, and training that solve real problems teachers encounter in the classroom.
- Provide technology tools, resources, and training to help manage standards-based instruction.
- Maximize classroom teaching through customized instruction and more effective use of teachers' time.
- Ensure students achieve the rigorous academic standards and basic skill sets required for future success.

Source: FY 2000-01 Students Achieving Standards Basic Education Grant Application Guidelines.

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The Department invited school districts to submit applications to receive grants for purchasing advanced software designed to empower teachers, support their curriculums, improve student learning, and enhance higher order thinking skills while implementing the Pennsylvania academic standards. Applicants were asked to select one or several software solutions that would best fit their needs and philosophy. Such software programs included, but were not limited to, curriculum management, instructional management, and integrated learning systems software. Computers, connectivity, and professional development could also be acquired with these Link-to-Learn funds. Exhibit 7 lists the eligible uses of the Link-to-Learn monies for the SAS program.

#### Exhibit 7

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### **Allowable Uses of L2L Funding for Students Achieving Standards**

- Software programs focused on curriculum management, instructional management, and integrated learning systems.
- Complimentary software or online services to support above listed software systems.
- Professional development.
- Hardware and networks necessary to implement the software, such as computers, laptops, servers, cabling, and modems among other things.

Source: FY 2000-01 Project Link-to-Learn Student Achieving Standards Grant Application Guidelines.

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All Pennsylvania school districts, charter schools, area vocational technical schools, and career technical centers were eligible to apply for SAS funding. However, unlike previous years, the SAS grant monies were awarded on a competitive grant basis. Grant awards were based on the number of students served and the school's aid ratio. A base of \$30,000 with a maximum amount of \$350,000 was established. School districts with more than 7,500 students in grades 3 to 5 were eligible for larger amounts of funds. All applicants had to provide a 20 percent match with local or federal funds.

A "peer review panel" employed a competitive process to evaluate all applications. The review panel scored applications based on information provided in the request for proposal, and reviewers assigned point values to each question answered in the grant narrative and budget. The intent of this process was to fund applications that demonstrated the greatest likelihood of implementing projects that would provide recognizable educational benefits. Once the peer review panel scored all applications, it provided a list of recommendations for grant awards to the Office of Educational Technology. The Office then prepared a final list of recommendations and forwarded it to the Secretary of Education for final approval.

Table 5 shows that through FY 2001-02, state funding for competitive SAS grants totaled \$28.4 million. During FY 2000-01, the Department of Education



awarded 114 SAS grants totaling \$14,654,273. During this year, 109 public schools received a total of \$14,315,230 for the SAS projects, and five vocational technical schools received \$339,043. No charter schools or career technical schools received SAS grants in FY 2000-01.

Table 5

**State Funding for L2L “Students Achieving Standards” Competitive Grants**

Fiscal Year	“ Students Achieving Standards” Competitive Grants									
	Public Schools		Vocational Technical		Career Technology Center		Charter Schools		Total	
	Total	Amount	Total	Amount	Total	Amount	Total	Amount	Total	Amount
2000-01 ..	109	\$14,315,230	5	\$339,043	0	\$ 0	0	\$ 0	114	\$14,654,273
2001-02 ..	89	13,031,139	5	524,958	2	154,000	0	0	96	13,710,097
2002-03 ..		a/		a/		a/		a/		3,365,000 <sup>a</sup>
Total .....		\$27,346,369		\$864,001		\$154,000		\$ 0		\$31,729,370

<sup>a</sup>No grants were awarded to individual schools for FY 2002-03. However, state funding was available to participating schools for the purchase and scoring of standardized tests for the SAS project.

Source: Developed by LB&FC staff using information obtained from the Pennsylvania Office of Educational Technology.

FY 2001-02 was the second year of the SAS Project under the Link-to-Learn Initiative. In this year, the efforts of the first year were expanded by again offering competitive grants for software and technology to assist students in attaining the academic standards established for the Commonwealth. All second-year SAS requirements were identical to the first year, including funding purposes and criteria.

In FY 2001-02, the Department of Education awarded 96 SAS grants totaling \$13,710,097. During this year, 89 public schools received a total of \$13,031,139 in SAS grants; five vocational technical schools received \$524,958; and two career technical schools received a total of \$154,000.

In FY 2002-03, no grants were awarded for software and technology for the SAS projects. However, state funding in the amount of \$3,365,000 was available for those schools that received an SAS grant in the past to purchase and score the standardized tests required in the SAS project.

**Outcome Measures**

The primary goals for the Students Achieving Standards (SAS) portion of the Initiative were to “build a vision for improved student achievement through effective use of technology” and “measure the effectiveness of technology in teaching, learning, and administration.”

A formal assessment of the impact of SAS on student achievement was ongoing as of spring 2003. The Department of Education has contracted with an

educational research firm, Interactive, Inc., to conduct a statewide assessment of SAS in order to measure the impact of the program on education. This assessment is intended to help school districts understand what solutions and strategies work well for certain schools and students and which strategies do not have the desired impact. (See Appendix F for further information on this assessment.)

### **C. Perspectives on L2L From Grant Recipients**

To obtain perspectives on the implementation and perceived effectiveness of the L2L Initiative, LB&FC staff visited two public school districts and distributed a study questionnaire to public school superintendents, nonpublic school administrators, and officials at selected colleges and universities. We sent a total of 384 questionnaires to public school district superintendents (242), nonpublic school administrators (84), and college and university officials (58). We received 184 completed questionnaires, a 47.9 percent response rate.

The grant recipients who responded to the survey gave L2L a very positive rating with many crediting it with significant technology contributions to their schools and students. Overall, more than 70 percent of the questionnaire respondents rated the L2L program as being “highly effective” in expanding and enhancing the use of technology in Pennsylvania schools and communities. Exhibit 8 contains selected questionnaire comments provided by public and private school administrators in support of this rating.

The questionnaire responses include relatively few negative comments regarding the program. Those that were critical in nature focused primarily on the changeover from L2L entitlement grants to the competitively-awarded “Students Achieving Standards” grants. Others were critical of the program’s reduced funding levels, and a few expressed concerns about the application process and the lack of feedback and evaluation of program outcomes. (See Exhibit 9.)

### **D. Current Status**

L2L basic education funding in both its entitlement grant and competitive grant forms has ended. What originally began as a three-year entitlement grant format, was subsequently extended for an additional year of entitlement grants and two years of competitive SAS grants.

A third year of funding for SAS in FY 2002-03 is only available to those schools that received SAS grants in the previous two fiscal years for the costs of standardized testing being done in conjunction with Interactive Inc.’s ongoing assessment study. The Governor’s FY 2003-04 Executive Budget as approved by the General Assembly in March 2003 did not include any monies for either entitlement or competitive L2L grants.

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**Selected Questionnaire Comments From School Officials  
Regarding Impacts of the L2L Initiative**

- Before L2L, [our] School District had very little technology installed throughout the buildings. At that time, we had no Internet access to any building. There was also no networking infrastructure installed. Labs were not networked. As a direct result of the money we received from L2L, we were able to add new technology to each building, install a complete network infrastructure, add high-speed Internet access to all buildings and network every computer lab.
- The Link-to-Learn project enabled our school to purchase a complete fiber infrastructure in 1997 that is continuing to service our needs today. Our District was able to go from zero Internet-connected computers to over 800 in less than five years. Without Link-to-Learn, our District would have struggled to find the funds to make our District as technology rich as it is today. Our District was named one of the top 100 “wired” schools by *PC Family Magazine* in the year 2000, only three years after the initial implementation of Link-to-Learn.
- Link-to-Learn gave us the opportunity to develop LANs in our buildings and finally a district-wide WAN. This connectivity has expanded the use of technology in both our schools and community.
- Link-to-Learn funding has provided our school with the means to greatly enhance our instructional programs by expanding the use of technology in the classroom. Link-to-Learn funds has provided the initiative to place computers in all classrooms, provide Internet service and e-mail to all computers in our school. Also, all professional employees were provided with ten hours of computer training for three consecutive years.
- The funds have given our district the opportunity to pilot, train, and explore technologies that we could never have afforded. This experience has enabled us to direct our limited funds to technology that would benefit our students.
- With these L2L funds, we were able to put a “backbone” in our district which allowed us to link all our buildings together into a wide-area network. This allowed us to obtain Internet access for all students and staff. We also greatly increased the number of machines available to our students. All of this enhanced instruction would not have been possible without L2L.
- The equipment and training which our school and faculty have received through Link-to-Learn funding has played a major role in updating our technology and its use in the learning process.
- Technology Grant opportunities are vital to a small school district’s ability to increase student knowledge and academic skills. Discontinuing these grant opportunities would be a disservice to our children and community.
- Through the Link-to-Learn Program, this district was able to install local area networks in three of our elementary school years before they would have been installed. But, more importantly, it allowed us to train teachers to use the various resources that became available due to the networking. In the last year of the Program, our middle school formed a lasting partnership with NASA and the Goddard Space Flight Center in Greenbelt, MD. Through their “You Be The Scientist Program,” our district

## Exhibit 8 (Continued)

became one of only 12 schools nationally to engage in real-time satellite data capture and analysis from the GOES 8 satellite. Through this program, students were immersed in a newly developed problem solving curriculum that continues today.

- I would rate the effectiveness of the Link-to-Learn Program as highly effective in expanding and enhancing the use of technology in Pennsylvania's schools and universities. The grant came along just at the right time in the technology continuum to give a glimpse of what could be achieved with up-to-date technology in schools.
- Link-to-Learn provided a means to lay the key foundations upon which to build an effective technology program. The L2L initiative provided adequate funds that afforded the school administration the opportunity to forge ahead with its technology plan. The reliability of and recurrence of this funding provided a stable platform upon which key network infrastructure could be developed. This infrastructure allowed the administration to demonstrate the viability of technological solutions to the school board and public. Having the available funding provided a "politic-free" method of establishing a core technology program upon which the district could build.
- Our school was able to raise scores in math and English from an average of 5.5 grade level to 7.2 grade level using computers and computer-based instruction acquired through L2L.
- Our school district was able to enhance student access to and use of technology by adding several hundred computer systems to classrooms and media centers/libraries throughout the district, along with software used to support teaching and learning. Our professional staff received training that enabled them to take advantage of technology both in classroom teaching, and in planning and preparation.

Source: Selected comments from an LB&FC study questionnaire completed by L2L grant recipients.

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**Selected Comments Expressing Concerns About the L2L Initiative**

- Initially, the Link-to-Learn Program was extremely effective in assisting small schools through the entitlement approach. However, as the program became competitive, it was almost impossible for a small school without an IT Coordinator to be able to compete.
- The L2L Program was highly effective at its inception. It allowed districts to get the needed funds for technology purchases. However, when it switched to Students Achieving Standards, we feel some of the effectiveness was lost. It was difficult to involve the teachers, who were already short on time, in the planning process, leaving it all up to the technology coordinator. This made for poor cooperation since the L2L guidelines were now being “forced” on the teachers by the technology coordinator. This resulted in our district not requesting funds the last two years.
- When the program was not competitive, I thought it was highly effective because it provided schools with necessary funding to get started with tech hardware and software purchases. Recently, the program is less effective because it has become competitive and has been restricted to be used in only certain grade levels.
- I do not support the move from entitlement to competitive funding. For those institutions without experienced grant writers or the means to place staff in reviewer positions, it puts them at a disadvantage, regardless of their actual need. Wealthier schools generally have full-time grant writers.
- This funding helped to place Pennsylvania schools in the position we are in today in terms of using technology for instructional and administrative purposes. Once in that position, many schools cannot allocate the local funds to maintain their positions. Annual funding from the state to support technology initiatives is a wise use of public funds. Entitlement funding should be supporting versus competitive funding to ensure equal access to technology for all schools, including AVTS and CTCS.

Source: Selected comments from an LB&FC study questionnaire completed by L2L grant recipients.

## IV. Link-to-Learn Higher Education Grants

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### A. Grant Purposes and Eligibility

As part of the Link-to-Learn Initiative, the Department of Education also established a statewide system of competitive grants to strengthen learning at higher education institutions through the improvement and integration of technology. Originally, the higher education component of the program was to be responsible for building an integrated statewide network that would connect schools and libraries and expand educational opportunities for Pennsylvania's students.

As the expansion of the Internet progressed, however, it became evident to state officials that development of a statewide network was not necessary. Consequently, the higher education component of the Link-to-Learn Program then began focusing on annually awarding grants to higher education institutions to assist in the planning, design, and implementation of technology into their academic programs.

This component of the L2L Initiative was intended to address the need for improved technological resources in higher education institutions and for enhanced technology skills in the educational environment and in the workplace. K-12 students, in-service teachers, and pre-service teachers were also to benefit from these programs.

Unlike the initial basic education grants, the L2L grants for higher education were competitive in nature and required matching funds. Each year, PDE officials designated a different theme for projects funded with these higher education grants. Since FY 1996-97, the Department established the following grant themes for projects funded with L2L monies:

<u>FY</u>	
1996-97 .....	Technology Testbeds
1997-98 .....	Infrastructure Investment
1998-99 .....	Integrating Technology Into Teacher Preparation (ITTP)
1999-00 .....	IT Workforce Development (ITWD)
2000-01 .....	I-Grad
2001-02 .....	Improving Technology at Colleges and Universities (ITCU)

Any institution in the Commonwealth that offers a higher education degree program was eligible to apply for these grants. Community Education Councils were eligible in FY 1996-97, FY 1997-98, and FY 2001-02. In completing the application for this Link-to-Learn funding, higher education applicants were required to do the following: (1) describe the educational goals and objectives of their proposed

project; (2) the means by which technology will assist in the attainment of these goals and objectives; (3) the activities they will pursue; (4) the evaluation criteria for the project; and (5) a list of the parties that will be served by the project. The application also required a budget request summary and an itemization of associated expenditures.

Each year the Department activated a peer review group process to evaluate each of the applications that were submitted. Applications were evaluated strictly on the information provided in the application package, and were scored according to criteria specific to each year's grant topic. No reviewer was allowed to score an application affiliated with the institution at which he/she is employed. Scores were tabulated using statistical procedures to ensure the best scoring applications were advanced. The review panel forwarded its recommendations to the Secretary of Education each year for a final decision. Once the grantees were selected and grant award amounts determined, each institution entered into a service purchase contract with the Department of Education for the awarding of the funds.

Various administrative features of the grant awards changed over the years. For example, while the minimum grant amount remained constant each year at \$25,000, the maximum award amount changed over time. In the first year of the program, the maximum award amount was \$1,000,000. In subsequent years, the maximum amount was \$500,000 until FY 2001-02 when the maximum grant award amount was reduced to \$250,000. Additionally, in the first year, the full project cost was funded by the Link-to-Learn grant. In all subsequent years, a requirement of the application was that 20 percent of total project costs must be paid with matching funds.

The grant disbursement schedule and the reporting requirements placed on the grantees also changed over the course of the award process. Initially 25 percent of the grant award was distributed at the start of the project timeline, with another 25 percent disbursed each quarter. Additionally, quarterly reports had to be submitted by the grantee to the Department of Education detailing the project to date as well as expenditures. The disbursement of the quarterly funds was contingent on the receipt of the quarterly report. Beginning in FY 2000-01, funds were disbursed with 70 percent of the grant awarded at the beginning of the project and the remainder at mid-year based on the submittal of a mid-year report. Semi-annual reports are now required rather than quarterly reports, and they too must detail project activities and expenditures to date. These semi-annual reports are also to assess the attainment of project goals and objectives.

## **B. Grant Awards and Expenditures**

Between FY 1996-97 and FY 2001-02, the Department of Education awarded grants totaling \$29.9 million to institutions of higher education. Table 6 provides a breakdown of this funding by fiscal year and grant theme. (Appendix D contains a

listing of the higher education institutions that received L2L funding and the annual amounts of their grants.)

Table 6

<b>Link-to-Learn Grants to Institutions of Higher Education</b>			
<u>Fiscal Year</u>	<u>Grant Theme</u>	<u>Grants Awarded<sup>a</sup></u>	
		<u>Number of Schools</u>	<u>Total Amount</u>
1996-97	Technology Testbeds Project .....	15	\$ 4,000,000
1997-98	Infrastructure Investment Project.....	21	5,809,000
1998-99	Integrating Technology Into Teacher Preparation .....	20	5,376,362
1999-00	IT Workforce Development .....	26	5,572,163
2000-01	I-Grad .....	26	4,970,327
2001-02	Improving Technology at Colleges & Universities .....	23	4,145,186
	Total .....	131	\$29,873,038

<sup>a</sup>A complete list of all project awards, by higher education institution, is located in Appendix D.

Source: Developed by LB&FC staff using information obtained from the Office of Educational Technology, Pennsylvania Department of Education.

As Table 6 shows, Commonwealth institutions of higher education received a total of \$29,873,038 in L2L funding between FY 1996-97 and FY 2001-02.<sup>1</sup> Appendix D provides a breakdown of funding for each of the individual fiscal year grant themes. The following is a brief description of L2L-funded activities carried out as a part of each year’s particular grant theme:

**Technology Testbeds Project (FY 1996-97)**

The purpose of this project was to enable the testing and evaluation of new telecommunications technologies, services, and applications before being deployed to other schools. These testbeds were to focus on technologies that would provide recognizable benefits to schools, libraries, and communities. Applicants for the Higher Education Testbeds Project grant monies were to provide innovative ways of filling an existing need or opportunity or providing technologies to underserved populations, or both. Fifteen grants were awarded in FY 1996-97 totaling \$4,000,000.

**Infrastructure Investment Project (FY 1997-98)**

This project was to transform the educational model from one limited by institutional and geographic boundaries to one with virtually unlimited access to

<sup>1</sup>In some cases, the amounts shown on Table 7 for a particular college or university (e.g., the University of Pittsburgh) include funding provided to branch campuses.



Table 7

**Recipients of Link-to-Learn Higher Education Grants**  
(FY 1996-97 Through FY 2001-02)

<u>Recipient</u>	<u>Total Grants</u>	<u>Recipient</u>	<u>Total Grants</u>
Albright College .....	\$ 275,895	Lincoln University .....	\$ 240,592
Allegheny College.....	322,540	Lock Haven University .....	1,166,849
Bloomsburg University.....	1,763,918	Manor Junior College .....	132,000
Bryn Mawr College .....	106,758	Mansfield University .....	482,000
California University.....	330,500	Marywood University.....	315,057
Carlow College .....	400,500	Mercyhurst College .....	51,822
Carnegie Mellon University .....	75,000	Metropolitan Career Center <sup>a</sup> .....	363,441
Center for Community Partnerships <sup>a</sup> .....	197,000	Millersville University.....	620,500
Central Susquehanna Intermediate Unit <sup>a</sup> ....	407,435	Mount Aloysius College.....	234,257
Chestnut Hill College .....	268,500	Muhlenberg College .....	128,094
Clarion University .....	330,500	Northampton Community College .....	227,736
Clarion/Venango Ed. Resources Alliance ...	44,949	Penn College of Optometry.....	228,328
College Misericordia .....	1,195,452	Penn State University.....	311,100
Community College of Allegheny .....	271,225	Pennsylvania College of Technology .....	551,679
Community College of Beaver County .....	100,000	Pennsylvania Institute of Technology.....	214,570
Council of Elk & Cameron Counties <sup>a</sup> .....	105,000	Philadelphia University .....	245,791
Crawford County Development Corp. <sup>a</sup> .....	243,000	Point Park College.....	672,043
Delaware County Community College .....	58,522	Saint Francis University .....	82,022
Delaware Valley College .....	114,793	Saint Vincent College .....	513,599
DeSales University .....	481,505	Shippensburg University .....	475,798
Drexel University .....	1,486,856	Slippery Rock University .....	29,297
Duquesne University .....	1,000,385	Temple University.....	1,656,301
E. Lebanon County School District <sup>a</sup> .....	60,215	University of Pittsburgh .....	2,973,741
Edinboro University .....	221,974	University of Scranton .....	136,948
Gannon University .....	270,970	University of the Arts .....	800,500
Greater Johnstown School District <sup>a</sup> .....	300,000	Villanova University .....	104,500
Harrisburg Area Com. College – Gettysburg	106,530	Warren/Forest Higher Education Council	80,000
Indiana University .....	1,502,599	Waynesburg College.....	558,000
Juniata College.....	463,958	West Chester University.....	598,760
Keystone College .....	492,322	Widener University .....	251,299
Kutztown University .....	195,000	Wilkes University .....	747,656
LaSalle University.....	615,157	Woodlynde School <sup>a</sup> .....	<u>107,000</u>
Lehigh Carbon Community College .....	251,400		
Lehigh University .....	511,400	Total .....	<u>\$29,873,038</u>

<sup>a</sup>This list also includes school districts, education councils, and other educational entities that partnered with an institution of higher education or, in some years, received a grant directly.

Source: Developed by LB&FC staff using information obtained the Office of Educational Technology, PA Department of Education.

information and expertise. Successful applicants had to identify a meaningful educational goal and then present a solution that could achieve that goal through technology. Twenty-one grants were awarded in FY 1997-98 for a total of \$5,809,000.

### **Integrating Technology Into Teacher Preparation (FY 1998-99)**

This theme was aimed specifically at improving the technology integration skills of college students majoring in education. Projects were to emphasize teaching with technology instead of teaching about technology. The funding initiative had three goals:

- to define technological knowledge and skills for teachers of specific subjects and levels, particularly to support effective teaching of emergent Commonwealth academic standards in applicable disciplines;
- to enable colleges and universities to develop these technological competencies in their students majoring in education; and
- to encourage mutually beneficial relationships between college students majoring in education and practicing K-12 and/or vocational technical teachers.

Twenty grants were awarded in FY 1998-99 for a total of \$5,376,362. Only the public and private higher education institutions approved by the Pennsylvania Department of Education as a teacher preparation institution were eligible to receive this grant.

### **IT Workforce Development (FY 1999-00)**

The theme of this project was to enable higher education institutions to implement curricular changes, resource improvements, and/or special programs that will attract, retain, and graduate information technology students with the knowledge and skills that match the needs of Pennsylvania employers. Preference was given to proposals that strengthened relationships between Commonwealth businesses hiring information technology employees, higher education institutions producing information technology graduates, and institutions providing primary and secondary education in science and technology.

Twenty-six grants were awarded through this program in FY 1999-00 amounting to \$5,572,163. These grants were open to all Pennsylvania public or private higher education institutions that offer associate, undergraduate, and/or graduate degrees in one or more information technology disciplines.

### **I-Grad (FY 2000-01)**

This theme built upon the prior year's Information Technology Workforce Development project and was designed to provide Pennsylvania businesses with a sufficient supply of qualified information technology workers. I-Grad provided

funding to higher education institutions that designed programs that would strengthen and invest in one or more of the following areas:

- information technology disciplines, such as computer science, network engineering, and/or Web development;
- technology-influenced disciplines, such as graphic design, visual communications, multimedia authoring and design, and architectural design; and/or
- non-technology related disciplines, such as political science, medical sciences, or the humanities that explore how technology is changing the field.

Twenty-six grants were awarded in FY 2000-01 totaling \$4,970,327.

### **Improving Technology at Colleges and Universities (FY 2001-02)**

This project was designed to strengthen learning at Pennsylvania's higher education institutions through the improvement and integration of technology in one or more of the following areas:

- improve and integrate technology to strengthen an academic discipline by revising the curriculum, improving resources, or adding special programs;
- incorporate technology into educational curricula;
- provide faculty and students ample access to computer hardware, software, and networking to support learning;
- use technology to provide greater access to courses through programs, such as distance learning;
- provide incentives and resources to improve professional development for faculty; and
- increase access to technology-based education resources for technologically disadvantaged groups.

Twenty-three grants were awarded in FY 2001-02 totaling \$4,145,186.

During the first years of awarding Link-to-Learn funds to higher education institutions, project staff visited each grantee for an on-site review of the projects. Since FY 1998-99, staff has randomly selected projects for on-site visits. These visits in conjunction with the semi-annual reports the institutions must submit are the means by which PDE staff monitors Link-to-Learn spending to assure that the funds are used for the intended purposes.

In addition to the intended objectives of the annual projects, the higher education portion of the L2L Initiative has produced a valuable tool for Pennsylvania in the form of the Commonwealth's *Technology Atlas*. Because the higher education component of the Link-to-Learn Program was initially tasked with developing a statewide education network, a project team was established to document the

technology resources in Pennsylvania. This was a critical first step for the development of a network as it sought to eliminate expensive duplication by building on already existing technology resources.

The project team identified and assessed the communications infrastructures in Pennsylvania (e.g., telephone, video, cable, microwave, and satellite). Additionally, the team developed and sent a technology survey to each school district in the Commonwealth to inventory all education-based technology resources across the state. The survey was also completed by other entities, such as universities and colleges, utility companies, cable companies, and other telecommunications companies. The result of these surveys was a comprehensive inventory of the state's technology resources. The information from these surveys and inventories was then compiled into a document that became known as the *Commonwealth Technology Atlas*.

With the advancement of the Internet, it became apparent that a dedicated statewide education network would be duplicative in nature. Moreover, other states that had developed such dedicated networks were reportedly struggling to keep them viable. Despite the abandonment of the proposed education network, the effort that went into developing the *Technology Atlas* remains a valuable byproduct of the L2L Initiative, especially as the Commonwealth negotiated expansion of its existing technology resources. The Office of Information Technology in the Office of Administration continues to use this information and now fully funds its maintenance. The Department of Community and Economic Development also uses the *Atlas* as an economic development tool in working with employers to expand commerce in Pennsylvania.

### **C. Perspectives on L2L From Grant Recipients**

Comments from college and university administrators contained consistently positive ratings for the L2L Initiative in higher education. These comments are listed in Exhibit 10 and relate, for example, to the technology acquisitions, curricula improvements, and new education programs made possible through the L2L grants. Questionnaire respondents also commented on the impact of certain L2L-funded projects on enabling the schools to align their curricula with the needs of Pennsylvania employers.

### **D. Current Status**

The higher education portion of the L2L Initiative has also been phased out. Although the Legislature appropriated \$4.5 million for such grants for FY 2002-03, these funds have subsequently been placed in budgetary reserve. The Office of Educational Technology planned to award these monies on a competitive grant basis to teacher preparation institutions for the acquisition of technology to be used in the teacher preparation curriculum. The Governor's FY 2003-04 Executive Budget did not include any funding for L2L higher education grants.

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### **Selected Questionnaire Comments Regarding L2L Impacts for Higher Education**

- Our school's curriculum is very technology-intensive for students studying multimedia and news media. The grant was invaluable in enabling us to provide students with the hands-on learning and experience they will need to obtain good entry-level jobs with significant possibility for advancement. L2L has given us technology capabilities that enable us to align our curriculum with the needs of Pennsylvania technology and media employers—we are confident we are preparing our students with the tools and technologies they will encounter on the job.
- Certainly the L2L Initiatives have played a significant role in the technological evolution at [this university]. Three state-of-the-art instructional computer laboratories were funded with L2L funds. The ITTP Initiative allowed university faculty to train public school teachers in the use of the latest technologies. The ITWD Initiative allowed us to fund a summer camp for middle school girls that exposed these individuals to the latest IT and associated career fields. Finally, the I-Grad Initiative allowed the university to integrate GIS technology and informatics into selected course curricula and provided a forum for the development of an informatics certificate program in cooperation with the Geisinger Medical System. Certainly, none of these opportunities would have been possible without these granting initiatives.
- Our college was behind many others in its level of technology integration and usage. Through these two grants we have made significant improvements in our Departments of Business, Journalism, and Education. Hundreds of students each year will now benefit from the many improvements in curriculum and in facilities/equipment.
- The program has had a great impact on hundreds of college students and teachers. Ultimately, this has a multiplication factor on thousands of public school children. Pennsylvania should be proud of the impact that L2L has had on technology in Pennsylvania.
- The infusion of funds enabled this college to build and enhance facilities to support our new Information Technology program. The network lab, Web development lab, and support for hands-on projects with local industry clients are a few critical examples. Critical to the program and student experience and for those client industries who participated in the program.
- The L2L program has been highly effective meeting this objective. For [our] university students, the impact of curriculum changes made possible by the grant on their knowledge and career experiences will not be known for some time. However, the immediate impact that the technology-rich facility, created with the grant funds, has had on student recruitment, corporate partnerships, faculty interest in technology, and community involvement with the university far exceeded the most aggressive expectations. Plans are underway for local businesses to utilize the facility for retreats, meetings, and conferences. Several faculty members have become rejuvenated as the prospect of working with current information technology is now available. Finally, the interest in information technology generated by the success of the project funded through the I-Grad grant is spreading across campus and serving as a seed from which other technology-oriented initiatives will develop.
- Grant funding at our institution enabled the creation of two new programs: the Master of Science in Information Technology and the (undergraduate) minor in Applied Computer Technology. These are forward-thinking and groundbreaking attempts to organize and define a new discipline. As such, they serve as model programs for other institutions.
- This has been an excellent program to increase the size and quality of the information technology workforce in this region.
- Funding was adequate to achieve goals of the grant. The outcomes from the grant during the initial year appeared to contribute to a more marketable and technologically sophisticated workforce.

Source: Selected comments from an LB&FC study questionnaire completed by L2L grant recipients.

## **V. Other Components of the Link-to-Learn Initiative**

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### **A. Grants to Intermediate Units for Nonpublic Schools**

Beginning in FY 1998-99, Link-to-Learn funding was also made available to nonpublic schools. When initially created in FY 1996-97, L2L program guidelines encouraged public-private partnerships to leverage technology resources and grant funding. However, few partnerships developed, and in FY 1998-99, a General Fund appropriation was established to direct Link-to-Learn funding to nonpublic schools to promote the incorporation of technology into their education programs.

In FY 1998-99, when the Nonpublic Schools component of Link-to-Learn was formally adopted, Department of Education staff developed administrative guidelines for grant awards. Since other funding procedures were already in place for nonpublic schools (e.g., Act 89—Auxiliary Services and the Textbook Programs), the Department decided to operate the nonpublic school component of L2L in a similar way.

Staff of the Department's Division of Nonpublic and Private School Services administered this component of L2L. The Division awarded L2L funds to Pennsylvania's 29 Intermediate Units (IUs). The IUs then made technology equipment and services purchases on behalf of the nonpublic schools within their geographic boundaries. (Exhibit 11 shows the geographic boundaries of the 29 IUs in the state.) The IUs loaned the equipment to the nonpublic schools with the IUs retaining ownership. Each year, staff of the Division of Nonpublic and Private School Services allocated available funds to the IUs based on the previous year's enrollments in participating schools.

The funding priorities for the Nonpublic Schools component of Link-to-Learn included the acquisition of hardware, software, and related technologies; Internet connectivity; and professional staff development. Within each of these broad priority groups, each IU decided annually the specific spending priorities for the nonpublic schools within its geographic area.

Twice each fiscal year, representatives of each IU met with the principals of the nonpublic schools to discuss the needs of the students and the technology plans for the schools. From these discussions, each IU could tailor a specific set of funding priorities for the upcoming year. Once established, the funding priorities were communicated to the Department of Education to assure that the priorities were consistent with the Link-to-Learn objectives.

Approximately 85 percent of the nearly 2,500 nonpublic and private schools participated in the Link-to-Learn Program. As shown on Table 8, for the period FY



1998-99 through FY 2001-02, the state's 29 IUs spent \$21,825,020 in Link-to-Learn funding on behalf of these nonpublic schools. In each of these years, funds were used for a variety of technology purposes including: hardware, software, Internet connectivity, and professional development activities.

Table 8

<b>Link-to-Learn Funding for Nonpublic Schools</b>			
<u>Fiscal Year</u>	<u>Expenditures</u>	<u>Participating Nonpublic Schools</u>	
		<u>Percent of Total</u>	<u>Total Student Enrollment</u>
1998-99.....	\$ 4,844,029	83.1%	276,492
1999-00.....	3,821,061	85.7	279,311
2000-01.....	5,921,948	85.7	279,117
2001-02.....	<u>7,237,982</u>	85.3	278,908
Total.....	\$21,825,020		

Source: Developed by LB&FC staff using information obtained from the Department of Education.

The Department also maintains data on technology acquisitions for nonpublic schools through reports submitted annually by the IUs. Using these reports, we determined that between FY 1998-99 (the first year nonpublic schools were eligible) and FY 2000-01, L2L funds are credited with the acquisition of 6,836 computers and 924 nonpublic schools being connected to the Internet. (See Table 9.)

Table 9

<b>L2L-Related Technology Acquisition for Nonpublic Schools</b>			
	<u>FY 1998-99</u>	<u>FY 1999-00</u>	<u>FY 2000-01</u>
Number of Computers Purchased.....	2,484	1,911	2,441
Number of Schools Connected to the Internet.....	69	61	794

Source: Developed by LB&FC staff using information obtained from the PDE's Division of Nonpublic and Private School Services.

The amounts of L2L funding awarded to each of the state's 29 IUs are shown on Table 10.

## **B. Digital School Districts**

In FY 2000-01, the General Assembly appropriated monies for the funding of Digital School Districts as part of the Link-to-Learn Initiative. Digital Schools were to be established through a statewide competition designed to select and fund new educational models that would act as living laboratories for other schools. These digital schools were to demonstrate how an infusion of sophisticated technology, used by well-trained educators, can systematically redefine all aspects of teaching, learning, and managing an education system. Exhibit 12 lists the primary goals of the Digital School District project.



Table 10

**Link to Learn Funding Awarded to Nonpublic  
Schools, by Intermediate Unit**

<u>IU Number</u>	<u>IU Name</u>	<u>FY 1998-99</u>	<u>FY 1999-00</u>	<u>FY 2000-01</u>	<u>FY 2001-02</u>	<u>Total</u>
1	Intermediate Unit 1 <sup>a</sup> .....	\$ 49,942	\$ 39,611	\$ 59,154	\$ 76,867	\$ 225,574
2	Pittsburgh-Mount Oliver.....	190,142	92,564	215,366	238,932	737,003
3	Allegheny.....	385,641	304,345	444,952	565,994	1,700,932
4	Midwestern <sup>b</sup> .....	65,009	51,242	78,311	92,594	287,156
5	Northwest Tri-County .....	164,406	141,656	152,687	251,363	710,112
6	Riverview.....	33,888	26,708	37,601	52,837	151,033
7	Westmoreland .....	70,647	61,943	80,566	118,493	331,649
8	Appalachia.....	106,573	78,869	118,065	150,672	454,179
9	Seneca Highlands .....	36,300	26,719	41,361	46,219	150,599
10	Central <sup>c</sup> .....	20,428	17,191	25,510	34,048	97,176
11	Tuscarora .....	12,025	9,383	2,697	17,517	41,622
12	Lincoln .....	87,453	69,588	99,975	144,730	401,746
13	Lancaster-Lebanon .....	158,159	118,514	189,884	236,441	702,997
14	Berks County.....	79,550	62,239	94,648	114,782	351,219
15	Capital Area.....	131,850	109,435	170,831	225,749	637,865
16	Central Susquehanna.....	47,450	36,943	54,687	71,495	210,575
17	BLaST <sup>d</sup> .....	20,711	20,536	35,383	42,560	119,190
18	Luzerne .....	123,271	106,645	191,796	239,114	660,826
19	Northeastern Ed. ....	97,977	84,312	168,369	159,418	510,076
20	Colonial .....	98,167	110,749	210,645	210,645	630,207
21	Carbon-Lehigh.....	191,150	94,958	184,954	184,954	656,017
22	Bucks County .....	316,314	239,493	382,656	451,913	1,390,376
23	Montgomery County.....	522,557	440,747	627,718	825,091	2,416,113
24	Chester County .....	177,003	158,174	246,068	307,832	889,077
25	Delaware County.....	385,755	300,537	476,127	615,665	1,778,084
26	Philadelphia.....	1,174,052	938,143	1,399,166	1,617,820	5,129,181
27	Beaver Valley .....	31,775	27,959	45,675	53,952	159,362
28	Arin <sup>e</sup> .....	14,811	13,304	19,261	22,448	69,823
29	Schuylkill .....	51,025	38,554	67,836	67,836	225,251
Totals .....		\$4,844,029	\$3,821,061	\$5,921,948	\$7,237,982	\$21,825,020

<sup>a</sup>Fayette, Greene, and Washington Counties.

<sup>b</sup>Butler, Lawrence, and Mercer Counties.

<sup>c</sup>Centre, Clinton, and Clearfield Counties.

<sup>d</sup>Bradford, Lycoming, Sullivan, and Tioga Counties.

<sup>e</sup>Armstrong and Indiana Counties.

Source: Developed by LB&FC staff from information obtained from the Department of Education.

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## Primary Goals of the Digital School District Initiative

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The primary goals of the Digital School District Initiative are:

- develop a new educational paradigm enabled by technology and systematic reform;
- increase student achievement related to academic standards;
- increase the appropriate and effective use of technology in teaching, learning, and managing schools;
- develop strategies to overcome challenges while maximizing the benefits of educational technology;
- bridge the “digital divide”<sup>a</sup> within communities;
- develop partnerships with world-class companies and education institutions; and
- serve as a model of the innovative use of technology to other schools.

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<sup>a</sup>The “Digital Divide” is generally defined as differences in access to information technologies and associated skills due to geography, race, economic status, gender, and physical ability.

Source: Pennsylvania Office of Educational Technology.

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The Digital School Districts are to serve as resource and demonstration centers, providing tangible examples of how technology can improve education, achieve cost savings, and deliver education in ways that previously may not have been thought possible. The underlying premise of this concept is that technology offers an opportunity to rethink the way a school is managed and education is delivered. The Department believes, however, that systematic reform is difficult without proven examples demonstrating the success.

The Commonwealth set out initially to create three Digital School Districts. The Department invited all school districts, technical schools, and charter schools to submit applications detailing how they would use the Digital School District funding. The Department urged applicants to think of new methods, concepts, and practices and thereby reengineer education by integrating technology. In total the Department received concept papers from 77 schools. Through an extensive review process, the 77 schools were narrowed to 30 schools. Those schools were then asked to submit more detailed implementation plans describing how their vision would become a reality. These plans were to include issues, such as management, project team qualifications, evaluations, budget, and marketing.

From this group of 30, the Department further evaluated the applications to identify the top six applicants. These applicants were then invited to appear before a panel of judges to conduct presentations as a final opportunity to describe their vision, and explain why they should be selected as one of the final Digital School Districts. Ultimately, three school districts were selected for this initiative—Carlisle Area School District, Quaker Valley School District, and Spring Cove School District. Each of these school districts received a total of \$4.1 million during

the period FY 2000-01 through FY 2002-03. The following briefly describes each Digital School:

**Carlisle Area School District.** The Carlisle Area School District (CASD) is in Cumberland County and serves a diverse population of rural, suburban, and urban communities. One of every five students in the district lives in poverty. CASD estimates that 5,000 students will be impacted from their selection as a Digital School District. The following are some activities the district planned to undertake as a Digital School District:

- provide low interest to no interest loans to parents of students for the purchase of laptop computers starting in Grade 10 with subsidies available for low income students;
- provide students, staff, and faculty with Internet access from home;
- offer an accelerated studies curriculum and access to university courses for students in grades 6 through 12 so that they may move more rapidly through the curriculum and possibly graduate early; and
- establish a Web-based connection to foreign language educators around the world for high school language classrooms.

**Quaker Valley School District.** Quaker Valley School District (QVSD) is located in Allegheny County and serves a primarily suburban population. Fifteen percent of the students in this district are in low-income households, while 9 percent qualify for the federally funded Free- and Reduced-Lunch Program. The district estimates that 1,839 students will be impacted from their selection as a Digital School District. As a member of the Digital School District community, the QVSD had outlined the following activities:

- each student in grades 3 through 12 would be provided with a notebook computer;
- wireless computers would be used with portable labs for students in kindergarten, first, and second grades;
- wireless technology is to be installed to establish a home network so that students may enter the school's network, including classroom sites, the library, and the Internet from home; and
- parents of students would be able to obtain data, such as grades, attendance, e-mail, and school communications through the home network.

**Spring Cove School District.** Spring Cove School District (SCSD) is located in Blair County and serves a mostly rural population. On average, 33 percent of the students in the district qualify as low-income. The district states that 5 percent of their students are gifted, while 11 percent require special education. The district estimates that 2,135 students will be impacted from their selection as a Digital

School District. The following are some activities SCSD planned to undertake as a Digital School District:

- installation of a Wide Area Network to provide Internet connections district-wide and to each facility in the school district;
- development of a wireless PC lab at the high school for the use of Tutoring Software;
- introduction of curriculum software for grades 1, 2, and 3 at the elementary schools; and
- construction of the Cove Educational Community Center at the middle school complex that will house two digital classrooms, a digital multimedia studio, wireless workstations, large group presentation boards, and video conferencing.

### **C. Technology Leadership Academies**

In response to findings from two state-funded research projects and in conjunction with L2L, the Department of Education created the Technology Leadership Academies (TLAs) for Principals, Superintendents, and School Board Directors. The research results reinforced previous experience, which indicated that administrators who understood the role and power of technology in education were better equipped to lead districts into technology initiatives. The TLAs are described by Department officials as a series of intensive, multi-faceted, technology-rich professional development programs designed specifically for school leaders.

The Office of Educational Technology anticipates all superintendents will attend a Superintendent TLA, and approximately 80 percent of the state's public and nonpublic principals will participate in a regionally administered Principal TLA. The School Board Director TLAs will accommodate school board directors and business managers through four regional three-day conferences geared specifically to their needs. A grant from the Bill and Melinda Gates Foundation provided supplemental funding for this project.

The Technology Leadership Academy is designed to provide superintendents, principals, and school board members with skills to address the uses and importance of technology in education. These individuals are also trained in how to plan, implement, and manage technology in their schools.

The Office of Educational Technology sponsors conferences for these individuals. Each group attends its own conference where the importance of technology in schools is underscored. A large part of these conferences is presentations by state and national technology leaders. Examples of discussion topics at the first superintendent technology leadership training include technology leadership, community relations, professional development, technical support, budgeting and total cost of

ownership, distance learning, funding resources, trends in technology, and basic computer skills, such as e-mail, Internet, and PowerPoint presentations.

Upon completion of the session, the Department provides technology equipment to attendees for use at their schools. Superintendents receive a laptop computer at the end of their training program, while principals receive a Palm Pilot, and school board members receive an electronic whiteboard for their schools.

Funding for the TLAs is derived from a \$1.7 million grant provided by the Bill and Melinda Gates Foundation and matching funds from the State General Fund, nonpublic schools, and other miscellaneous sources. In both FY 2001-02 and FY 2002-03, the General Assembly appropriated \$1.3 million and the nonpublic schools provided \$300,000 in TLA matching funds. The Governor's Executive Budget for FY 2003-04 recommended a \$1.3 million appropriation to continue these academies.

## **D. Current Status**

### **Nonpublic Schools**

For FY 2002-03, \$8.0 million was appropriated for Link-to-Learn grants to nonpublic schools. While actual expenditure amounts were not available as of May 2003, Department officials indicated that the amounts should be similar to those allocated to and spent by each IU in FY 2001-02. No funding for L2L grants for nonpublic schools was included in the Governor's FY 2003-04 Executive Budget.

### **Digital School Districts**

The three Digital School Districts received a total of \$1.7 million in state funding in FY 2002-03. This was the third and final year of L2L funding for Digital School Districts. No state funding was included in the FY 2003-04 budget, but the *State Education Technology Plan* calls for continued support and development of the Digital Schools concept and its replication statewide.

### **Technology Leadership Academies**

State funding for these academies totaled \$1.3 million in both FY 2001-02 and FY 2002-03. Unlike the other L2L components, this project is to continue at a funding level of \$1.3 million in FY 2003-04.

## **VI. The Federal Enhancing Education Through Technology (EETT) Initiative**

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The federal No Child Left Behind (NCLB) Act was passed on January 8, 2002. This act amended the Elementary and Secondary Education Act of 1965, and was designed to reorient federal spending for schools into a federal investment in improved student performance. One aspect of the NCLB Act is the “Enhancing Education Through Technology” (EETT) Initiative.

The EETT Initiative consolidates the federal Technology Literacy Challenge Fund and the Technology Innovation Challenge Grant programs into a single state-administered educational program. EETT provides financial assistance to school districts and charter schools to encourage the effective integration of technology into education through teacher training and curriculum development, among other things. The EETT legislation seeks to establish successful, research-based instructional methods and, thereby, improve student achievement and ensure student computer literacy by the end of the eighth grade.

### **EETT Goals and Objectives**

The purposes of the Enhancing Education Through Technology Initiative are as follows:

1. To provide assistance to states and localities for the implementation and support of a comprehensive system that effectively uses technology in elementary schools and secondary schools to improve student academic achievement.
2. To encourage the establishment or expansion of initiatives, including initiatives involving public-private partnerships, designed to increase access to technology, particularly in schools served by high-need local educational agencies.
3. To assist states and localities in the acquisition, development, interconnection, implementation, improvement, and maintenance of an effective educational technology infrastructure in a manner that expands access to technology for students (particularly for disadvantaged students) and teachers.
4. To promote initiatives that provide school teachers, principals, and administrators with the capacity to integrate technology effectively into curricula and instruction that are aligned with challenging state academic content and student academic achievement standards, through such means as high-quality professional development programs.

5. To enhance the ongoing professional development of teachers, principals, and administrators by providing constant access to training and updated research in teaching and learning through electronic means.
6. To support the development and utilization of electronic networks and other innovative methods, such as distance learning, of delivering specialized or rigorous academic courses and curricula for students in areas that would not otherwise have access to such courses and curricula, particularly in geographically isolated regions.
7. To support the rigorous evaluation of programs supported with program funds, particularly regarding the impact of such programs on student academic achievement, and ensure that timely information on the results of such evaluations is widely accessible through electronic means.
8. To support local efforts using technology to promote parent and family involvement in education and communication among students, parents, teachers, principals, and administrators.

### **EETT Eligibility and Grant Awards**

The “EETT Act” (Title II, Part D of the No Child Left Behind Act) appropriated \$1.0 billion for federal fiscal year 2002, with “such sums as necessary for each of the five succeeding years.” In order for a state to receive a portion of this appropriation, the state educational agency (i.e., the Pennsylvania Department of Education (PDE)) must submit an application to the Secretary of Education that contains a statewide long-range strategic education technology plan. State award amounts are determined by formula allocations based on each state’s current-year Title I, Part A funds (related to students living in poverty).

Local educational agencies are eligible to receive a subgrant from the state if they submit their own application to the state educational agency. The application must contain the LEA’s local long-range strategic educational technology plan consistent with the state agency’s plan.

Specific activities must be carried out at the state level with the grant monies including, for example:

- developing specialized or rigorous academic courses and curricula through the use of technology, including distance learning technologies;
- establishing or supporting public-private initiatives for the acquisition of educational technology;
- providing high-quality professional development and training in the use of technology;
- providing students (including those with disabilities and limited English) and teachers with access to educational technology;

- developing performance measurement systems to determine the effectiveness of the educational technology programs; and
- collaborating with other state educational agencies on distance learning.

There are also specific local level activities that must occur, especially as it relates to professional development and curricula and instructional materials. These local activities are very similar to the state level activities.

PDE submitted the required application and long-range strategic plan and first-year EETT funding was available to Pennsylvania schools in FY 2002-03. For FY 2002-03, approximately \$22.0 million in EETT monies was allocated to Pennsylvania for public schools and charter schools. This funding was awarded in two grants, half through a formula grant and half on a competitive grant basis. PDE officials report that they expect that Pennsylvania will receive another \$22.0 million during FY 2003-04.

Recipients of EETT grants must enter into a service purchase contract with PDE before receiving their award funds. These contracts specify that the schools must outline their spending purposes to ensure compliance with EETT purposes. EETT guidelines state that recipients of EETT competitive grant funds must use at least 25 percent of the fund allocation to provide sustained, intensive, high-quality professional development training for teachers. The recipient must provide professional development in the integration of advanced technologies, including emerging technologies, into curricula and instruction in using those technologies to create new learning environments.

The remaining funds must be used to carry out the purposes of the EETT program, including the creation and maintenance of projects that will ultimately improve student academic achievement, including technology literacy, of all students attending the school and improve the capacity of all teachers in the school to integrate technology effectively into curricula and instruction. Additionally, funded projects must also promote parental involvement, increase communication with parents, and include a method of delivery of information on technology used in the education of their children to parents.

FY 2002-03 EETT formula grants were awarded to the public school districts and charter schools in Pennsylvania based on the number of Title I, Part A students in the schools. A total of \$10,991,756 was available to 558 schools, including schools in 492 of the 501 public school districts and 66 charter schools. The EETT formula grant award amount each school district and charter school should receive for FY 2002-03 is listed in Appendix E. EETT formula grant monies are to be used for activities that support the previously stated goals and objectives of the EETT Initiative.



In December 2002, PDE awarded EETT competitive grants to 81 school districts and 6 charter schools. The school districts were required to share funding with interested nonpublic schools within their service area. Only public school districts and charter schools classified as “high need” were eligible for EETT competitive grants funding. “High-need” is defined as those schools in the state with the highest number of children from families with incomes below the poverty level. Of these “high poverty” schools, those schools that had a substantial need for assistance in acquiring and using technology were eligible. This “substantial need” for technology is based on the following:

- the student to computer ratio was higher than 5:1;
- the school did not have high-speed Internet access; and
- twenty-five percent or greater of the teachers were at a beginning level in computer proficiency.

Additionally, high poverty areas that operate one or more schools identified for improvement or corrective action under Section 1116 of the Elementary and Secondary Education Act are also eligible for EETT funds. Based on these criteria, 203 Pennsylvania schools were eligible to apply for the competitive EETT grants. Of this number, 196 schools applied, and 87 schools were selected for grants. A total of \$10,795,126 was available for FY 2002-03. Appendix E lists the recipients of these grants and their award amounts.

The Pennsylvania Office of Educational Technology (POET) staff, in conjunction with federal program staff of PDE, report that they will monitor the local expenditure of EETT funds. This will include periodic on-site evaluations to determine if the spending purposes, as stated in the contract with PDE, are being met. Additionally, POET staff plans to conduct semi-annual and annual on-line reviews of recipient spending and activities. Fund recipients are also required to submit bi-annual reports through PDE’s e-grants system on the status of their projects.

## **VII. Other Educational Technology Initiatives**

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The following provides overview information on funding for other education technology initiatives that have been available to Pennsylvania schools during the period covered by this review.

### **Technology Literacy Challenge Fund (TLCF)**

The TLCF was a federally-funded initiative designed to enable local education agencies, particularly those with a high percentage of economically challenged schools, to purchase the technology that met their most important educational needs. From 1996 through 2001, \$81.4 million in TLCF monies were awarded. This initiative is no longer being funded.

### **E-Rate Discount**

The federal E-Rate program makes technology affordable for every library and school in the U.S. by providing discounts on eligible services. Established by the Telecommunications Act of 1996 and funded up to \$2.25 billion per year by contributions from telecommunications carriers, E-Rate offers discounts of 20 percent to 90 percent on the cost of telecommunications, Internet access, and internal data connections. Schools and institutions apply directly to a nonprofit subsidiary of the Federal Communications Commission (FCC) for this program, but POET staff assist schools with filling out the application. Since 1998, participating Pennsylvania schools and libraries have received nearly \$340 million in E-Rate discounts.

### **Digital Grass Roots**

The Pennsylvania Digital Grass Roots Initiative, a subset of the Technology Literacy Challenge Fund grant, was a two-year program that provided students the opportunity to digitize unique aspects of their communities and to place those digitized images on-line. Through participation in this program, students were able to gain high-tech skills in Web page authoring and new media design, and a deeper appreciation of their neighborhoods' identities. A total of \$6 million in funding was available, with grants up to \$20,000 per local education agency awarded each year. Examples of work completed through these grants include "A Virtual Tour of President James Buchanan's House" by fourth graders at the Penn Manor School District, a Web site for the Everett Free Library by the Everett Area School District, and a Web site for the Coalport Area Coal Museum by the West Branch School District. This Initiative is no longer being funded.

## **School Renovation, IDEA, and Technology Grant**

In spring 2002, Pennsylvania awarded federally funded, competitive grant monies to rural and poor local education agencies for school repair and renovation, special education programs, and renovation-related technology expenses. Eligibility for the technology funding was contingent upon the school's participation in year 5 of the E-Rate program and the school's submission of a state-approved technology plan. Total funding for all three grants was \$44 million. Future funding for this initiative is unknown.

## **State Digital Divide Grant**

In March 2002, the Department of Community and Economic Development began a grant program to improve computer literacy skills and Internet access for low-income families known as the "Digital Divide Initiative." Under this initiative, nonprofit community agencies, economic development organizations, and educational institutions are eligible to apply for awards that range from \$25,000 to \$500,000. Proposals are reviewed and grants awarded on a rolling basis until the funding has been exhausted. In FY 2001-02, a total of \$3.4 million in Digital Divide Grants was awarded to 13 projects across Pennsylvania, of which four were school-based. For FY 2002-03, \$4.0 million has been allocated for this program.

## **CyberStart**

CyberStart is a multi-year initiative administered by the Department of Community and Economic Development, in conjunction with the Department of Public Welfare. The Pennsylvania Department of Education is not involved with this initiative. CyberStart is a tool specifically designed to help licensed child day care facilities serving children ages 3 to 5 find the resources necessary to harness the power of technology. Initiative partners across Pennsylvania provide participating facilities such things as: computer hardware, software, controlled Internet connectivity, educational resources, training, services, and technical support.

## VIII. Pennsylvania Compared to Other States on Selected Measures of Educational Technology Development

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Certain benchmarks can be used to judge the progress of technology adoption and use in the nation's public schools. Market Data Retrieval (MDR), a leading provider of information on the education technology market, has developed a series of such benchmarks. One of the MDR publications in which these benchmarks appear is the *Technology in Education Report*, a comprehensive report on the state of technology in the K-12 market nationwide.<sup>1</sup> Using the 2002 MDR report, we compared Pennsylvania to other states on several selected technology measures.

### Computer Intensity

Computer intensity is defined as the ratio of students to instructional-use computers. This represents a basic measure of a school's success in providing students with adequate access to technology. This measure includes all computers provided to students regardless of age or functionality.

According to the 2002 MDR survey, Pennsylvania's computer intensity index was 3.5 students per computer, slightly better than the national average of 3.8 students per computer. Computer intensities vary by state, ranging from a most accessible 1.8 students per computer in South Dakota to a least accessible 5.8 students per computer in Louisiana. (See Table 11.) The MDR report notes that several of the states with computer intensities better than the national average (e.g., Florida, Ohio, Pennsylvania, Texas, and Virginia) have invested heavily in instructional technology.

According to the MDR surveys, the number of computers for instructional use in public schools has more than doubled over the past five years. Figures cited in the survey show the installed base of instructional computers growing from 6.3 million nationally in 1996-97 to 12.7 million in 2001-02. MDR concluded that "after nearly two decades of investment in computer hardware, schools continue to add to their hardware inventory in an effort to provide improved access to state-of-the-art technology."

### High-End Computers

Processor type helps determine capability in the installed base of instructional computers. Older PCs—those equipped with 286-, 386-, or even 486-type

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<sup>1</sup>MDR, a company of the Dun and Bradstreet Corporation, reports that its databases include 5 million educators at more than 260,000 institutions. The MDR's 2002 survey reached all 87,100 schools in the United States, using direct mail, telephone, and Internet survey techniques.

Table 11

**Number of Students Per Instructional  
Use Computer (Computer Intensity)  
Pennsylvania and All States\*  
(2001-02)**

<u>State</u>	Students per <u>Computer</u>	<u>State</u>	Students per <u>Computer</u>
South Dakota.....	1.8	South Carolina .....	3.9
North Dakota .....	2.3	Kentucky .....	3.9
Kansas .....	2.4	Colorado.....	3.9
Wyoming .....	2.5	Arkansas .....	3.9
Nebraska .....	2.5	Oregon .....	4.0
Wisconsin .....	2.7	Massachusetts .....	4.0
Iowa .....	2.7	Maine .....	4.0
Alaska.....	2.7	Illinois .....	4.0
Montana .....	2.8	Georgia .....	4.0
District of Columbia ...	2.8	Tennessee .....	4.1
Idaho .....	3.0	North Carolina .....	4.1
New Mexico.....	3.2	Michigan.....	4.1
Minnesota .....	3.2	Arizona .....	4.1
Indiana.....	3.2	New York.....	4.2
Texas.....	3.3	Hawaii .....	4.3
Ohio .....	3.3	Utah.....	4.5
Missouri .....	3.3	Connecticut .....	4.5
Vermont.....	3.4	Rhode Island .....	4.7
Washington .....	3.5	Maryland .....	4.8
Virginia .....	3.5	New Hampshire .....	4.9
<b>Pennsylvania .....</b>	<b>3.5</b>	Mississippi.....	4.9
Florida .....	3.5	Nevada.....	5.1
Oklahoma .....	3.6	California.....	5.1
West Virginia .....	3.7	Alabama .....	5.1
New Jersey.....	3.7	Louisiana.....	5.8
Delaware .....	3.7		
<b>National Average .....</b>	<b>3.8</b>		

\*Includes all computers, regardless of age or functionality.

Source: *Market Data Retrieval, 2002, Public School Findings.*

processors—are not able to run most of the software being designed and marketed today; thus, their usefulness in the classroom is limited. MDR classified “high-end computers” as those that are Pentium II-type or higher, Power Macintosh, and iMac. Medium processor type was defined as 586 and non-Power Macs. Low processor type was defined as Apple II and 486-type or less.

MDR’s survey found that, nationally, 43 percent of instructional computers have high-end processors. (See Table 12.) Minnesota leads the nation with 77 percent of its instructional computers having high-end processors, while Vermont is the lowest, with 3 percent high-end processors. In Pennsylvania, 45.4 percent of the instructional computers have high-end processors, 2 percent higher than the national average. MDR projects that the trend toward high-end processors will continue as vendors offer schools more powerful machines at prices comparable to or lower than current price points, as system requirements for using sophisticated software continue to increase, and as aging machines are replaced.

## **Multimedia Computers**

A multimedia computer is one that is equipped with a sound card and CD/DVD drive. MDR reports that, for the most part, both sound cards and CD drives are now standard features of the computers that sell to the K-12 market. These features are necessary to handle current instructional software, most of which is multimedia intensive and requires high-speed processors and CD/DVD drives.

According to MDR surveys, the nationwide multimedia computer intensity (student-to-multimedia computer ratio) in 2001-02 was 5.9 students. This compares to 3.8 students per computer for the total installed base of instructional-use computers and represents significant improvement in the past five years when national multimedia computer intensity was 21.2 in 1996-97.

As shown on Table 13, individual state multimedia intensities range from 2.7 in South Dakota to 8.5 in Louisiana, compared to a national average of 5.9. In Pennsylvania, the ratio was better than the national average at 5.4 students per multimedia computer.

Schools report that multimedia computers now make up the majority (62 percent) of their installed base. The percentage of the installed base that is made up of multimedia computers ranges from a high of 81 percent in Delaware to a low of 43 percent in Alaska. In Pennsylvania, multimedia computers account for 63.8 percent of the installed base, about two points above the national average.

Table 12

**High-End Computers as a  
Percentage of the Installed Base\***  
Pennsylvania and All States  
(2001-02)

<u>State</u>	Installed <u>Base %</u>	<u>State</u>	Installed <u>Base %</u>
Minnesota .....	77.3%	South Dakota .....	43.8%
Wisconsin .....	69.4	Indiana .....	43.4
California .....	67.5	<b>National Average.....</b>	<b>43.3</b>
Florida .....	63.3	Missouri.....	41.9
Texas.....	63.0	Georgia .....	38.2
Arizona .....	63.0	Oregon .....	36.9
New Jersey.....	62.3	Kansas .....	35.8
Utah .....	61.9	Kentucky .....	35.1
District of Columbia ...	61.4	New Mexico .....	34.5
Washington .....	60.7	Alabama .....	32.1
Michigan .....	60.3	Montana .....	29.5
Colorado.....	59.1	Idaho .....	26.3
Nebraska .....	58.9	Rhode Island.....	24.8
Massachusetts .....	57.4	Alaska .....	23.8
Iowa .....	56.9	Wyoming .....	23.0
Connecticut .....	55.8	Arkansas .....	21.8
Oklahoma .....	55.4	New Hampshire .....	18.2
New York.....	54.9	Mississippi.....	17.4
Tennessee.....	53.2	Nevada.....	16.5
Hawaii.....	52.3	Louisiana.....	15.4
Ohio .....	48.5	Delaware .....	13.6
South Carolina.....	48.0	West Virginia .....	13.2
Illinois .....	46.0	Maryland .....	13.0
<b>Pennsylvania .....</b>	<b>45.4</b>	Maine .....	12.1
Virginia .....	44.9	North Dakota .....	9.5
North Carolina .....	43.9	Vermont.....	3.0

\*High-end computers include Pentium II or higher, Power Mac, and iMac.

Source: *Market Data Retrieval, 2002, Public School Findings.*

Table 13

**Number of Public School Students  
Per Multimedia Computer**  
Pennsylvania and All States  
(2001-02)

<u>State</u>	Students per Multimedia <u>Computer</u>	<u>State</u>	Students per Multimedia <u>Computer</u>
South Dakota.....	2.7	<b>National Average.....</b>	<b>5.9</b>
Delaware .....	4.0	Minnesota .....	5.9
Idaho .....	4.1	Alaska .....	5.9
Kansas .....	4.3	Massachusetts .....	5.9
Wisconsin .....	4.4	Arkansas .....	6.1
North Dakota .....	4.5	Illinois .....	6.1
Nebraska .....	4.7	Kentucky .....	6.1
Missouri.....	4.9	North Carolina.....	6.2
Indiana.....	4.9	Maine .....	6.3
Ohio.....	4.9	New York.....	6.3
South Carolina.....	5.0	Tennessee .....	6.4
West Virginia .....	5.0	Arizona .....	6.6
Iowa .....	5.1	Mississippi.....	6.8
Vermont.....	5.1	Connecticut .....	6.9
Texas.....	5.1	Alabama .....	7.0
District of Columbia ...	5.2	Washington .....	7.0
Virginia .....	5.2	Nevada.....	7.0
Montana .....	5.3	Colorado.....	7.0
<b>Pennsylvania .....</b>	<b>5.4</b>	Oregon .....	7.3
New Jersey.....	5.4	New Hampshire .....	7.4
Wyoming .....	5.4	California .....	7.6
Florida .....	5.6	Hawaii .....	7.7
New Mexico.....	5.6	Utah.....	8.1
Oklahoma.....	5.7	Maryland .....	8.2
Michigan .....	5.7	Rhode Island.....	8.3
Georgia.....	5.7	Louisiana.....	8.5

Source: *Market Data Retrieval, 2002, Public School Findings.*



## **Internet Computer Intensity**

According to MDR, the national ratio of students-to-computers with Internet access (Internet computer intensity) was 5.6 in 2002. This compares to 3.8 students per computer for the total installed base of instructional-use computers. Individual state Internet computer intensities range from 8.2 students per Internet computer in Louisiana to a best of 2.6 in South Dakota. As Table 14 shows, Pennsylvania schools are slightly above the national average at 5.4.

## **Laptop Computers**

While laptops are not yet a significant computing resource for teachers and students, MDR projects that the next few years could see “an explosion of laptop purchasing for instructional use.” To date, widespread acquisition of laptops has been slowed by relatively high cost and concerns about security and durability. Industry analysts report, however, that the means to secure and protect laptops from theft and damage are available and that market forces are beginning to drive down prices.

The most recent MDR survey found that laptop computer ownership among public schools ranged from a high of 60 percent in Hawaii to a low of 23.5 percent in Rhode Island. The national average was 40.2 percent and Pennsylvania schools were at 36.2 percent.

However, among those with laptops, Pennsylvania schools ranked first in the average number of laptops per school at 22.2. The survey report notes that large-scale state initiatives are responsible for the higher averages in some states. The national average among schools with laptops was 13.6 per school.

Table 14

**Internet Computer Intensity**  
 Pennsylvania and All States  
 (2001-02)

<u>State</u>	Students per	<u>State</u>	Students per
	Internet Access		Internet Access
	<u>Computer</u>		<u>Computer</u>
South Dakota.....	2.6	Kentucky .....	5.5
Delaware .....	3.6	Maine .....	5.5
Nebraska .....	3.7	<b>National Average.....</b>	<b>5.6</b>
Wyoming .....	3.9	Mississippi.....	5.6
Kansas .....	4.1	Illinois .....	5.8
Wisconsin .....	4.1	Oregon .....	5.8
North Dakota .....	4.1	Florida .....	5.8
Alaska.....	4.3	Washington .....	5.8
Idaho .....	4.4	Colorado.....	5.9
Iowa.....	4.4	Arizona .....	5.9
Ohio.....	4.6	Massachusetts .....	6.0
Montana .....	4.7	Michigan.....	6.0
South Carolina.....	4.8	Rhode Island.....	6.0
Missouri .....	4.9	Georgia .....	6.0
Vermont.....	4.9	Utah.....	6.2
West Virginia .....	4.9	Tennessee .....	6.2
Virginia .....	4.9	New York.....	6.4
Indiana.....	4.9	North Carolina.....	6.5
Texas.....	5.0	Nevada.....	6.6
Minnesota.....	5.1	New Hampshire .....	6.7
Arkansas .....	5.1	Hawaii .....	6.7
Oklahoma .....	5.2	Connecticut.....	7.3
District of Columbia ...	5.4	Alabama .....	7.4
<b>Pennsylvania .....</b>	<b>5.4</b>	Maryland .....	7.7
New Mexico.....	5.4	California.....	7.7
New Jersey.....	5.4	Louisiana.....	8.2

Source: Market Data Retrieval, 2002, Public School Findings.

## **IX. Appendices**

# APPENDIX A

## Results of Pennsylvania's Technology Inventory

(2000-2001 School Year)

The state's School Technology Inventory/Survey is an annual online collection of administrative and instructional technology data conducted by the Pennsylvania Office of Educational Technology (POET). For 2000-2001 school year, 451 school district and 2,690 school building surveys were completed. The following are some of the results from that School Technology Inventory/Survey.

### 1. School Districts Infrastructure, E-mail, and Internet Access

- Districts report that 92 percent of their teachers have e-mail accounts, and 88 percent of school buildings report that teachers can communicate with parents via e-mail.
- 96 percent of school districts have e-mail accounts for administrators, and 15 percent of school districts provide e-mail accounts for students.
- As of 2000-2001, 94 percent of the Pennsylvania school districts had an acceptable use policy that meets the requirements of the Children's Internet Protection Act and/or Neighborhood Protection Act, and 61 percent of schools were already using filtering software.
- 72 percent of schools are connected to the Internet at a speed of T1 or greater.
- 88 percent of the schools have Internet access, 80 percent of classrooms have Internet access, and 84 percent of the total computers in the state have Internet access.
- 87 percent of the 2,690 school buildings that responded to the 2001 Inventory/Survey, reported they connect to the Internet via telecommunications lines, and 8 percent have wireless satellite connections to the Internet.

### 2. Distance Learning

- 58 percent of school districts participate in distance learning, with 21 percent of school buildings participating in distance learning.
- 27,628 students participate in distance learning.

### 3. Computers

- There is one computer for every six students in Pennsylvania schools.<sup>1</sup>
- This survey also asked schools to classify the computer hardware. These categories were defined by age and qualified by configuration:

o Less than 18 months.....	43%
o 18-36 months .....	30
o 3-5 years old .....	17
o More than 5 years old .....	10

<sup>1</sup>This ratio differs from the one computer for every 3.5 students reported by Market Data Retrieval (MDR) in Section VIII because the MDR ratio considers all instructional use computers while POET's Technology Survey includes only computers less than three years old.

## **Appendix A (Continued)**

### **4. School District Professional Development**

- 37 percent (137 school districts) of responding districts require teachers to demonstrate technology skills for employment in the district. Of the 137 school districts:
  - o 53 percent use transcripts,
  - o 50 percent use professional development hours,
  - o 47 percent use hands-on evaluation, and
  - o 36 percent use other forms of verification.
- Teachers are given incentives for acquiring technological fluency and/or changing their teaching methods to take advantage of the available technology in 501 of school districts in Pennsylvania.
- 80 percent of school districts offer release time to teachers engaged for technology-related training.

### **5. Technical Support Staff**

- 82 percent of districts have technology coordinators, 88 percent of whom are employed full-time. Of the 2,684 school buildings, the following kinds of technical expertise are available:
  - o Computer repair: 71 percent
  - o Telecommunications: 47 percent
  - o Network Wiring: 59 percent
  - o Network Administration: 65 percent

### **6. School District Technology Funding**

- Districts report paying for technology (hardware, software, infrastructure, technical support, and training) out of their current operating budget, or their capital budget, or both.
- In 2001, school districts reported spending an average of 4 percent of their operating budgets and 8 percent of their capital budgets on technology.

Source: *Pennsylvania State Education Technology Plan, July 1, 2002, to June 30, 2005*, Pennsylvania Department of Education.

## APPENDIX B

### Partnerships Between PDE and Technology Stakeholder Groups

The following are descriptions of current partnerships between the Pennsylvania Department of Education (PDE)'s Office of Educational Technology and Technology Stakeholder Groups.

State Educational Technology Directors Association (SETDA). The State Educational Technology Directors Association is a national organization created as a forum for state educational technology directors. SETDA convenes semi-annually to exchange information and ideas on common initiatives, programs, partnerships, and practices.

Intermediate Units (IUs) and Instructional Media Services Directors (IMS Directors). The 29 Intermediate Units are public, regional educational service agencies that provide programs, resources, and services to the schools in Pennsylvania. Instructional Media Services Directors are the technology staff of Pennsylvania's IUs. IMS Directors provide leadership and direction to public and nonpublic schools on technology issues and commonly serve on advisory committees and meet quarterly with the Office of Educational Technology staff to participate in a reciprocal exchange of ideas.

E-Rate Alliance. The E-Rate Alliance is a national coalition comprised of state E-Rate coordinators and serves as a clearinghouse of information for both applicants and the federal E-Rate administrators. Weekly conference calls and semi-annual meetings are held to develop consensus and make recommendations to the Federal Communications Commission and the School Libraries Division of the Universal Service Administrative Company.

Mid-Atlantic Regional Technology in Education Consortium (MARTEC). PDE has partnered with the MARTEC to evaluate the status of technology integration at Pennsylvania's Pre-Service Teacher Programs. The comprehensive study focuses on how effectively 88 schools of education are preparing faculty and pre-service teachers to utilize technology. The information collected will build upon what is embodied in the Pennsylvania Chapter 354 legislation as it applies to pre-service teacher education programs.

WorldCom Foundation. PDE and the Tuscarora Intermediate Unit have teamed with the WorldCom Foundation to provide the MarcoPolo Internet Professional Development Program to Pennsylvania educators. MarcoPolo, in conjunction with leading educational organizations, provides quality, standards-based Internet content for the classroom. To date, approximately 1,462 Pennsylvania educators, representing 347 schools, have been trained as field trainers. They subsequently have trained more than 7,000 teachers on the integration of MarcoPolo lesson plans into classroom instruction.

Satellite Education Resources Consortium (SERC). Pennsylvania is a member of the Satellite Educational Resources Consortium, which combines the resources of state departments of education and public television licensees. SERC has developed and delivered a variety of curricular and free professional development resources via satellite, VHS tape, CD-ROM, and the Internet. Through SERC, students participate in a variety of courses that would otherwise be unavailable to them. Pennsylvania's membership in the consortia guarantees reduced rates for all student courses and over 80 hours of free professional development programs.

America Online (AOL) Foundation. In May 2001, the Office of Educational Technology partnered with the AOL Foundation to provide free access to [AOL@School](#) for every Pennsylvania school. [AOL@School](#) is a learning portal for students and educators, providing age appropriate online content, a lesson plan finder, professional development resources, and a customized toolbar designed specifically for K-12 schools.

Workforce Development Partnerships. PDE has established historical partnerships with several leading hardware and software companies in order to provide workforce development programs specifically designed to enhance students' knowledge of technology and increase students' marketability after graduation. Microsoft, Cisco, 3Com, Oracle, and Palm offer instructor training to participating high school teachers, student certification testing, and the additional resources necessary to prepare students to thrive in a high-tech society.

Source: *Pennsylvania State Education Technology Plan, July 1, 2002, to June 30, 2005*, Pennsylvania Department of Education.

# APPENDIX C

## Funding Awarded to Public K-12 Schools Under the Link-to-Learn Initiative, (Including Students Achieving Standards), by School District (FY 1996-97 Through FY 2001-02)

District	Entitlement Grants				Competitive Grants				Subtotal Competitive	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	Subtotal	FY00-01	FY 01-02	Subtotal		
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	Entitlements	SAS Year 1	SAS Year 2			
					\$	\$	\$	\$	\$	
<b>Adams County</b>										
Bermudian Springs SD .....	44,000	44,000	44,000	23,500	\$ 155,500	\$ 0	0	0	0	\$ 155,500
Conewago Valley SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Fairfield Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Gettysburg Area SD .....	88,000	88,000	88,000	44,000	308,000	0	66,832	66,832	66,832	374,832
Littletown Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Upper Adams SD .....	44,000	44,000	44,000	23,500	155,500	72,000	0	72,000	72,000	227,500
<b>Allegheny County</b>										
A W Beattie AVTS .....	0	19,492	19,492	11,500	50,484	0	0	0	0	50,484
Allegheny Valley SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	77,500
Avonworth SD .....	44,000	44,000	44,000	22,000	154,000	0	0	0	0	154,000
Baldwin-Whitehall SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	311,000
Bethel Park SD .....	44,000	44,000	44,000	47,000	179,000	0	0	0	0	179,000
Brentwood Borough SD .....	44,000	44,000	44,000	23,500	155,500	0	47,200	47,200	47,200	202,700
Carlynton SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Chartiers Valley SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	77,500
Clairton City SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Cornell SD .....	44,000	44,000	44,000	22,000	154,000	30,000	0	30,000	30,000	184,000
Deer Lakes SD .....	44,000	44,000	44,000	23,500	155,500	0	55,665	55,665	55,665	211,165
Duquesne City SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
East Allegheny SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Elizabeth Forward SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Forbes Road East AVTS .....	0	38,984	38,984	23,500	101,468	0	0	0	0	101,468
Fox Chapel Area SD .....	44,000	44,000	44,000	23,000	155,000	0	0	0	0	155,000
Gateway SD .....	44,000	44,000	44,000	23,000	155,000	0	0	0	0	155,000
Hampton Township SD .....	21,710	21,710	21,710	11,500	76,630	0	0	0	0	76,630
Highlands SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Keystone Oaks SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants			Subtotal Entitlements	Subtotal Competitive	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02				
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2				
<b>Allegheny County (Continued)</b>										
McKeesport Area SD .....	120,000	120,000	120,000	65,000	0	123,098	425,000	123,098	548,098	
McKeesport AVTS.....	0	53,160	53,160	32,500	0	0	138,820	0	138,820	
Montour SD .....	22,000	22,000	22,000	11,500	0	0	77,500	0	77,500	
Moon Area SD.....	21,250	21,250	21,250	11,500	0	0	75,250	0	75,250	
Mt. Lebanon SD .....	44,000	44,000	44,000	23,000	0	0	155,000	0	155,000	
North Allegheny SD.....	66,000	66,000	66,000	34,500	0	0	232,500	0	232,500	
North Hills SD.....	44,000	44,000	44,000	23,000	0	0	155,000	0	155,000	
Northgate SD .....	44,000	44,000	44,000	23,500	62,240	60,160	155,500	122,400	277,900	
Northside Urban Pathways CS....	0	0	0	4,500	0	0	4,500	0	4,500	
Parkway West AVTS .....	0	19,492	19,492	11,500	0	0	50,484	0	50,484	
Penn Hills SD .....	88,000	88,000	88,000	47,000	0	0	311,000	0	311,000	
Pine-Richland SD .....	22,000	22,000	22,000	11,500	0	68,040	77,500	68,040	145,540	
Pittsburgh SD .....	600,000	600,000	600,000	330,000	0	0	2,130,000	0	2,130,000	
Plum Borough SD .....	88,000	88,000	88,000	47,000	0	0	311,000	0	311,000	
Quaker Valley SD.....	22,000	22,000	22,000	11,500	0	0	77,500	0	77,500	
Riverview SD.....	44,000	44,000	44,000	23,500	0	0	155,500	0	155,500	
Shaler Area SD .....	88,000	88,000	88,000	47,000	0	0	311,000	0	311,000	
South Allegheny SD .....	60,000	60,000	60,000	32,500	0	0	212,500	0	212,500	
South Fayette Township SD .....	44,000	44,000	44,000	22,000	52,481	54,740	154,000	107,221	261,221	
South Park SD .....	44,000	44,000	44,000	23,500	0	0	155,500	0	155,500	
Steel Center AVTS.....	0	38,984	38,984	23,500	0	0	101,468	0	101,468	
Steel Valley SD .....	44,000	44,000	44,000	23,500	92,800	0	155,500	92,800	248,300	
Sto-Rox SD .....	44,000	44,000	44,000	32,500	0	0	164,500	0	164,500	
Upper Saint Clair SD .....	44,000	44,000	44,000	23,000	0	0	155,000	0	155,000	
Urban League of Pitsbrgh CS .....	0	0	0	4,500	0	0	4,500	0	4,500	
West Allegheny SD .....	44,000	44,000	44,000	23,500	0	0	155,500	0	155,500	
West Jefferson Hills SD .....	44,000	44,000	44,000	23,500	0	0	155,500	0	155,500	
West Mifflin Area SD .....	44,000	44,000	44,000	23,500	0	0	155,500	0	155,500	
Wilkinsburg Borough SD .....	44,000	44,000	44,000	23,500	80,640	0	155,500	80,640	236,140	
Woodland Hills SD .....	88,000	88,000	88,000	47,000	188,160	0	311,000	188,160	499,160	



**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Subtotal			
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	SAS Year 1	SAS Year 2		
<b>Armstrong County</b>										
Apollo-Ridge SD .....	\$ 60,000	\$ 60,000	\$ 60,000	\$ 32,500	\$ 212,500	\$ 0	\$ 0	\$ 0	\$ 0	\$ 212,500
Armstrong SD .....	180,000	180,000	180,000	97,500	637,500	0	0	0	0	637,500
Freeport Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Leechburg Area SD .....	44,000	44,000	44,000	23,500	155,500	30,000	0	30,000	0	185,500
Lenape AVTS .....	0	53,160	53,160	26,580	132,900	0	0	0	0	132,900
<b>Beaver County</b>										
Aliquippa SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Ambridge Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Beaver Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Beaver Co. AVTS .....	0	38,984	38,984	23,500	101,468	0	0	0	0	101,468
Big Beaver Falls Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Blackhawk SD .....	44,000	44,000	44,000	23,500	155,500	62,914	93,962	156,876	0	312,376
Center Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Freedom Area SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	0	210,000
Hopewell Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Midland Borough SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Monaca SD .....	60,000	60,000	60,000	30,000	210,000	0	30,000	30,000	0	240,000
New Brighton Area SD .....	60,000	60,000	60,000	32,500	212,500	93,400	97,200	190,600	0	403,100
Riverside Beaver County SD .....	60,000	60,000	60,000	30,000	210,000	72,000	70,400	142,400	0	352,400
Rochester Area SD .....	60,000	60,000	60,000	32,500	212,500	30,000	30,000	60,000	0	272,500
South Side Area SD .....	44,000	44,000	44,000	23,500	155,500	53,600	0	53,600	0	209,100
Western Beaver County SD .....	60,000	60,000	60,000	32,500	212,500	36,000	0	36,000	0	248,500
<b>Bedford County</b>										
Bedford Area SD .....	44,000	44,000	44,000	23,500	155,500	90,720	86,080	176,800	0	332,300
Bedford Co. Technical Ctr .....	0	38,984	38,984	23,500	101,468	0	112,000	112,000	0	213,468
Chestnut Ridge SD .....	60,000	60,000	60,000	32,500	212,500	0	73,280	73,280	0	285,780
Everett SD .....	60,000	60,000	60,000	30,000	210,000	67,360	0	67,360	0	277,360
Northern Bedford County SD .....	60,000	60,000	60,000	32,500	212,500	44,640	0	44,640	0	257,140
Tussey Mountain SD .....	60,000	60,000	60,000	32,500	212,500	70,800	70,800	141,600	0	354,100

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				L2L Total	
	FY96-97	FY97-98	FY98-99	FY99-00	Subtotal	FY00-01	FY01-02	Subtotal		
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	Entitlements	SAS Year 1	SAS Year 2	Competitive		
<b>Berks County</b>										
Antietam SD .....	44,000	44,000	44,000	23,500	\$155,500	\$	0	0	\$	155,500
Berks CTC .....	0	19,492	19,492	23,500	62,484	0	0	0	0	62,484
Boyetown Area SD .....	132,000	132,000	132,000	70,500	466,500	0	0	0	0	466,500
Brandywine Heights Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Conrad Weiser Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Daniel Boone Area SD .....	44,000	44,000	44,000	23,500	155,500	105,420	107,660	213,080	0	368,580
Exeter Township SD .....	44,000	44,000	44,000	23,500	155,500	93,248	0	93,248	0	248,748
Fleetwood Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Governor Mifflin SD .....	44,000	44,000	44,000	23,000	155,000	0	0	0	0	155,000
Hamburg Area SD .....	44,000	44,000	44,000	23,500	155,500	30,000	0	30,000	0	185,500
Kutztown Area SD .....	44,000	44,000	44,000	23,500	155,500	0	57,120	57,120	0	212,620
Muhlenberg SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	77,500
Oley Valley SD .....	44,000	44,000	44,000	23,500	155,500	53,327	0	53,327	0	208,827
Reading SD .....	360,000	360,000	360,000	195,000	1,275,000	794,800	720,000	1,514,800	0	2,789,800
Reading-Muhlenberg AVTS .....	0	38,984	38,984	32,500	110,468	0	192,000	192,000	0	302,468
Schuykill Valley SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	77,500
Tulpehocken Area SD .....	44,000	44,000	44,000	23,500	155,500	0	62,160	62,160	0	217,660
Twin Valley SD .....	22,000	22,000	22,000	23,500	89,500	0	0	0	0	89,500
Wilson SD .....	44,000	44,000	44,000	23,000	155,000	0	0	0	0	155,000
Wyomissing Area SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	77,500
<b>Blair County</b>										
Altoona Area SD .....	240,000	240,000	240,000	130,000	850,000	321,280	0	321,280	0	1,171,280
Bellwood-Antis SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	0	210,000
Claysburg-Kimmel SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Greater Altoona CTC .....	0	38,984	38,984	23,500	101,468	0	0	0	0	101,468
Holidaysburg Area SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	311,000
Spring Cove SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Tyrone Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Williamsburg Community SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500

# Appendix C (Continued)

District	Entitlement Grants				Competitive Grants				L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	Subtotal	FY00-01	FY01-02	Subtotal	
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	Entitlements	SAS Year 1	SAS Year 2	Competitive	
<b>Bradford County</b>									
Athens Area SD.....	\$ 60,000	\$ 60,000	\$ 60,000	\$ 32,500	\$ 212,500	\$ 29,977	\$ 0	\$ 29,977	\$ 242,477
Canton Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Northeast Bradford SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Northern Tier Career Center.....	0	53,160	53,160	26,580	132,900	0	0	0	132,900
Sayre Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Towanda Area SD .....	44,000	44,000	44,000	23,500	155,500	67,360	76,320	143,680	299,180
Troy Area SD.....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Wyalusing Area SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000
<b>Bucks County</b>									
Bensalem Township SD .....	66,000	66,000	66,000	34,500	232,500	0	0	0	232,500
Bristol Borough SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Bristol Township SD .....	132,000	132,000	132,000	70,500	466,500	0	0	0	466,500
Bucks Co. AVTS.....	0	19,492	19,492	23,500	62,484	0	0	0	62,484
Centennial SD .....	66,000	66,000	66,000	34,500	232,500	0	0	0	232,500
Central Bucks SD .....	110,000	110,000	110,000	69,500	399,500	0	0	0	399,500
Council Rock SD .....	110,000	110,000	110,000	57,500	387,500	0	0	0	387,500
Middle Bucks Inst. of Tech .....	0	19,492	19,492	11,500	50,484	0	0	0	50,484
Morrisville Borough SD .....	22,000	22,000	22,000	23,500	89,500	0	0	0	89,500
Mosaica Academy CS .....	0	0	0	8,500	8,500	0	0	0	8,500
Neshaminy SD.....	88,000	88,000	88,000	46,000	310,000	0	0	0	310,000
New Hope-Solebury SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500
Palisades SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500
Pennridge SD .....	66,000	66,000	66,000	34,500	232,500	0	0	0	232,500
Pennsbury SD .....	88,000	88,000	88,000	57,500	321,500	0	0	0	321,500
Quakertown Community SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	311,000
Upper Bucks Co. AVTS .....	0	19,492	19,492	11,500	50,484	0	0	0	50,484
<b>Butler County</b>									
Butler Area SD.....	132,000	132,000	132,000	70,500	466,500	293,120	0	293,120	759,620
Butler Co. AVTS .....	0	38,984	38,984	23,500	101,468	0	0	0	101,468
Mars Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Moniteau SD.....	60,000	60,000	60,000	32,500	212,500	66,720	65,114	131,834	344,334

## Appendix C (Continued)

District	Entitlement Grants				Competitive Grants				Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Subtotal	L2L		
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	Competitive	Total		
<b>Butler County (Continued)</b>										
Seneca Valley SD .....	\$ 132,000	\$ 132,000	\$ 132,000	\$ 70,500	\$ 0	\$ 0	\$ 0	\$ 0	\$ 466,500	466,500
Slippery Rock Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	155,500	155,500
South Butler County SD .....	44,000	44,000	44,000	23,500	109,382	0	109,382	0	264,882	264,882
<b>Cambria County</b>										
Admiral Peary AVTS .....	0	53,160	53,160	32,500	0	0	0	0	138,820	138,820
Blacklick Valley SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
Cambria Heights SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
Central Cambria SD .....	44,000	44,000	44,000	23,500	68,800	68,800	137,600	0	293,100	293,100
Conemaugh Valley SD .....	60,000	60,000	60,000	32,500	0	42,200	42,200	0	254,700	254,700
Ferndale Area SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
Forest Hills SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
Greater Johnstown AVTS .....	0	38,984	38,984	23,500	67,860	68,000	135,860	0	237,328	237,328
Greater Johnstown SD .....	120,000	120,000	120,000	60,000	146,080	146,080	292,160	0	712,160	712,160
Northern Cambria SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
Penn Cambria SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
Portage Area SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
Richland SD .....	21,948	21,948	21,948	11,500	0	0	0	0	77,343	77,343
Westmont Hilltop SD .....	22,000	22,000	22,000	11,500	0	0	0	0	77,500	77,500
<b>Cameron County</b>										
Cameron County SD .....	60,000	60,000	60,000	32,500	0	0	0	0	212,500	212,500
<b>Carbon County</b>										
Carbon Co. AVTS .....	0	38,984	38,984	23,500	0	0	0	0	101,468	101,468
Jim Thorpe Area SD .....	22,000	22,000	22,000	11,500	0	0	0	0	77,500	77,500
Leighton Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	155,500	155,500
Palmerton Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	155,500	155,500
Panther Valley SD .....	44,000	44,000	44,000	23,500	0	0	0	0	155,500	155,500
Weatherly Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	155,500	155,500
<b>Centre County</b>										
Bald Eagle Area SD .....	44,000	44,000	44,000	23,500	86,392	0	86,392	0	241,892	241,892
Bellefonte Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	155,500	155,500
C'tral Pa Inst for Sci & Tech .....	0	38,984	38,984	23,500	0	0	0	0	101,468	101,468
Centre Learning Comm. CS .....	0	0	0	3,500	0	0	0	0	3,500	3,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Subtotal	L2L		
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2				
<b>Centre County (Continued)</b>										
Nittany Valley Charter Sch.	\$ 0	\$ 0	\$ 0	\$ 3,500	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,500	
Penns Valley Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	
State College Area SD .....	66,000	66,000	66,000	34,500	232,500	0	0	0	232,500	
<b>Chester County</b>										
Avon Grove SD .....	88,000	88,000	88,000	47,000	311,000	192,337	179,182	371,519	682,519	
Center for Arts & Technology ...	0	19,492	19,492	11,500	50,484	0	0	0	50,484	
Coatesville Area SD .....	132,000	132,000	132,000	70,500	466,500	0	0	0	466,500	
Downtingtown Area SD .....	88,000	88,000	88,000	46,000	310,000	78,000	180,000	258,000	568,000	
Great Valley SD .....	22,000	22,000	22,000	11,500	77,500	0	101,640	101,640	179,140	
Kennett Consolidated SD .....	22,000	22,000	22,000	11,500	77,500	106,200	108,600	214,800	292,300	
Octorara Area SD .....	44,000	44,000	44,000	23,500	155,500	91,000	0	91,000	246,500	
Owen J Roberts SD .....	22,000	22,000	22,000	23,000	89,000	0	0	0	89,000	
Oxford Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	
Phoenixville Area SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500	
Tredyffrin-Easttown SD .....	44,000	44,000	44,000	23,000	155,000	0	0	0	155,000	
Unionville-Chadds Ford SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500	
West Chester Area SD .....	88,000	88,000	88,000	57,500	321,500	0	0	0	321,500	
<b>Clarion County</b>										
Allegheny-Clarion Valley SD .....	60,000	60,000	60,000	32,500	212,500	40,000	0	40,000	252,500	
Clarion Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	
Clarion Co. Career Center .....	0	53,160	53,160	32,500	138,820	0	0	0	138,820	
Clarion-Limestone Area SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000	
Keystone SD .....	60,000	60,000	60,000	34,100	214,100	0	47,950	47,950	262,050	
North Clarion County SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000	
Redbank Valley SD .....	60,000	60,000	60,000	32,500	212,500	66,800	0	66,800	279,300	
Union SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500	
<b>Clearfield County</b>										
Clearfield Area SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000	
Clearfield Co. AVTS .....	0	53,160	53,160	32,500	138,820	42,800	62,538	105,338	244,158	
Curwensville Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500	
Dubois Area SD .....	88,000	88,000	88,000	47,000	311,000	139,823	0	139,823	450,823	
Glendale SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500	

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants			Subtotal	Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Competitive			
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	Competitive			
<b>Clearfield County (Continued)</b>										
Harmony Area SD.....	\$ 60,000	\$ 60,000	\$ 60,000	\$ 32,500	\$ 212,500	\$ 0	\$ 0	\$ 0	\$ 212,500	\$ 212,500
Moshannon Valley SD	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500	212,500
Philipsburg-Osceola Area SD	60,000	60,000	60,000	32,500	212,500	78,720	83,200	161,920	374,420	374,420
West Branch Area SD.....	60,000	60,000	60,000	32,500	212,500	48,255	0	48,255	260,755	260,755
<b>Clinton County</b>										
Keystone Central AVTS.....	0	38,984	38,984	23,500	101,468	0	74,880	74,880	176,348	176,348
Keystone Central SD.....	88,000	88,000	88,000	47,000	311,000	185,960	192,000	377,960	688,960	688,960
<b>Columbia County</b>										
Benton Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
Berwick Area SD.....	88,000	88,000	88,000	47,000	311,000	0	0	0	311,000	311,000
Bloomsburg Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
Central Columbia SD.....	44,000	44,000	44,000	23,500	155,500	0	94,720	94,720	250,220	250,220
Columbia-Montour AVTS.....	38,944	38,944	38,944	23,500	140,332	0	0	0	140,332	140,332
Millville Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
Southern Columbia Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
<b>Crawford County</b>										
Conneaut SD.....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000	210,000
Crawford Central SD.....	88,000	88,000	88,000	47,000	311,000	0	163,982	163,982	474,982	474,982
Crawford Co. AVTS.....	0	38,894	38,894	23,500	101,288	0	0	0	101,288	101,288
Penncrest SD.....	88,000	88,000	88,000	65,000	329,000	107,680	0	107,680	436,680	436,680
<b>Cumberland County</b>										
Big Spring SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
Camp Hill SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500	77,500
Carlisle Area SD.....	88,000	88,000	88,000	47,000	311,000	0	0	0	311,000	311,000
Cumberland Valley SD.....	66,000	66,000	66,000	34,500	232,500	0	0	0	232,500	232,500
Cumberland-Perry AVTS.....	0	38,984	38,984	23,500	101,468	0	0	0	101,468	101,468
East Pennsboro Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
Mechanicsburg Area SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500	77,500
Shippensburg Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
South Middleton SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500	155,500
<b>Dauphin County</b>										
Central Dauphin SD.....	88,000	88,000	88,000	57,500	321,500	0	0	0	321,500	321,500
Dauphin Co. AVTS.....	0	19,492	19,492	11,500	50,484	0	0	0	50,484	50,484

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				Subtotal	Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Competitive				
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	SAS Year 1	SAS Year 2			
<b>Dauphin County (Continued)</b>											
Derry Township SD.....	\$ 22,000	\$ 22,000	\$ 22,000	\$ 11,500	\$ 77,500	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 77,500
Halifax Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
Harrisburg City SD .....	240,000	240,000	240,000	120,000	840,000	0	325,366	325,366	0	0	1,165,366
Lower Dauphin SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	0	311,000
Middletown Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
Millersburg Area SD .....	44,000	44,000	44,000	23,500	155,500	30,000	0	30,000	0	0	185,500
Steelton-Highspire SD .....	44,000	44,000	44,000	32,500	164,500	0	0	0	0	0	164,500
Susquehanna Township SD .....	22,000	22,000	22,000	11,500	77,500	84,735	0	84,735	0	0	162,235
Sylvan Heights Science CS .....	0	0	0	3,500	3,500	0	0	0	0	0	3,500
Upper Dauphin Area SD .....	44,000	44,000	44,000	23,500	155,500	0	60,320	60,320	0	0	215,820
<b>Delaware County</b>											
Archway CS of Chester.....	0	0	0	4,500	4,500	0	0	0	0	0	4,500
Chester Charter School .....	0	0	0	6,500	6,500	0	0	0	0	0	6,500
Chester-Upland SD .....	180,000	180,000	180,000	97,500	637,500	0	0	0	0	0	637,500
Chichester SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	0	311,000
Delaware Co. AVTS .....	0	19,492	19,492	11,500	50,484	111,823	127,540	239,363	0	0	289,847
Garnet Valley SD .....	22,000	22,000	22,000	11,500	77,500	91,700	0	91,700	0	0	169,200
Haverford Township SD .....	44,000	44,000	44,000	23,000	155,000	62,120	0	62,120	0	0	217,120
Interboro SD .....	44,000	44,000	44,000	47,000	179,000	0	0	0	0	0	179,000
Marple Newtown SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	0	77,500
Penn-Delco SD .....	22,000	22,000	22,000	11,500	77,500	0	100,940	100,940	0	0	178,440
Radnor Township SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	0	77,500
Ridley SD .....	88,000	88,000	88,000	47,000	311,000	0	115,192	115,192	0	0	426,192
Rose Tree Media SD .....	44,000	44,000	44,000	23,000	155,000	0	0	0	0	0	155,000
Southeast Delco SD .....	88,000	88,000	88,000	47,000	311,000	0	30,000	30,000	0	0	341,000
Springfield SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	0	77,500
Upper Darby SD .....	176,000	176,000	176,000	117,500	645,500	118,240	60,800	179,040	0	0	824,540
Village CS of Chester-Upland .....	0	0	0	6,500	6,500	0	0	0	0	0	6,500
Wallingford-Swarthmore SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	0	77,500
William Penn SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	0	311,000

**Appendix C (Continued)**

District	FY96-97	FY97-98	FY98-99	FY99-00	Subtotal		FY00-01	FY01-02	Subtotal	L2L
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	Entitlements	SAS Year 1	SAS Year 1	SAS Year 2	Competitive	Total
<b>Elk County</b>										
Johnsonburg Area SD.....	\$ 60,000	\$ 60,000	\$ 60,000	\$ 30,000	\$ 210,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 210,000
Ridgway Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
Saint Marys Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500
<b>Erie County</b>										
Corry Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Erie City AVTS.....	0	38,984	38,984	23,500	101,468	0	0	0	0	101,468
Erie City SD .....	220,000	220,000	220,000	117,500	777,500	0	0	0	0	777,500
Erie County AVTS.....	0	0	23,500	23,500	47,000	0	0	0	0	47,000
Fainview SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	77,500
Fort Leboeuf SD .....	44,000	44,000	44,000	23,500	155,500	88,640	83,200	171,840	171,840	327,340
Gecac Community CS .....	0	0	0	5,500	5,500	0	0	0	0	5,500
General McLane SD .....	44,000	44,000	44,000	23,500	155,500	71,274	0	71,274	71,274	226,774
Girard SD.....	44,000	44,000	44,000	23,500	155,500	69,483	0	69,483	69,483	224,983
Harbor Creek SD .....	44,000	44,000	44,000	23,500	155,500	84,000	0	84,000	84,000	239,500
Iroquois SD .....	60,000	60,000	60,000	32,500	212,500	46,367	51,942	98,309	98,309	310,809
Millcreek Township SD .....	132,000	132,000	132,000	66,000	462,000	0	212,567	212,567	212,567	674,567
North East SD.....	60,000	60,000	60,000	30,000	210,000	0	0	0	0	210,000
Northwestern SD .....	60,000	60,000	60,000	32,500	212,500	73,440	73,450	146,890	146,890	359,390
Union City Area SD.....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Wattsburg Area SD .....	44,000	44,000	44,000	23,500	155,500	0	59,997	59,997	59,997	215,497
<b>Fayette County</b>										
Abington SD.....	66,000	66,000	66,000	34,500	232,500	0	42,000	42,000	42,000	274,500
Albert Gallatin Area SD.....	120,000	120,000	120,000	65,000	425,000	0	0	0	0	425,000
Brownsville Area SD .....	60,000	60,000	60,000	32,500	212,500	100,400	99,137	199,537	199,537	412,037
Connellsville Area SD .....	180,000	180,000	180,000	90,000	630,000	0	0	0	0	630,000
Fayette Co. AVTS.....	0	53,160	53,160	32,500	138,820	0	0	0	0	138,820
Frazier SD.....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	212,500
Laurel Highlands SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	311,000
North Fayette Co. AVTS .....	0	53,160	53,160	32,500	138,820	0	0	0	0	138,820
Uniontown Area SD .....	120,000	120,000	120,000	65,000	425,000	0	112,000	112,000	112,000	537,000
<b>Forest County</b>										
Forest Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	155,500



**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants			Subtotal	Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Competitive			
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	Competitive			
<b>Franklin County</b>										
Chambersburg Area SD.....	\$ 132,000	\$ 132,000	\$ 132,000	\$ 70,500	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 466,500
Fannett-Metal SD.....	44,000	44,000	44,000	23,500	0	30,000	0	30,000	0	185,500
Franklin Co. CTC.....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Greencastle-Antrim SD.....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Scotland School for Vet's Children .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Tuscarora SD.....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Waynesboro Area SD .....	88,000	88,000	88,000	47,000	0	0	0	0	0	311,000
<b>Fulton County</b>										
Central Fulton SD .....	60,000	60,000	60,000	30,000	0	0	0	0	0	210,000
Forbes Road SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Fulton Co. AVTS.....	0	53,160	53,160	32,500	0	0	0	0	0	138,820
Southern Fulton SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
<b>Greene County</b>										
Carmichaels Area SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Central Greene SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Greene Co. AVTS.....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Jefferson-Morgan SD.....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Southeastern Greene SD.....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
West Greene SD.....	44,000	44,000	44,000	23,500	45,920	0	45,920	0	45,920	201,420
<b>Huntingdon County</b>										
Huntingdon Area SD .....	44,000	44,000	44,000	23,500	92,648	95,518	188,166	188,166	0	343,666
Huntingdon Co. CTC.....	0	53,160	53,160	26,580	0	0	0	0	0	132,900
Mount Union Area SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Southern Huntingdon Cty. SD.....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
<b>Indiana County</b>										
Blairsville-Saltsburg SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Homer-Center SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Indiana Area SD .....	88,000	88,000	88,000	44,000	0	110,320	110,320	110,320	0	418,320
Indiana Co. Technology Center..	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Marion Center Area SD.....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				Subtotal	Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	FY00-01	FY01-02			
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	SAS Year 1	SAS Year 2			
<b>Indiana County (Continued)</b>											
Penns Manor Area SD .....	\$ 60,000	\$ 60,000	\$ 60,000	\$ 32,500	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 212,500
Purchase Line SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	0	212,500
United SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	0	212,500
<b>Jefferson County</b>											
Brockway Area SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	0	212,500
Brookville Area SD .....	60,000	60,000	60,000	30,000	0	0	0	0	0	0	210,000
Jefferson Co-Dubois AVTS .....	0	38,984	38,984	23,500	0	0	0	0	0	0	101,468
Punxsutawney Area SD .....	60,000	60,000	60,000	32,500	110,390	0	0	0	0	110,390	322,890
<b>Juniata County</b>											
Juniata County SD .....	44,000	44,000	44,000	23,500	30,000	0	0	0	0	0	185,500
<b>Lackawanna County</b>											
Abington Heights SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	0	77,500
Carbondale Area SD .....	44,000	44,000	44,000	32,500	32,640	0	0	0	0	32,640	197,140
CTC of Lackawanna County .....	0	38,984	38,984	23,500	0	0	0	0	0	0	101,468
Dunmore SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
Lakeland SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
Mid Valley SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
North Pocono SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
Northeast Charter School .....	0	0	0	3,500	0	0	0	0	0	0	3,500
Old Forge SD .....	44,000	44,000	44,000	23,500	33,430	0	0	0	0	33,430	188,930
Riverside SD .....	44,000	44,000	44,000	23,500	0	53,280	0	53,280	53,280	53,280	208,780
Scranton SD .....	176,000	176,000	176,000	94,000	285,837	284,134	569,971	569,971	569,971	569,971	1,191,971
Scranton State School for the Deaf .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
Valley View SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
<b>Lancaster County</b>											
Cocalico SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
Columbia Borough SD .....	44,000	44,000	44,000	23,500	57,095	0	57,095	57,095	57,095	57,095	212,595
Conestoga Valley SD .....	22,000	22,000	22,000	23,000	0	0	0	0	0	0	89,000
Donegal SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	0	155,500
Eastern Lancaster County SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	0	77,500
Elizabethtown Area SD .....	88,000	88,000	88,000	47,000	98,300	0	98,300	98,300	98,300	98,300	409,300
Ephrata Area SD .....	88,000	88,000	88,000	47,000	133,555	0	133,555	133,555	133,555	133,555	444,555

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				Subtotal	Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	FY00-01	FY01-02			
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	SAS Year 1	SAS Year 2			
<b>Lancaster County (Continued)</b>											
Hempfield SD.....	\$ 132,000	\$ 132,000	\$ 132,000	\$ 70,500	\$ 466,500	\$ 159,596	\$ 0	\$ 159,596	\$ 0	\$ 159,596	\$ 626,096
La Academia: the Ptnshp CS.....	0	0	0	3,500	3,500	0	0	0	0	0	3,500
Lampeter-Strasburg SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	0	77,500
Lancaster Co. CTC.....	0	38,984	38,984	23,500	101,468	0	42,000	42,000	0	42,000	143,468
Lancaster SD.....	176,000	176,000	176,000	94,000	622,000	0	387,348	387,348	0	387,348	1,009,348
Manheim Central SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
Manheim Township SD.....	44,000	44,000	44,000	23,000	155,000	144,000	0	144,000	0	144,000	299,000
Penn Manor SD.....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	0	311,000
Pequea Valley SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	0	0	77,500
Solanco SD.....	88,000	88,000	88,000	47,000	311,000	160,160	160,480	320,640	0	320,640	631,640
Warwick SD.....	88,000	88,000	88,000	47,000	311,000	151,890	0	151,890	0	151,890	462,890
<b>Lawrence County</b>											
Eilwood City Area SD.....	60,000	60,000	60,000	32,500	212,500	0	30,000	30,000	0	30,000	242,500
Laurel SD.....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	0	212,500
Lawrence Co. AVTS.....	0	53,160	53,160	32,500	138,820	0	0	0	0	0	138,820
Mohawk Area SD.....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	0	212,500
Neshannock Township SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
New Castle Area SD.....	120,000	120,000	120,000	65,000	425,000	0	0	0	0	0	425,000
Shenango Area SD.....	44,000	44,000	44,000	32,500	164,500	0	0	0	0	0	164,500
Union Area SD.....	60,000	60,000	60,000	32,500	212,500	0	0	0	0	0	212,500
Wilmington Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
<b>Lebanon County</b>											
Annville-Cleona SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
Cornwall-Lebanon SD.....	88,000	88,000	88,000	47,000	311,000	0	0	0	0	0	311,000
Eastern Lebanon County SD.....	44,000	44,000	44,000	22,000	154,000	36,638	0	36,638	0	36,638	190,638
Lebanon Co. AVTS.....	0	38,984	38,984	23,500	101,468	30,000	0	30,000	0	30,000	131,468
Lebanon SD.....	88,000	88,000	88,000	47,000	311,000	156,000	157,280	313,280	0	313,280	624,280
Northern Lebanon SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
Palmyra Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	0	0	155,500
<b>Lehigh County</b>											
Allentown City SD.....	264,000	264,000	264,000	141,000	933,000	319,835	319,918	639,753	0	639,753	1,572,753
Catasauqua Area SD.....	44,000	44,000	44,000	23,500	155,500	63,000	0	63,000	0	63,000	218,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants			Subtotal	Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Subtotal			
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	Competitive			
<b>Lehigh County</b>										
East Penn SD	\$ 66,000	\$ 66,000	\$ 66,000	\$ 34,500	\$ 130,980	\$ 0	\$ 130,980	\$ 0	\$ 130,980	\$ 363,480
Lehigh Co. AVTS	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Northern Lehigh SD	44,000	44,000	44,000	23,500	0	73,440	73,440	0	73,440	228,940
Northwestern Lehigh SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Parkland SD	66,000	66,000	66,000	34,500	0	0	0	0	0	232,500
Salisbury Township SD	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Southern Lehigh SD	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Whitehall-Coplay SD	22,000	22,000	22,000	23,000	0	0	0	0	0	89,000
<b>Luzerne County</b>										
Crestwood SD	44,000	44,000	44,000	23,500	107,200	0	107,200	0	107,200	262,700
Dallas SD	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Greater Nanticoke Area SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Hanover Area SD	44,000	44,000	44,000	23,500	73,440	0	73,440	0	73,440	228,940
Hazleton Area Career Center	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Hazleton Area SD	176,000	176,000	176,000	88,000	288,000	0	288,000	0	288,000	904,000
Lake-Lehman SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Northwest Area SD	60,000	60,000	60,000	30,000	0	0	0	0	0	210,000
Pittston Area SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
West Side AVTS	0	38,984	38,984	23,500	86,560	0	86,560	0	86,560	188,028
Wilkes-Barre Area SD	132,000	132,000	132,000	72,100	254,646	0	254,646	0	254,646	722,746
Wilkes-Barre AVTS	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Wyoming Area SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Wyoming Valley West SD	88,000	88,000	88,000	47,000	0	0	0	0	0	311,000
<b>Lycoming County</b>										
East Lycoming SD	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Jersey Shore Area SD	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Loyalsock Township SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Lycoming County Career Consortium	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Montgomery Area SD	44,000	44,000	44,000	23,500	40,000	0	40,000	0	40,000	195,500
Montoursville Area SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Muncy SD	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				
	FY96-97	FY97-98	FY98-99	FY99-00	Subtotal	FY00-01	FY01-02	Subtotal	L2L
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	Entitlements	SAS Year 1	SAS Year 2	Competitive	Total
<b>Lycoming County (Continued)</b>									
South Williamsport Area SD .....	\$ 44,000	\$ 44,000	\$ 44,000	\$ 23,500	\$ 155,500	\$ 0	\$ 0	\$ 0	\$ 155,500
Williamsport Area SD .....	132,000	132,000	132,000	70,500	466,500	158,400	0	158,400	624,900
<b>McKean County</b>									
Bradford Area SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000
Kane Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Karns City Area SD .....	60,000	60,000	60,000	32,500	212,500	66,029	67,680	133,709	346,209
Otto-Eldred SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Port Allegany SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Seneca Highlands AVTS .....	0	53,160	53,160	32,500	138,820	0	0	0	138,820
Smethport Area SD .....	60,000	60,000	60,000	32,500	212,500	41,440	38,080	\$79,520	292,020
<b>Mercer County</b>									
Commodore Perry SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Farrell Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Greenville Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Grove City Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Hermitage SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Jamestown Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Lakeview SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000
Mercer Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Mercer Co. AVTS .....	0	38,984	38,984	23,500	101,468	0	0	0	101,468
Reynolds SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Sharon City SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Sharpville Area SD .....	44,000	44,000	44,000	23,500	155,500	0	45,280	45,280	200,780
West Middlesex Area SD .....	44,000	44,000	44,000	25,100	157,100	0	0	0	157,100
<b>Mifflin County</b>									
Juniata-Mifflin Co. AVTS .....	0	38,984	38,984	23,500	101,468	0	0	0	101,468
Mifflin County SD .....	132,000	132,000	132,000	70,500	466,500	0	0	0	466,500
<b>Monroe County</b>									
East Stroudsburg Area SD .....	44,000	44,000	44,000	70,500	202,500	0	244,124	244,124	446,624
Monroe Co. AVTS .....	0	38,984	38,984	23,500	101,468	0	0	0	101,468

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Subtotal	Competitive		
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2				
<b>Monroe County (Continued)</b>										
Pleasant Valley SD .....	\$ 88,000	\$ 88,000	\$ 88,000	\$ 47,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 311,000
Pocono Mountain SD .....	88,000	88,000	88,000	94,000	0	354,200	0	354,200	0	712,200
Stroudsburg Area SD .....	44,000	44,000	44,000	47,000	0	0	0	0	0	179,000
<b>Montgomery County</b>										
Cheltenham Township SD .....	44,000	44,000	44,000	23,000	0	0	0	0	0	155,000
Colonial SD .....	44,000	44,000	44,000	23,000	0	0	0	0	0	155,000
Ctr for Tech Studies/ Mont Co. ....	0	19,492	19,492	11,500	0	0	0	0	0	50,484
Eastern Ctr. for Arts & Tech. ....	0	19,492	19,492	11,500	0	0	0	0	0	50,484
Hatboro-Horsham SD .....	44,000	44,000	44,000	23,000	0	0	0	0	0	155,000
Jenkintown SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Lower Merion SD .....	44,000	44,000	44,000	23,000	0	0	0	0	0	155,000
Lower Moreland Township SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Methacton SD .....	44,000	44,000	44,000	23,000	0	0	0	0	0	155,000
Norristown Area SD .....	66,000	66,000	66,000	34,500	132,320	0	0	132,320	0	364,820
North Montco Tech Career Ctr .....	0	19,492	19,492	11,500	0	0	0	0	0	50,484
North Penn SD .....	110,000	110,000	110,000	57,500	0	0	0	0	0	387,500
Perkiomen Valley SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Pottsgrove SD .....	44,000	44,000	44,000	23,500	115,928	0	0	115,928	0	271,428
Pottstown SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Souderton Area SD .....	44,000	44,000	44,000	34,500	0	0	0	0	0	166,500
Springfield Township SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Spring-Ford Area SD .....	44,000	44,000	44,000	23,000	115,800	129,071	244,871	244,871	399,871	155,000
Upper Dublin SD .....	44,000	44,000	44,000	23,000	0	0	0	0	0	155,000
Upper Merion Area SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Upper Moreland Township SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Upper Perkiomen SD .....	44,000	44,000	44,000	23,500	77,280	0	77,280	77,280	232,780	101,468
Western Ctr. for Tech Studies .....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Wissahickon SD .....	44,000	44,000	44,000	23,000	0	0	0	0	0	155,000
<b>Montour County</b>										
Danville Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				
	FY96-97	FY97-98	FY98-99	FY99-00	Subtotal	FY00-01	FY01-02	Subtotal	L2L
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	Entitlements	SAS Year 1	SAS Year 2	Competitive	Total
<b>Northampton County</b>									
Bangor Area SD.....	\$ 44,000	\$ 44,000	\$ 44,000	\$ 23,500	\$ 155,500	\$ 0	\$ 0	\$ 0	\$ 155,500
Bethlehem Area SD .....	110,000	110,000	110,000	69,500	399,500	445,346	474,180	919,526	1,319,026
Bethlehem AVTS .....	0	19,492	19,492	11,500	50,484	0	0	0	50,484
Career Institute of Tech .....	0	38,984	38,984	23,500	101,468	0	0	0	101,468
Easton Area SD .....	132,000	132,000	132,000	70,500	466,500	0	306,167	306,167	772,667
Nazareth Area SD .....	88,000	88,000	88,000	47,000	311,000	0	76,767	76,767	287,767
Northampton Area SD .....	88,000	88,000	88,000	47,000	311,000	0	51,976	51,976	362,976
Pen Argyl Area SD .....	44,000	44,000	44,000	23,500	155,500	0	63,271	63,271	218,771
Saucon Valley SD .....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500
Wilson Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
<b>Northumberland County</b>									
Line Mountain SD .....	60,000	60,000	60,000	30,000	210,000	0	0	0	210,000
Milton Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Mount Carmel Area SD .....	60,000	60,000	60,000	32,500	212,500	60,640	0	60,640	273,140
Northumberland Co. AVTS .....	0	53,160	53,160	32,500	138,820	0	0	0	138,820
Shamokin Area SD .....	60,000	60,000	60,000	32,500	212,500	0	92,000	92,000	304,500
Shikellamy SD .....	43,999	43,999	43,999	23,500	155,497	0	0	0	155,497
Susq-Cyber Charter School .....	0	0	0	3,500	3,500	0	0	0	3,500
Warrior Run SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
<b>Perry County</b>									
Greenwood SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Newport SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Susquenita SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
West Perry SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
<b>Philadelphia County</b>									
Architecture And Design CS .....	0	0	0	7,500	7,500	0	0	0	7,500
Center for Economics & Law CS .....	0	0	0	6,500	6,500	0	0	0	6,500
Christopher Columbus CS .....	0	0	0	6,500	6,500	0	0	0	6,500
Freire CS .....	0	0	0	4,500	4,500	0	0	0	4,500
Germantown Settlement CS .....	0	0	0	6,500	6,500	0	0	0	6,500
Imani Education Circle CS .....	0	0	0	6,500	6,500	0	0	0	6,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				L2L Total
	FY96-97 L2L Year 1	FY97-98 L2L Year 2	FY98-99 L2L Year 3	FY99-00 L2L Year 4	Subtotal Entitlement	FY00-01 SAS Year 1	FY01-02 SAS Year 2	Subtotal Competitive	
<b>Philadelphia County (Continued)</b>									
Imhotep Institute CS .....	\$ 0	\$ 0	\$ 0	\$ 5,500	\$ 5,500	\$ 0	\$ 0	\$ 0	\$ 5,500
Mast Community CS .....	0	0	0	8,500	8,500	0	0	0	8,500
Math, Civics and Sciences CS .....	0	0	0	10,500	10,500	0	0	0	10,500
Phila Comnty Academy CS .....	0	0	0	6,500	6,500	0	0	0	6,500
Phila Harambee Inst CS .....	0	0	0	5,500	5,500	0	0	0	5,500
Philadelphia Academy CS .....	0	0	0	9,500	9,500	0	0	0	9,500
Philadelphia City SD .....	3,000,000	3,000,000	3,000,000	1,650,000	10,650,000	2,999,730	2,999,193	5,998,923	16,648,923
Renaissance CS .....	0	0	0	5,500	5,500	0	0	0	5,500
The Alliance Charter School .....	0	0	0	4,500	4,500	0	0	0	4,500
The Laboratory Charter Sch .....	0	0	0	6,500	6,500	0	0	0	6,500
The Preparatory Charter Sch .....	0	0	0	4,500	4,500	0	0	0	4,500
Universal Institute CS .....	0	0	0	6,500	6,500	0	0	0	6,500
West Oak Lane Charter Sch .....	0	0	0	8,500	8,500	0	0	0	8,500
World Communications CS .....	0	0	0	7,500	7,500	0	0	0	7,500
Young Scholars CS .....	0	0	0	3,500	3,500	0	0	0	3,500
<b>Pike County</b>									
Delaware Valley SD .....	88,000	88,000	88,000	47,000	311,000	0	0	0	311,000
<b>Potter County</b>									
Austin Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Coudersport Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Galeton Area SD .....	44,000	44,000	44,000	23,500	155,500	25,595	0	25,595	181,095
Northern Potter SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Oswayo Valley SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
<b>Schuylkill County</b>									
Blue Mountain SD .....	44,000	44,000	44,000	23,500	155,500	81,119	0	81,119	236,619
Mahanoy Area SD .....	60,000	60,000	60,000	32,500	212,500	0	0	0	212,500
Minersville Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
North Schuylkill SD .....	44,000	44,000	44,000	23,500	155,500	0	79,040	79,040	234,540
Pine Grove Area SD .....	44,000	44,000	44,000	23,500	155,500	0	75,680	75,680	231,180
Pottsville Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500
Saint Clair Area SD .....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500



**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants			Subtotal Entitlement	Subtotal Competitive	L2L Total
	FY96-97 L2L Year 1	FY97-98 L2L Year 2	FY98-99 L2L Year 3	FY99-00 L2L Year 4	FY00-01 SAS Year 1	FY01-02 SAS Year 2				
	\$	\$	\$	\$	\$	\$	\$			
<b>Schuylkill County (Continued)</b>										
Schuylkill Co. AVTS .....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Schuylkill Haven Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Shenandoah Valley SD .....	60,000	60,000	60,000	32,500	0	39,925	30,925	30,925	30,925	252,425
Tamaqua Area SD .....	44,000	44,000	44,000	23,500	81,600	82,720	164,320	164,320	164,320	319,820
Tri-Valley SD .....	44,000	44,000	44,000	23,500	0	40,960	40,960	40,960	40,960	196,460
Williams Valley SD .....	60,000	60,000	60,000	32,500	52,320	0	52,320	52,320	52,320	264,820
<b>Snyder County</b>										
Midd-West SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Selingsgrove Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
<b>Somerset County</b>										
Berlin Brothersvalley SD .....	60,000	60,000	60,000	30,000	34,560	0	34,560	34,560	34,560	244,560
Conemaugh Township Area SD .....	60,000	60,000	60,000	30,000	0	0	0	0	0	210,000
Meyersdale Area SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
North Star SD .....	60,000	60,000	60,000	32,500	30,000	0	30,000	30,000	30,000	242,500
Rockwood Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Salisbury-Elk Lick SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Shade-Central City SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Shanksville-Stonycreek SD .....	44,000	44,000	44,000	23,500	30,000	0	30,000	30,000	30,000	185,500
Somerset Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Somerset Co. Technology Center .....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Turkeyfoot Valley Area SD .....	60,000	60,000	60,000	30,000	30,000	0	30,000	30,000	30,000	240,000
Windber Area SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
<b>Sullivan County</b>										
Sullivan County SD .....	44,000	44,000	44,000	22,000	0	0	0	0	0	154,000
<b>Susquehanna County</b>										
Blue Ridge SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Elk Lake SD .....	60,000	60,000	60,000	32,500	65,206	0	65,206	65,206	65,206	277,706
Forest City Regional SD .....	44,000	44,000	44,000	23,500	0	36,880	36,880	36,880	36,880	192,380
Montrose Area SD .....	60,000	60,000	60,000	30,000	87,520	0	87,520	87,520	87,520	297,520
Mountain View SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Susquehanna Community SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Susquehanna County CTC .....	0	53,160	53,160	32,500	0	0	0	0	0	138,820

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants			Subtotal Competitive	L2L Total
	FY96-97 L2L Year 1	FY97-98 L2L Year 2	FY98-99 L2L Year 3	FY99-00 L2L Year 4	FY00-01 SAS Year 1	FY01-02 SAS Year 2	Subtotal		
<b>Tioga County</b>									
Northern Tioga SD .....	\$ 60,000	\$ 60,000	\$ 60,000	\$ 32,500	\$ 0	\$ 0	\$ 0	\$ 212,500	\$ 212,500
Southern Tioga SD .....	60,000	60,000	60,000	30,000	0	0	0	210,000	210,000
Wellsboro Area SD .....	44,000	44,000	44,000	23,500	0	0	0	155,500	155,500
<b>Union County</b>									
Lewisburg Area SD .....	22,000	22,000	22,000	11,500	0	0	0	77,500	77,500
Mifflinburg Area SD .....	44,000	44,000	44,000	23,500	0	0	0	155,500	155,500
Sun Area CTC .....	0	38,984	38,984	23,500	0	0	0	101,468	101,468
<b>Venango County</b>									
Cranberry Area SD .....	60,000	60,000	60,000	32,500	0	46,200	46,200	258,700	258,700
Franklin Area SD .....	60,000	60,000	60,000	32,500	0	0	0	212,500	212,500
Oil City Area SD .....	60,000	60,000	60,000	32,500	0	0	0	212,500	212,500
Titusville Area SD .....	60,000	60,000	60,000	32,500	0	0	0	212,500	212,500
Valley Grove SD .....	60,000	60,000	60,000	32,500	0	0	0	212,500	212,500
Venango Co. AVTS .....	0	53,160	53,160	32,500	0	0	0	138,820	138,820
<b>Warren County</b>									
Warren Co. AVTS .....	0	38,984	38,984	23,500	0	0	0	101,468	101,468
Warren County SD .....	132,000	132,000	132,000	70,500	141,760	188,480	330,240	796,740	796,740
<b>Washington County</b>									
Avella Area SD .....	60,000	60,000	60,000	32,500	0	0	0	212,500	212,500
Bentworth SD .....	60,000	60,000	60,000	30,000	0	0	0	210,000	210,000
Bethlehem-Center SD .....	60,000	60,000	60,000	32,500	0	0	0	212,500	212,500
Burgettstown Area SD .....	44,000	44,000	44,000	23,500	59,970	58,720	118,690	274,190	274,190
California Area SD .....	60,000	60,000	60,000	32,500	0	0	0	212,500	212,500
Canon-Mcmillan SD .....	88,000	88,000	88,000	47,000	0	0	0	311,000	311,000
Charleroi SD .....	44,000	44,000	44,000	23,500	0	0	0	155,500	155,500
Chartiers-Houston SD .....	44,000	44,000	44,000	23,500	0	48,000	48,000	203,500	203,500
Fort Cherry SD .....	44,000	44,000	44,000	23,500	0	0	0	155,500	155,500
McGuffey SD .....	60,000	60,000	60,000	30,000	0	94,500	94,500	304,500	304,500
Mon Valley CTC .....	0	38,984	38,984	23,500	0	0	0	101,468	101,468
Peters Township SD .....	22,000	22,000	22,000	11,500	0	0	0	77,500	77,500

## Appendix C (Continued)

District	Entitlement Grants				Competitive Grants			Subtotal	Subtotal	L2L Total
	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	Subtotal			
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	Competitive			
<b>Washington County</b>										
Ringgold SD .....	\$ 44,000	\$ 44,000	\$ 44,000	\$ 47,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 179,000
Trinity Area SD .....	88,000	88,000	88,000	47,000	0	127,602	127,602	127,602	0	438,602
Washington SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Western Area CTC .....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
<b>Wayne County</b>										
Wallenpaupack Area SD .....	22,000	22,000	22,000	11,500	0	0	0	0	0	77,500
Wayne Highlands SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Western Wayne SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
<b>Westmoreland County</b>										
Belle Vernon Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Burrell SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Central Westmoreland CTC .....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Derry Area SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Eastern Westmoreland CTC .....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Franklin Regional SD .....	88,000	88,000	88,000	44,000	119,700	119,000	238,700	238,700	0	546,700
Greater Latrobe SD .....	88,000	88,000	88,000	47,000	0	0	0	0	0	311,000
Greensburg Salem SD .....	88,000	88,000	88,000	47,000	0	0	0	0	0	311,000
Hempfield Area SD .....	132,000	132,000	132,000	70,500	0	0	0	0	0	466,500
Jeannette City SD .....	60,000	60,000	60,000	32,500	0	0	0	0	0	212,500
Kiski Area SD .....	88,000	88,000	88,000	47,000	0	0	0	0	0	311,000
Ligonier Valley SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500
Monessen City SD .....	44,000	44,000	44,000	32,500	0	0	0	0	0	164,500
Mount Pleasant Area SD .....	44,000	44,000	44,000	23,500	100,640	0	100,640	100,640	0	256,140
New Kensington-Arnold SD .....	44,000	44,000	44,000	23,500	64,800	64,800	128,600	128,600	0	285,100
Northern Westmoreland Co. AVTS .....	0	38,984	38,984	23,500	0	0	0	0	0	101,468
Norwin SD .....	88,000	88,000	88,000	47,000	0	0	0	0	0	311,000
Penn-Trafford SD .....	88,000	88,000	88,000	47,000	0	0	0	0	0	311,000
Ridgeview Academy CS .....	0	0	0	4,500	0	0	0	0	0	4,500
Southmoreland SD .....	60,000	60,000	60,000	30,000	0	0	0	0	0	210,000
Yough SD .....	44,000	44,000	44,000	23,500	0	0	0	0	0	155,500

**Appendix C (Continued)**

District	Entitlement Grants				Competitive Grants				Subtotal	Subtotal	L2L Total
	FY97-98		FY98-99		FY00-01		FY01-02				
	L2L Year 1	L2L Year 2	L2L Year 3	L2L Year 4	SAS Year 1	SAS Year 2	SAS Year 1	SAS Year 2			
<b>Wyoming County</b>											
Lackawanna Trail SD.....	\$ 44,000	\$ 44,000	\$ 44,000	\$ 23,500	\$ 155,500	\$ 52,324	\$ 55,200	\$ 107,524	\$ 263,024		
Tunkhannock Area SD.....	44,000	44,000	44,000	23,500	155,500	0	122,878	122,878	278,378		
<b>York County</b>											
Central York SD.....	44,000	44,000	44,000	23,000	155,000	89,884	0	89,884	244,884		
Crispus Attucks Youth Build CS....	0	0	0	3,500	3,500	0	0	0	3,500		
Dallastown Area SD.....	44,000	44,000	44,000	23,000	155,000	0	0	0	155,000		
Dover Area SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500		
Eastern York SD.....	44,000	44,000	44,000	23,500	155,500	0	113,015	113,015	268,515		
Hanover Public SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500		
Northeastern York SD.....	44,000	44,000	44,000	23,500	155,500	40,000	0	40,000	195,500		
Northern York County SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500		
Red Lion Area SD.....	88,000	88,000	88,000	47,000	311,000	0	0	0	311,000		
South Eastern SD.....	44,000	44,000	44,000	23,500	155,500	30,000	0	30,000	185,500		
South Western SD.....	88,000	88,000	88,000	47,000	311,000	0	0	0	311,000		
Southern York County SD.....	44,000	44,000	44,000	23,500	155,500	0	0	0	155,500		
Spring Grove Area SD.....	88,000	88,000	88,000	47,000	311,000	0	0	0	311,000		
West Shore SD.....	66,000	66,000	66,000	34,500	232,500	0	42,736	42,736	275,236		
West York Area SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500		
York City SD.....	180,000	180,000	180,000	97,500	637,500	329,284	0	329,284	966,784		
York Co. AVTS.....	0	38,984	38,984	23,500	101,468	0	0	0	101,468		
York Suburban SD.....	22,000	22,000	22,000	11,500	77,500	0	0	0	77,500		
<b>Total.....</b>	<b>\$32,997,851</b>	<b>\$35,646,901</b>	<b>\$35,670,401</b>	<b>\$19,848,540</b>	<b>\$124,163,693</b>	<b>\$14,654,273</b>	<b>\$13,710,097</b>	<b>\$28,364,370</b>	<b>\$152,528,062</b>		

Source: Department of Education, Office of Educational Technology.

## APPENDIX D

### Link-to-Learn Grants to Pennsylvania Institutions of Higher Education

(FY 1996-97 Through FY 2001-02)

#### **FY 1996-97: Technology Testbeds Project**

<u>Recipient</u>	<u>Grant Amount</u>
Allegheny College .....	\$ 244,000
Center for Community Partnerships <sup>a</sup> .....	197,000
Central Susquehanna Intermediate Unit <sup>a</sup> .....	407,435
College Misericordia.....	614,950
Council of Elk & Cameron Counties <sup>a</sup> .....	105,000
Crawford County Development Corp. <sup>a</sup> .....	243,000
E. Lebanon County School District <sup>a</sup> .....	60,215
Greater Johnstown School District <sup>a</sup> .....	300,000
Lehigh University.....	251,400
Lehigh University.....	260,000
Lock Haven University .....	600,000
University of Pittsburgh .....	150,000
Waynesburg College.....	245,000
West Chester University .....	215,000
Woodlynde School <sup>a</sup> .....	<u>107,000</u>
Total .....	\$4,000,000

#### **FY 1997-98: Infrastructure Investment Project**

<u>Recipient</u>	<u>Grant Amount</u>
Bloomsburg University .....	\$ 500,000
Carnegie Mellon University .....	75,000
Community College of Allegheny County .....	211,000
Community College of Beaver County.....	100,000
Duquesne University.....	500,000
Indiana Univ. of PA Center for Voc. Personnel.....	420,000
Kutztown University.....	195,000
Lincoln University .....	112,000
Lock Haven University .....	335,000
Manor Junior College .....	132,000
Mansfield University .....	482,000
Millersville University.....	420,000
Pennsylvania College of Technology.....	60,000
Pennsylvania College of Technology.....	257,000
Temple University .....	207,000
University of Pittsburgh .....	480,000
University of Pittsburgh at Johnstown.....	145,000
Univ. of Pitt. School of Info. Science.....	385,000
University of the Arts .....	400,000
Warren/Forest Higher Education Council .....	80,000
Waynesburg College.....	<u>313,000</u>
Total .....	\$5,809,000

## Appendix D (Continued)

### 1998-99: Integrating Technology Into Teacher Preparation

<u>Recipient</u>	<u>Grant Amount</u>
Bloomsburg University .....	\$ 408,500
California University .....	330,500
Carlow College .....	400,500
Chestnut Hill College .....	268,500
Clarion University .....	330,500
College Misericordia .....	67,470
Drexel University .....	415,500
Duquesne University .....	275,500
Gannon University .....	270,970
Indiana University of Pennsylvania .....	427,500
LaSalle University .....	110,500
Lock Haven University .....	163,500
Mercyhurst College .....	51,822
Millersville University .....	200,500
Penn State University .....	311,100
Saint Vincent College .....	215,500
Temple University .....	402,500
University of the Arts .....	400,500
Villanova University .....	104,500
Wilkes University .....	<u>220,500</u>
Total .....	\$5,376,362

### 1999-2000: IT Workforce Development

<u>Recipient</u>	<u>Grant Amount</u>
Bloomsburg University .....	\$ 303,935
Bloomsburg University .....	350,108
College Misericordia .....	286,432
Delaware County Community College .....	58,522
Drexel University .....	255,985
Edinboro University .....	221,974
Indiana University of Pennsylvania .....	432,313
Juniata College .....	463,958
Keystone College .....	280,489
LaSalle University .....	84,132
Lock Haven University .....	68,349
Metropolitan Career Center .....	121,800
Mount Aloysius College .....	234,257
Northampton Community College .....	227,736
Pennsylvania Institute of Technology .....	120,814

**Appendix D (Continued)**

**1999-2000: IT Workforce Development (Continued)**

<u>Recipient</u>	<u>Grant Amount</u>
Saint Vincent College.....	\$ 94,466
Slippery Rock University .....	29,297
Temple University .....	72,812
Temple University .....	241,625
University of Pittsburgh at Bradford .....	110,226
University of Pittsburgh .....	298,127
University of Pittsburgh .....	218,640
University of Pittsburgh .....	497,962
University of Pittsburgh at Bradford .....	81,903
West Chester University .....	170,363
Wilkes University.....	<u>245,938</u>
Total .....	\$5,572,163

**2000-01: I-Grad**

<u>Recipient</u>	<u>Grant Amount</u>
Albright College.....	\$ 275,895
Allegheny College .....	78,540
Community College of Allegheny .....	60,225
DeSales University.....	285,275
Drexel University .....	100,500
Drexel University .....	496,500
Duquesne University.....	224,885
Harrisburg Area Com. College – Gettysburg .....	106,530
Indiana University.....	88,462
LaSalle University .....	122,615
LaSalle University .....	114,576
Marywood University.....	315,057
Metropolitan Career Center .....	241,641
Muhlenberg College .....	128,094
Point Park College .....	421,268
Saint Francis University .....	82,022
Saint Vincent College.....	54,873
Shippensburg University .....	169,628
Shippensburg University .....	161,130
Temple University .....	184,100
Temple University .....	370,410
University of Pittsburgh at Greensburg .....	63,450
University of Pittsburgh at Bradford .....	98,309
University of Pittsburgh at Bradford .....	207,944
University of Pittsburgh, Dept. of Health .....	237,180
Wilkes University.....	<u>281,218</u>
Total .....	\$4,970,327

**Appendix D (Continued)**

**2001-02: Improving Technology at Colleges and Universities**

<u>Recipient</u>	<u>Grant Amount</u>
Bloomsburg University .....	\$ 201,375
Bryn Mawr College.....	106,758
Clarion/Venango Educ. Resources Alliance .....	44,949
College Misericordia.....	226,600
Delaware Valley College.....	114,793
DeSales University.....	196,230
Drexel University.....	218,371
Indiana University of Pennsylvania .....	134,324
Keystone College .....	211,833
LaSalle University .....	183,334
Lehigh Carbon Community College .....	251,400
Lincoln University.....	128,592
Penn College of Optometry.....	228,328
Pennsylvania College of Technology.....	234,679
Pennsylvania Institute of Technology .....	93,756
Philadelphia University.....	245,791
Point Park College .....	250,775
Saint Vincent College.....	148,760
Shippensburg University .....	145,040
Temple University .....	177,854
University of Scranton.....	136,948
West Chester University .....	213,397
Widener University.....	<u>251,299</u>
Total .....	\$4,145,186

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<sup>a</sup>While higher education institutions were the primary recipients of these grant monies, grants were also available to entities that formed a partnership with a college or university, to K-12 schools when partnered with a college, and to Community Education Councils. The schools, school districts, councils and development corporations listed in this appendix partnered with higher education institutions in their projects. Because these entities were responsible for administration and accounting of the grant monies, their names are listed instead of the college or university they partnered with to receive the grant.

Source: Developed by LB&FC staff using information obtained the Office of Educational Technology, PA Department of Education.



# APPENDIX E

## Federal Enhancing Education Through Technology (EETT) Grant Amounts Available to PA Schools (FY 2002-03)

County	School District	EETT Grant Amount			County	School District	EET Grant Amount		
		Formula	Competitive	Total			Formula	Competitive	Total
Adams	Bermudian Springs SD	\$ 4,946	0	\$ 4,946	Allegheny (Cont.)	Pine-Richland SD	\$ 1,382	0	\$ 1,382
	Conewego Valley SD	9,632	0	9,632		Pittsburgh SD	576,809	1,018,013	1,594,822
	Fairfield Area SD	2,447	0	2,447		Plum Borough SD	6,534	0	6,534
	Gettysburg Area School	14,656	0	14,656		Quaker Valley SD	4,061	0	4,061
	Littlestown Area SD	6,430	0	6,430		Rapah-Edison CS	1,311	0	1,311
	Upper Adams SD	5,336	0	5,336		Riverview SD	6,267	0	6,267
	Allegheny Valley SD	4,399	0	4,399		Shaler Area SD	10,595	0	10,595
	Avonworth SD	8,123	0	8,123		South Allegheny SD	11,008	0	11,008
	Baldwin-Whitehall SD	9,319	0	9,319		South Fayette Township SD	8,842	0	8,842
	Bethel Park SD	6,441	0	6,441		South Park SD	6,065	0	6,065
Allegheny	Brentwood Borough SD	2,525	0	2,525	Steel Valley SD	17,852	0	17,852	
	Career Connections CS	2,322	30,000	32,322	Sto-Rox SD	33,618	46,820	80,438	
	Carlynton SD	6,950	0	6,950	Upper Saint Clair SD	4,060	0	4,060	
	Chartiers Valley SD	6,274	0	6,274	Urban League of Pittsburgh CS	1,348	29,800	31,148	
	Clairton City SD	18,135	0	18,135	West Allegheny SD	6,091	0	6,091	
	Cornell SD	5,783	0	5,783	West Jefferson Hills SD	4,496	0	4,496	
	Deer Lakes SD	2,764	0	2,764	West Mifflin Area SD	16,839	0	16,839	
	Duquesne City SD	18,901	0	18,901	Wilksburg Borough SD	27,602	0	27,602	
	East Allegheny SD	20,777	0	20,777	Woodland Hills SD	63,432	0	63,432	
	Elizabeth Forward SD	10,217	0	10,217	Apollo-Ridge SD	11,138	0	11,138	
Allegheny	Fox Chapel Area School	10,243	0	10,243	Armstrong SD	48,193	172,800	220,993	
	Gateway SD	11,441	0	11,441	Freeport Area SD	6,690	0	6,690	
	Hampton Township School	1,874	0	1,874	Leechburg Area SD	3,306	0	3,306	
	Highlands SD	27,444	0	27,444	Aliquippa SD	36,577	44,200	80,777	
	Keystone Oaks SD	10,403	0	10,403	Ambridge Area SD	18,603	0	18,603	
	Manchester Academy CS	2,022	0	2,022	Beaver Area SD	5,933	0	5,933	
	Mckeesport Area SD	53,976	0	53,976	Big Beaver Falls Area SD	22,547	54,820	77,367	
	Montour SD	3,829	0	3,829	Blackhawk SD	5,800	0	5,800	
	Moon Area SD	7,497	0	7,497	Center Area SD	2,983	0	2,983	
	Mt Lebanon SD	4,629	0	4,629	Freedom Area SD	9,467	0	9,467	
Allegheny	North Hills SD	5,176	0	5,176	Hopewell Area SD	14,843	0	14,843	
	Northgate SD	8,765	35,000	43,765	Midland Borough SD	8,155	0	8,155	
	Northside Urban Pathways CS	1,685	0	1,685	Monaca SD	8,597	0	8,597	
	Penn Hills SD	15,538	0	15,538	New Brighton Area SD	15,959	45,860	61,819	

# Appendix E (Continued)

	EETT Grant Amount			EETT Grant Amount		
	County	School District	Total	Formula	Competitive	Total
Beaver (Cont.)	Riverside Beaver County SD	Bucks	\$ 6,464	\$ 6,464	0	\$ 6,464
	Rochester Area SD	Bucks	9,685	30,000	30,000	39,685
	South Side Area SD	Bucks	5,282	0	5,282	5,282
	Western Beaver County SD	Bucks	5,292	0	5,292	5,292
Bedford	Bedford Area SD	Bucks	11,558	0	11,558	11,558
	Chestnut Ridge SD	Bucks	12,868	43,380	43,380	56,248
	Everett Area SD	Bucks	8,514	0	8,514	8,514
	Northern Bedford County SD	Bucks	6,224	0	6,224	6,224
	Tussey Mountain SD	Bucks	10,836	31,080	31,080	41,916
Berks	Antietam SD	Butler	665	0	665	665
	Boyertown Area SD	Butler	7,745	0	7,745	7,745
	Brandywine Heights Area SD	Butler	6,221	0	6,221	6,221
	Conrad Weiser Area SD	Butler	7,002	0	7,002	7,002
	Exeter Township SD	Butler	2,589	0	2,589	2,589
	Fleetwood Area School	Butler	2,603	0	2,603	2,603
	Governor Mifflin School	Butler	3,437	0	3,437	3,437
	Hamburg Area SD	Butler	4,998	0	4,998	4,998
	Kutztown Area SD	Butler	4,139	0	4,139	4,139
	Muhlenberg SD	Butler	5,909	0	5,909	5,909
	Oley Valley SD	Butler	3,020	0	3,020	3,020
	Reading SD	Butler	190,444	0	190,444	190,444
	Schuylkill Valley SD	Cambria	3,983	0	3,983	3,983
	Tulpehocken Area SD	Cambria	8,668	0	8,668	8,668
	Twin Valley SD	Cambria	11,812	0	11,812	11,812
	Wilson SD	Cambria	7,107	0	7,107	7,107
Blair	Altoona Area SD	Cambria	77,373	221,180	221,180	298,553
	Bellwood-Antis SD	Cambria	8,133	0	8,133	8,133
	Claysburg-Kimmel SD	Cambria	9,008	30,000	30,000	39,008
	Holidaysburg Area School	Cambria	15,325	0	15,325	15,325
	Spring Cove SD	Cambria	13,382	0	13,382	13,382
	Tyrone Area SD	Cambria	15,454	46,618	46,618	62,072
	Williamsburg Community SD	Cambria	5,705	0	5,705	5,705
Bradford	Athens Area SD	Cambria	14,345	0	14,345	14,345
	Canton Area SD	Cambria	7,827	0	7,827	7,827
	Northeast Bradford SD	Cambria	10,176	0	10,176	10,176
	Sayre Area SD	Cambria	5,206	0	5,206	5,206
	Towanda Area SD	Cambria	12,108	43,800	43,800	55,908
	Troy Area SD	Cambria	13,047	0	13,047	13,047
	Wyalusing Area SD	Cambria	11,891	0	11,891	11,891
	Bensalem Township SD	Cambria	28,621	0	28,621	28,621
	Bristol Borough SD	Cambria	31,848	0	31,848	31,848
	Bristol Township SD	Cambria	35,755	0	35,755	35,755
	Centennial SD	Cambria	20,140	0	20,140	20,140
	Central Bucks SD	Cambria	11,297	0	11,297	11,297
	Council Rock SD	Cambria	7,127	0	7,127	7,127
	Morrisville Borough SD	Cambria	4,712	0	4,712	4,712
	Mosaica Academy CS	Cambria	4,589	0	4,589	4,589
	Neshaminy SD	Cambria	18,927	0	18,927	18,927
	New Hope-Solebury SD	Cambria	871	0	871	871
	Palisades SD	Cambria	3,346	0	3,346	3,346
	Pennridge SD	Cambria	11,662	0	11,662	11,662
	Pennsbury SD	Cambria	18,705	0	18,705	18,705
	Quakertown Community SD	Cambria	7,809	0	7,809	7,809
	Butler Area SD	Butler	56,246	163,100	163,100	219,346
	Kams City Area SC	Butler	0	46,100	46,100	46,100
	Mars Area SD	Butler	7,601	0	7,601	7,601
	Moniteau SD	Butler	9,608	38,677	38,677	48,285
	Seneca Valley SD	Butler	7,768	0	7,768	7,768
	Slippery Rock Area SD	Butler	10,621	0	10,621	10,621
	South Butler County SD	Butler	8,044	0	8,044	8,044
	Blacklick Valley SD	Cambria	6,633	0	6,633	6,633
	Cambria Heights SD	Cambria	14,455	0	14,455	14,455
	Central Cambria SD	Cambria	6,813	0	6,813	6,813
	Conemaugh Valley SD	Cambria	6,457	30,000	30,000	36,457
	Ferndale Area SD	Cambria	3,476	0	3,476	3,476
	Forest Hills SD	Cambria	10,088	0	10,088	10,088
	Greater Johnstown School	Cambria	58,840	0	58,840	58,840
	Northern Cambria SD	Cambria	16,899	0	16,899	16,899
	Penn Cambria SD	Cambria	12,984	0	12,984	12,984
	Portage Area SD	Cambria	9,261	0	9,261	9,261
	Richland SD	Cambria	6,492	0	6,492	6,492
	Westmont Hilltop SD	Cambria	1,619	0	1,619	1,619
	Cameron County SD	Cambria	5,304	0	5,304	5,304
	Jim Thorpe Area SD	Cambria	7,669	0	7,669	7,669
	Lehigh Area SD	Cambria	11,870	0	11,870	11,870
	Palmerton Area SD	Cambria	8,070	0	8,070	8,070
	Panther Valley SD	Cambria	11,912	45,780	45,780	57,692
	Weatherly Area SD	Cambria	3,176	0	3,176	3,176

**Appendix E (Continued)**

<u>County</u>	<u>School District</u>	<u>EETT Grant Amounts</u>			<u>County</u>	<u>School District</u>	<u>EETT Grant Amounts</u>		
		<u>Formula</u>	<u>Competitive</u>	<u>Total</u>			<u>Formula</u>	<u>Competitive</u>	<u>Total</u>
Centre	Bald Eagle Area SD	\$ 8,070	0	\$ 8,070	Columbia	Southern Columbia Area SD	\$ 6,221	0	\$ 6,221
	Bellefonte Area SD	18,009	0	18,009	(Cont.)	Conneaut SD	24,163	0	4,163
	Penns Valley Area SD	7,705	0	7,705	Crawford	Crawford Central SD	32,739	114,400	147,139
	State College Area SD	14,682	0	14,682		Penncrest SD	28,105	0	28,105
	Avon Grove SD	6,404	0	6,404	Cumberland	Big Spring SD	12,365	0	12,365
	Coatesville Area SD	61,953	189,440	251,393		Camp Hill SD	3,046	0	3,046
	Collegium CS	1,523	0	1,523		Carlisle Area SD	13,901	0	13,901
	Downtown Area SD	5,591	0	5,591		Cumberland Valley SD	6,668	0	6,668
	Graystone Academy CS	2,765	0	2,765		East Pennsboro Area SD	3,139	0	3,139
	Great Valley SD	7,809	0	7,809		Mechanicsburg Area SD	4,010	0	4,010
Clarion	Kennett Consolidated SD	8,970	0	8,970		Shippensburg Area SD	12,469	0	12,469
	Octorara Area SD	12,599	0	12,599	Dauphin	Central Dauphin SD	18,650	0	18,650
	Owen J Roberts SD	4,927	0	4,927		Halifax Area SD	3,228	0	3,228
	Oxford Area SD	10,562	0	10,562		Harrisburg City School	146,823	195,900	342,723
	Phoenixville Area SD	4,010	0	4,010		Lower Dauphin SD	4,263	0	4,263
	Renaissance Acad. Edison CS	665	0	665		Middletown Area SD	6,976	0	6,976
	West Chester Area SD	17,599	0	17,599		Millersburg Area SD	3,722	0	3,722
	Allegheny-Clarion Valley SD	8,571	30,000	38,571		Ronald H. Brown CS	6,716	0	6,716
	Clarion Area SD	3,957	0	3,957		Steelton-Highspire SD	4,738	0	4,738
	Clarion-Limestone Area SD	7,937	0	7,937		Susquehanna Township SD	3,957	0	3,957
Clearfield	Keystone SD	7,337	30,845	38,182		Sylvan Heights CS	2,608	30,000	32,608
	North Clarion County SD	6,677	0	6,677		Upper Dauphin Area SD	4,608	0	4,608
	Redbank Valley SD	10,379	30,000	40,379	Delaware	Chester Charter School	5,010	0	5,010
	Union SD	8,541	0	8,541		Chester Community CS	8,264	0	8,264
	Clearfield Area SD	26,738	0	26,738		Chester-Upland SD	129,264	0	129,264
	Curwensville Area SD	4,894	0	4,894		Chichester SD	14,343	0	14,343
	Dubois Area SD	28,563	115,040	143,603		Garnet Valley SD	2,337	0	2,337
	Glendale SD	5,966	0	5,966		Haverford Township SD	5,568	0	5,568
	Harmony Area SD	7,043	0	7,043		Interboro SD	9,684	0	9,684
	Moshannon Valley SD	6,117	0	6,117		Marple Newtown SD	9,423	0	9,423
Clinton	Philipsburg-Osceola Area SD	17,405	56,020	73,425		Radnor Township SD	7,653	0	7,653
	West Branch Area SD	6,266	0	6,266		Ridley SD	14,109	0	14,109
	Keystone Central SD	39,789	0	39,789		Rose Tree Media SD	7,549	0	7,549
	Sugar Valley Rural CS	1,589	0	1,589		Southeast Delco SD	41,816	127,280	169,096
	Benton Area SD	3,722	0	3,722		Springfield SD	3,941	0	3,941
	Berwick Area SD	15,905	0	15,905		Upper Darby SD	44,887	0	44,887
	Bloomsburg Area SD	8,226	0	8,226		Village CS of Chester Upland	5,347	0	5,347
	Central Columbia SD	5,519	0	5,519		Wallingford-Swarthmore SD	2,910	0	2,910
	Milville Area SD	6,543	0	6,543		William Penn SD	39,910	0	39,910

# Appendix E (Continued)

	EETT Grant Amount			EETT Grant Amount				
	County	School District	Formula	Competitive	Total	Formula	Competitive	Total
Elk.....	Johnsonburg Area SD.....	Huntingdon.....	\$ 2,927	0	\$ 2,927	\$ 15,550	\$ 55,228	\$ 70,778
	Ridgway Area SD.....	Juniata Valley SD.....	6,964	0	6,964	3,566	0	3,566
	Saint Marys Area SD.....	Mount Union Area SD.....	9,818	0	9,818	13,593	0	13,593
Erie.....	Corry Area SD.....	Southern Huntingdon Cty. SD...	25,500	69,780	95,280	9,779	0	9,779
	Erie City SD.....	Blairsville-Saltsburg SD.....	190,647	389,240	579,887	14,737	51,128	65,865
	Fairview SD.....	Homer-Center SD.....	2,916	0	2,916	8,929	0	8,929
	Fort Leboeuf SD.....	Indiana Area SD.....	8,252	0	8,252	20,778	0	20,778
	GECAC Community CS.....	Marion Center Area SD.....	2,725	30,000	32,725	14,343	50,960	65,303
	General McLane School.....	Penns Manor Area SD.....	7,757	0	7,757	11,407	0	11,407
	Girard SD.....	Purchase Line SD.....	10,317	0	10,317	16,913	0	16,913
	Harbor Creek SD.....	United SD.....	5,961	0	5,961	9,072	0	9,072
	Iroquois SD.....	Brockway Area SD.....	3,410	0	3,410	4,816	0	4,816
	Millcreek Township SD.....	Brookville Area SD.....	15,957	0	15,957	13,303	0	13,303
	North East SD.....	Punxsutawney Area SD.....	8,642	0	8,642	26,801	85,100	111,901
	Northwestern SD.....	Juniata County SD.....	7,757	0	7,757	14,057	0	14,057
	Union City Area SD.....	Lackawanna.....	9,323	0	9,323	3,966	0	3,966
	Wattsburg Area SD.....	Carbondale Area SD.....	8,851	0	8,851	16,733	43,780	60,513
Fayette.....	Abington SD.....	Dunmore SD.....	18,732	0	18,732	9,811	0	9,811
	Albert Gallatin Area SD.....	Lakeland SD.....	41,725	0	41,725	4,894	0	4,894
	Brownsville Area SD.....	Mid Valley SD.....	38,774	0	38,774	6,248	0	6,248
	Connellsville Area SD.....	North Pocono SD.....	64,017	0	64,017	8,356	0	8,356
	Frazier SD.....	Old Forge SD.....	6,998	0	6,998	2,707	0	2,707
	Laurel Highlands SD.....	Riverside SD.....	28,286	87,360	115,646	7,028	0	7,028
	Uniontown Area SD.....	Scranton SD.....	46,572	0	46,572	96,950	245,300	342,250
Forest.....	Forest Area SD.....	Scranton State Sch. for the Deaf	7,818	0	7,818	5,885	0	5,885
Franklin.....	Chambersburg Area SD.....	Valley View SD.....	35,093	0	35,093	6,742	0	6,742
	Fannett-Metal SD.....	Cocalico SD.....	11,626	30,000	41,626	6,482	0	6,482
	Greencastle-Antrim School.....	Columbia Borough SD.....	6,612	0	6,612	7,002	0	7,002
	Tuscarora SD.....	Conestoga Valley SD.....	9,762	0	9,762	17,493	0	17,493
	Waynesboro Area SD.....	Donegal SD.....	12,807	0	12,807	6,872	0	6,872
Fulton.....	Central Fulton SD.....	Eastern Lancaster Cty. School..	7,254	30,000	37,254	22,926	0	22,926
	Forbes Road SD.....	Elizabethtown Area SD.....	2,893	30,000	32,893	5,064	0	5,064
	Southern Fulton SD.....	Ephrata Area SD.....	3,827	0	3,827	10,881	0	10,881
Greene.....	Carmichaels Area SD.....	Hempfield SD.....	15,838	0	15,838	15,358	0	15,358
	Central Greene SD.....	La Academia CS.....	18,415	0	18,415	1,108	0	1,108
	Jefferson-Morgan SD.....	Lampeter-Strasburg SD.....	8,227	0	8,227	1,856	0	1,856
	Southeastern Greene SD.....	Lancaster SD.....	8,538	0	8,538	142,706	231,140	373,846
	West Greene SD.....	Manheim Central SD.....	14,833	0	14,833	8,903	0	8,903

# Appendix E (Continued)

County	School District	EETT Grant Amount			County	School District	EETT Grant Amount		
		Formula	Competitive	Total			Formula	Competitive	Total
Lancaster (Cont.)	Manheim Township SD	\$ 3,025	\$ 0	\$ 3,025	Lycoming	East Lycoming SD	\$ 6,560	\$ 0	\$ 6,560
	Penn Manor SD	4,741	0	4,741		Jersey Shore Area SD	12,079	0	12,079
	Pequea Valley SD	17,441	0	17,441		Loyalsock Township SD	4,712	0	4,712
	Solanco SD	31,693	0	31,693		Montgomery Area SD	7,718	30,000	37,718
	Warwick SD	7,237	0	7,237		Montoursville Area SD	5,831	0	5,831
Lawrence	Ellwood City Area SD	19,551	55,263	74,814		Muncy SD	6,498	0	6,498
	Laurel SD	8,322	32,740	41,062		South Williamsport Area SD	5,076	0	5,076
	Mohawk Area SD	13,005	45,410	58,415		Williamsport Area SD	67,005	165,600	232,605
	Neshannock Township SD	710	0	710	McKean	Bradford Area SD	29,631	0	29,631
	New Castle Area SD	44,910	96,120	141,030		Kane Area SD	8,235	0	8,235
	Shenango Area SD	5,002	0	5,002		Karns City Area SD	11,312	0	11,312
	Union Area SD	6,086	0	6,086		Otto-Eldred SD	5,867	0	5,867
	Wilmington Area SD	16,799	41,640	58,439		Port Allegany SD	7,782	0	7,782
Lebanon	Annville-Cleona SD	3,905	0	3,905		Smethport Area SD	5,806	0	5,806
	Cornwall-Lebanon SD	11,298	0	11,298	Mercer	Commodore Perry SD	2,837	0	2,837
	Eastern Lebanon County School	10,308	0	10,308		Farrell Area SD	20,981	0	20,981
	Lebanon SD	42,601	89,564	132,165		Greenville Area School	12,025	36,900	48,925
	Northern Lebanon SD	3,552	0	3,552		Grove City Area School	7,367	0	7,367
	Palmyra Area SD	2,131	0	2,131		Hermitage SD	8,981	0	8,981
Lehigh	Allentown City SD	141,711	329,300	471,011		Jamestown Area SD	4,279	30,000	34,279
	Catasauqua Area SD	5,310	0	5,310		Keystone Ed. Center CS	1,155	0	1,155
	East Penn SD	11,298	0	11,298		Lakeview SD	11,145	0	11,145
	Northern Lehigh SD	12,420	0	12,420		Mercer Area SD	6,612	0	6,612
	Parkland SD	13,016	0	13,016		Reynolds SD	10,437	0	10,437
	Roberto Clemente CS	833	0	833		Sharon City SD	24,355	60,220	84,575
	Salisbury Township SD	5,779	0	5,779		Sharpsville Area SD	4,634	0	4,634
	Southern Lehigh SD	3,025	0	3,025		West Middlesex Area SD	10,329	30,760	41,089
	Whitehall-Coplay SD	10,985	0	10,985	Mifflin	Mifflin County SD	50,866	0	50,866
Luzerne	Crestwood SD	9,892	0	9,892	Monroe	East Stroudsburg Area School	17,129	0	17,129
	Dallas SD	9,163	0	9,163		Pleasant Valley SD	17,050	0	17,050
	Greater Nanticoke Area	17,676	0	17,676		Pocono Mountain SD	26,655	0	26,655
	Hanover Area SD	22,546	0	22,546		Pocono Sch. of Excellence CS	823	0	823
	Hazleton Area SD	55,673	207,367	263,040	Montgomery	Stroudsburg Area SD	16,296	0	16,296
	Lake-Lehman SD	7,026	0	7,026		Cheltenham Township SD	10,204	0	10,204
	Northwest Area SD	7,309	0	7,309		Colonial SD	16,563	0	16,563
	Pittston Area SD	20,234	0	20,234		Hatboro-Horsham School	3,919	0	3,919
	Wilkes-Barre Area SD	52,182	198,011	250,193		Jenkintown SD	825	0	825
	Wyoming Area SD	9,163	0	9,163		Lower Merion SD	9,327	0	9,327
	Wyoming Valley West SD	37,467	0	37,467		Lower Moreland Township SD	3,150	0	3,150

# Appendix E (Continued)

County	School District	EETT Grant Amount			County	School District	EETT Grant Amount		
		Formula	Competitive	Total			Formula	Competitive	Total
Montgomery (Cont.)	Methacton SD	\$ 6,300	0	\$ 6,300	Philadelphia (Cont.)	Delaware Valley SD	\$ 12,625	0	\$ 12,625
	Norristown Area SD	35,229	0	35,229		Eugenio Maria de Hostos CS	2,436	0	2,436
	North Penn SD	22,429	0	22,429		Family CS	2,358	0	2,358
	Perkiomen Valley SD	9,754	0	9,754		Franklin Towne CS	8,174	29,993	38,167
	Pottsgrove SD	10,474	0	10,474		Freire CS	2,594	0	2,594
	Pottstown SD	17,999	0	17,999		Germantown Settlement CS	6,091	0	6,091
	Souderton Area SD	7,081	0	7,081		High Tech High CS	1,218	0	1,218
	Springfield Township SD	7,185	0	7,185		Hope CS	3,930	0	3,930
	Spring-Ford Area SD	6,352	0	6,352		Imani Education Circle CS	4,991	0	4,991
	Upper Dublin SD	15,162	0	15,162		Imhotep Institute CS	4,755	0	4,755
	Upper Merion Area SD	10,997	0	10,997		Independence CS	3,340	0	3,340
	Upper Moreland Township SD	5,571	0	5,571		Laboratory CS, The	4,912	0	4,912
	Upper Perkiomen SD	7,601	0	7,601		Leadership Learning CS	6,641	0	6,641
	Wissahickon SD	5,431	0	5,431		Mariana Bracetti Academy CS	9,104	0	9,104
Montour	Danville Area SD	11,974	0	11,974		Mast Community CS	12,300	0	12,300
Northampton	Bangor Area SD	8,252	0	8,252		Math, Civics and Science CS	10,139	0	10,139
O	Bethlehem Area SD	87,277	328,640	415,917		Multi Cultural Academy CS	1,926	0	1,926
	Easton Area SD	27,175	0	27,175		New Foundations CS	4,676	0	4,676
	Lehigh Vly. Acdmy. Reg. CS	2,378	0	2,378		Nueva Esperanza Academy CS	4,048	0	4,048
	Mount Carmel Area SD	0	41,680	41,680		People for People CS	4,480	0	4,480
	Nazareth Area SD	2,727	0	2,727		Philadelphia Academy CS	7,899	0	7,899
	Northampton Area SD	10,256	0	10,256		Philadelphia City SD	2,985,437	2,999,981	5,985,418
	Pen Argyl Area SD	4,373	0	4,373		Philadelphia Crmnty. Acdmy CS	4,834	0	4,834
	Saucon Valley SD	2,589	0	2,589		Philadelphia Harambee CS	3,026	0	3,026
	Vitalistic Ther. CS-Lehigh Vly.	1,271	0	1,271		Philadelphia Performing Arts CS	3,930	0	3,930
	Wilson Area SD	5,467	0	5,467		Preparatory CS, The	5,423	0	5,423
Northumberland..	Line Mountain SD	4,946	0	4,946		Raising Horizons CS	5,030	0	5,030
	Milton Area SD	11,376	0	11,376		Renaissance Advantage CS	7,427	0	7,427
	Mount Carmel Area SD	17,327	0	17,327		Renaissance CS	2,358	0	2,358
	Shamokin Area SD	25,164	0	25,164		Richard Allen Preparatory CS	2,319	0	2,319
	Shikellamy SD	14,499	0	14,499		Russell Byers CS	2,004	0	2,004
	Warrior Run SD	8,382	0	8,382		Skilled Trade and Tech CS	3,576	0	3,576
Perry	Greenwood SD	3,905	0	3,905		Universal Institute CS	4,755	0	4,755
	Newport SD	9,735	0	9,735		Wakisha CS	4,166	29,999	34,165
	Susquehanna SD	4,790	0	4,790		West Oak Lane CS	6,838	0	6,838
	West Perry SD	11,532	0	11,532		West Phil. Achievement CS	3,576	0	3,576
Philadelphia	Alliance CS, The	3,105	0	3,105		Wissahickon CS	2,987	0	2,987
	Archit. Design Public CS	4,087	0	4,087		World Communication CS	4,912	0	4,912
	Ctr. for Economics & Law C.	4,323	0	4,323		Young Scholars CS	2,279	0	2,279
	Christopher Columbus CS	6,130	0	6,130	Pike	Delaware Valley CS	4,166	0	4,166

**Appendix E (Continued)**

County	School District	EETT Grant Amount			County	School District	EETT Grant Amount		
		Formula	Competitive	Total			Formula	Competitive	Total
Potter.....	Austin Area SD .....	\$ 1,646	0	\$ 1,646	Union .....	Lewisburg Area SD .....	\$ 6,117	0	\$ 6,117
	Coudersport Area SD.....	3,566	0	3,566		Mifflinburg Area SD .....	19,723	64,220	83,943
	Galeton Area SD.....	4,875	0	4,875	Venango.....	Cranberry Area SD .....	13,280	0	13,280
	Northern Potter SD .....	8,192	0	8,192		Franklin Area SD .....	19,131	62,380	81,511
	Oswayo Valley SD .....	4,669	0	4,669		Oil City Area SD .....	22,851	0	22,851
Schuylkill .....	Blue Mountain SD .....	7,809	0	7,809		Titusville Area SD .....	19,527	0	19,527
	Mahanoy Area SD .....	11,130	30,500	41,630		Valley Grove SD .....	8,138	0	8,138
	Minersville Area SD .....	5,310	0	5,310	Warren .....	Warren County SD .....	30,375	0	30,375
	North Schuylkill SD .....	16,707	0	16,707	Washington .....	Avella Area SD .....	4,392	0	4,392
	Pine Grove Area SD .....	6,612	0	6,612		Bentworth SD .....	12,898	0	12,898
	Pottsville Area SD .....	20,941	0	20,941		Bethlehem-Center SD .....	16,349	0	16,349
	Saint Clair Area SD .....	3,254	0	3,254		Burgettstown Area SD .....	10,063	38,720	48,783
	Schuylkill Haven Area SD .....	3,983	0	3,983		California Area SD .....	9,600	30,000	39,600
	Shenandoah Valley SD.....	12,140	30,000	42,140		Canon-McMillan SD .....	13,250	0	13,250
	Tamaqua Area SD .....	10,699	0	10,699		Charleroi SD .....	12,167	0	12,167
	Tri-Valley SD .....	2,554	0	2,554		Chartiers-Houston SD .....	4,629	0	4,629
	Williams Valley SD .....	5,284	0	5,284		Fort Cherry SD .....	5,180	0	5,180
Snyder.....	Midq-West SD .....	16,456	0	16,456		McGuffey SD .....	16,748	62,280	79,028
	Seilingsgrove Area SD.....	17,737	0	17,737		Peters Township SD .....	1,850	0	1,850
Somerset.....	Berlin Brothers Valley SD .....	7,347	0	7,347		Ringgold SD .....	24,040	91,900	115,940
	Conemaugh Twp Area School .....	4,686	0	4,686		Trinity Area SD .....	21,631	0	21,631
	Meyersdale Area SD.....	10,117	31,600	41,717	Wayne.....	Washington SD .....	27,796	52,360	80,156
	North Star SD .....	13,070	0	13,070		Wallenpaupack Area SD .....	12,417	0	12,417
	Rockwood Area SD .....	6,492	0	6,492		Wayne Highlands SD .....	23,542	82,000	105,542
	Salisbury-Elk Lick SD.....	7,065	0	7,065		Western Wayne SD .....	14,062	0	14,062
	Shade-Central City SD.....	6,619	30,000	36,619	Westmoreland..	Belle Vernon Area SD .....	17,431	64,880	82,311
	Shanksville-Stonycreek SD .....	1,536	0	1,536		Burrell SD .....	6,612	0	6,612
	Somerset Area SD .....	16,997	0	16,997		Derry Area SD .....	20,253	67,120	87,373
	Turkeyfoot Valley Area SD.....	6,715	0	6,715		Franklin Regional School.....	3,794	0	3,794
	Windber Area SD .....	9,948	0	9,948		Greater Latrobe School .....	13,614	0	13,614
Sullivan.....	Sullivan County SD .....	6,029	0	6,029		Greensburg Salem School .....	26,048	85,680	111,728
Susquehanna ...	Blue Ridge SD .....	4,555	0	4,555		Hempfield Area School.....	21,078	0	21,078
	Elk Lake SD .....	10,031	0	10,031		Jeannette City SD .....	12,602	0	12,602
	Forest City Regional School .....	3,775	0	3,775		Kiski Area SD .....	30,464	0	30,464
	Montrose Area SD .....	7,679	0	7,679		Ligonier Valley SD .....	17,795	0	17,795
	Mountain View SD .....	13,891	34,160	48,051		Monessen City SD .....	12,115	30,000	42,115
	Susquehanna Community SD .....	11,202	0	11,202		Mount Pleasant Area SD .....	19,229	67,700	86,929
Tioga .....	Northern Tioga SD .....	22,977	61,409	84,386		New Kensington-Arnold SD .....	25,100	68,060	93,160
	Southern Tioga SD .....	15,218	0	15,218		Norwin SD .....	13,383	0	13,383
	Wellsboro Area SD .....	7,419	0	7,419		Penn-Trafford SD .....	4,126	0	4,126

# Appendix E (Continued)

<u>County</u>	<u>School District</u>	<u>EETT Grant Amount</u>		
		<u>Formula</u>	<u>Competitive</u>	<u>Total</u>
Westmoreland ....	Southmoreland SD .....	\$ 18,420	\$ 0	\$ 18,420
	Yough SD .....	19,835	0	19,835
Wyoming .....	Lackawanna Trail SD .....	4,738	0	4,738
	Tunkhannock Area SD .....	19,964	82,800	102,764
York .....	Central York SD .....	6,326	0	6,326
	Crispus Attucks CS .....	1,098	0	1,098
	Dallastown Area SD .....	5,179	0	5,179
	Dover Area SD .....	7,002	0	7,002
	Eastern York SD .....	8,330	0	8,330
	Hanover Public School .....	7,081	0	7,081
	Lincoln Edison CS .....	9,848	0	9,848
	Northeastern York SD .....	4,634	0	4,634
	Northern York County SD .....	2,506	0	2,506
	Red Lion Area SD .....	12,833	0	12,833
	South Eastern SD .....	5,467	0	5,467
	South Western SD .....	4,102	0	4,102
	Southern York County SD .....	7,731	0	7,731
	Spring Grove Area SD .....	7,133	0	7,133
	West Shore SD .....	15,150	0	15,150
West York Area SD .....	5,623	0	5,623	
York City SD .....	101,225	153,200	254,425	
York Suburban SD .....	3,931	0	3,931	
<b>Total.....</b>		<b>\$10,991,759</b>	<b>\$10,795,126</b>	<b>\$21,786,885</b>



## APPENDIX F

### **Information on an Ongoing Assessment of the Educational Impact of “Students Achieving Standards”**

Interactive, Inc., is conducting both a quantitative and qualitative analysis to document the gains for teachers, students, schools, and communities. Both experimental and control sites are being used in the sampling as well as pre- and post-testing. This assessment focuses on the three years of the SAS project, FY 2000-01 through FY 2002-03.

As of April 2003, Interactive, Inc., had gathered first year baseline data, but was still analyzing data for the second year of the SAS project. Until such analysis is complete, Interactive, Inc., cannot yet comment on the effects of SAS on student achievement. They anticipate concluding their second year analysis and releasing a report on it during the summer of 2003. A third year of data analysis along with a final report with recommendations is expected to be released by spring of 2004.

In the interim, Interactive, Inc., prepared a report for the Department of Education based on their work in the first year of the SAS project. This work included a survey of school administrators and teachers from those schools receiving SAS grants and the gathering of baseline data to be used in the assessment. In this report they stated that both school administrators and teachers are expecting substantial, positive outcomes for students with the use of SAS software. Interactive, Inc., also believes that it is likely that student achievement will increase with the use of the SAS. The research group expects that the data from student testing in years two and three will clearly show such achievement. Staff of Interactive, Inc., completed a similar study project for West Virginia in 1999.<sup>1</sup>

The West Virginia study examined that state’s Basic Skills/Computer Education (BS/CE) program. The program consisted primarily of three components: software that focused on West Virginia’s basic skills goals in reading, language arts, and mathematics; sufficient computers in the schools so that all students could have easy and regular access to the basic skills software; and professional development for teachers in the use of the software and the computers.

Interactive Inc.’s West Virginia study concluded that the BS/CE program had a “powerfully positive” effect in West Virginia, especially in those schools that used it most intensively. Specifically, they found that significant gains in reading, writing, and math were achieved, and the program was especially successful with low income and rural students. In discussing the effects of the BS/CE program the report notes that West Virginia moved up the list of states in the nation rank-ordered by school achievement from 33<sup>rd</sup> to 17<sup>th</sup> during the period studied. The study also found an 11 percent improvement in test scores attributable to the BS/CE program.

Interactive, Inc.’s report on the West Virginia Initiative goes on to state that the success of the BS/CE program can be attributed to the sustained funding support provided by the West Virginia state government. Specifically, the report states that “without the willingness of the state’s policymakers to keep instructional technology at or near the top of the priority list” such achievements would not have occurred.

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<sup>1</sup>*West Virginia Story: Achievement Gains from a Statewide Comprehensive Instructional Technology Program*, Interactive, Inc., March 1999.

## APPENDIX G

### Pending Legislation Related to Education Technology

(As of June 16, 2003)

**House Bill 932:** Amends the Public School Code to add an article to be known as “Improving the Quality of Instruction Program,” one component of which is to ensure that new technology in our children's classrooms serves to improve the quality of instruction. To this end, the state should provide assistance to school districts to ensure that their teachers are properly trained and capable of using the new technology and integrating computers into classroom instruction. Another component is to promote “Learning to Link” by providing continuing professional education opportunities and training to educators in the use of new technologies and computers in educating students, including integrating new education technologies into classroom instruction to improve student academic performance. State appropriations are included in the bill to fund this initiative.

**House Bill 1174:** Establishing the Office of Community, Business and Education Partnerships to be a cooperative arrangement between the private sector and one or more school entities to provide dropout prevention programs, programs to enrich and supplement existing academic programs, and career education initiatives through various means, including, but not limited to, career instruction, exploration, awareness, preparation, guidance and counseling that is incorporated into the school curriculum, job shadowing experiences, on-the-job work training, apprenticeship programs, internships, and programs relating to vocational education. One of the purposes of the partnership is to encourage the donation of functional computers, equipment, supplies, volunteers, and funds where available from the private sector to school entities and to educate the private sector of any tax advantage resulting from these donations.

**House Resolution 8:** Establishing the Commission on Rural Education to examine and study the status of rural education in the Commonwealth. This study is to include an examination of what technological resources and equipment are available to schools in rural areas. This resolution was adopted in February 2003.

Source: Developed by LB&FC staff from a review of proposed legislation.

## APPENDIX H

### **Department of Education's Response to This Report**



COMMONWEALTH OF PENNSYLVANIA  
**DEPARTMENT OF EDUCATION**

333 MARKET STREET  
HARRISBURG, PA 17126-0333

June 16, 2003

**Testimony & Comments on the Legislative Budget and Finance Committee Report**  
***The Status of Project Link-to-Learn and Other Educational Technology Initiatives***

Good morning. I am Michael Golden, Director for the Office of Educational Technology, Pennsylvania Department of Education. Thank you for allowing me this opportunity to respond to *The Status of Project Link-to-Learn and Other Educational Technology Initiatives* report and to briefly discuss the past, present, and future of educational technology in Pennsylvania.

The first sentence of the Report Summary states “Integrating the latest technology into [education]...is important to ensure that students are ‘technology literate’ and prepared for life in the 21<sup>st</sup> Century”; however, this is only one of the myriad purposes for educational technology. In addition to educating students on technology, educational technology also serves to improve student achievement in *all* academic areas by –

- ❑ Engaging students in dynamic cognitive learning,
- ❑ Targeting and meeting individualized instructional needs,
- ❑ Delivering curricula that might not otherwise be accessible,
- ❑ Providing educators the tools and resources necessary to ensure authentic learning in an effective manner, and
- ❑ Allowing administrators to make data-driven decisions regarding student performance and teacher quality and to manage a safe, efficient learning environment.

Several years ago, Pennsylvania schools began to recognize the growing need for technology and sought ways to build their technology infrastructures, though some had yet to realize the importance of technology and needed to see firsthand the potential for technology in education. In 1996, the Governor and the General Assembly created the Link-to-Learn Initiative to address both of these needs.

Over the subsequent seven years, L2L became the springboard for educational technology across the Commonwealth. Two hundred and thirty-one million dollars in State funds were expended to build a strong technology foundation. Research on the early, diverse solutions did not focus on measuring the program’s impact on education; however, more recent programs, better suited to that type of evaluation, will allow us to gauge the efficacy of programs and target future funding more efficiently.

While the Link-to-Learn initiative provided strong groundwork for the integration of technology, not all Pennsylvania schools have access to advanced technology nor are they all equally equipped to implement technology in their instructional and management systems. With the development of high speed Internet and Internet2, multimedia and handheld computers, and wireless solutions, technology continues to rapidly change the way we live and the way we work, leaving many of our schools several steps behind. It is imperative that all of our students have equal access to advanced technologies in the Information Age to be able to succeed academically and to gain the skills necessary to compete in a global high-tech economy.

To this end, the Office of Educational Technology will build upon the L2L foundation, and ensure that past investments are not wasted, by enhancing existing, successful programs and creating innovative solutions founded upon scientifically-based research studies that identify proven educational technology practices. We will promote initiatives that reflect the paradigm shifts from pedagogue/pupil to facilitator/learner, and from technology as a separate program to technology as an integral component in every aspect of the educational process. We will provide and promote sustained, specific professional development so that every teacher and administrator is highly qualified to utilize technology proficiently in instructional and management practices. And we will continue to work throughout the entire educational environment to impact lifelong learning and improve student academic achievement through the effective integration of technology into curricula.

However, we must do more than leverage our current resources in order to truly impact student achievement. Governor Rendell's Plan for a New Pennsylvania recognizes that an investment now is a down payment on Pennsylvania's future job growth and crucial to the Commonwealth's viability. As we strive to become a leader in the educational arena, we must look to the best practices adopted by other states. We must continue to partner with other agencies, organizations, businesses, and communities to advance statewide and local technology infrastructures and bridge the digital divide. We must promote the effective integration and implementation of technology in our schools and provide high-quality technology-rich professional development in order to improve academic achievement. Only through a committed, collaborative effort will we move Pennsylvania successfully to the vanguard of educational and technological reform.

## Report Comments

*The Status of Project Link-to-Learn and Other Educational Technology Initiatives* is reasonably accurate in its depiction though its brevity necessitates the following points be addressed to better explain educational technology and the outcomes of such initiatives.

### □ **Basic Education Grant Program**

In preparation for the status report, surveys were sent to Link-to-Learn grantees to solicit comments on the funded programs. Some responded that they did not support the move from entitlement to competitive grant, though the L2L initiative transitioned from formula-based entitlement grants to competitive grants in order to direct reduced funding to a more targeted population and ensure grants of sufficient size to have impact. The Students Achieving Standards grant program further narrowed the focus of funding to the integration of technology, rather than acquisition, for the improvement of student academic achievement.

The report generalizes that relatively little formal research was conducted on the impacts of the Link-to-Learn initiative on student achievement. In 2000, however, PDE commissioned a 3-year study of the Student Achieving Standards program to better understand and address the continuing impact of technology in the school educational environment and on student achievement. Currently in the third year of analysis, the study's year-two report is expected to be released Summer 2003 and the final 3-year longitudinal report will be released Spring 2004. Preliminary results demonstrate that student and teacher used technology more as a result of the program and, more importantly, teachers' abilities to implement the State Academic Standards into their classroom increased as a result of the grant program.

### □ **Higher Education Grant Program**

The status report discusses the Office of Educational Technology's (OET) involvement in the development and implementation of the Technology Atlas. Although the Office of Administration currently manages the Technology Atlas, OET continues to provide critical technology and infrastructure data to the Atlas through the Pennsylvania Technology Inventory (PATI). PATI collects critical information regarding technology and technology integration in Commonwealth schools, provides useful data for State and local technology planning purposes, and allows OET to target funding and technical assistance needs.

### □ **Enhancing Education Through Technology (EETT)**

As referenced on page 45 of the report, the Office of Educational Technology will be monitoring the EETT grant recipient budget expenditures and activities; however, the report failed to note that formal evaluation plans are also in process. Competitive grant recipients will monitor the efficacy of their individual programs - a requirement for receipt of EETT funding. Furthermore, OET is currently developing a Scope of Work for an independent contractor to conduct a formal evaluation of the EETT initiative and its impact on education in Pennsylvania.

