

Funding Models for eLearning in Education

Tomorrow's citizens and workforce deserve an education that prepares them - and their nation's economy - to thrive in a world of rapid change and widespread globalization.



"In today's global economy, eLearning is not a question of if, but rather when."

> - The One to One Computing Guidebook

EXECUTIVE SUMMARY

As countries prepare to participate fully in the increasingly knowledge-based, digital global economy, their education systems must evolve to better prepare tomorrow's workforce with 21st century skills—technology literacy and the problem solving, creativity and collaboration skills that it promotes. One approach that holds promise for creating this shift is eLearning—the use of technology to support improved teaching and learning outcomes.

Funding models for eLearning initiatives can include:

- Public-Private Partnerships government-backed loans, bundled service agreements, seed funding, support from religious institutions, NGOs, and micro-financing
- Technology Grants including public funding and private grants for hardware, software, and training
- Bonds, Leasing and Universal Service Fees community bonds, technology leasing, and the use of telecommunications access fees
- Parent or Individual Financing Bring Your Own Device options, tax relief, and user fees

Despite the growing worldwide recognition that eLearning initiatives are vital to future economic development, governments and educators are still struggling with the question of how to fund them within constrained national and education budgets. This paper suggests a variety of funding options as well as profiles of success stories from specific implementations.

Introduction & Overview

The 21st century skills to be gained through eLearning are critical to the success of individuals and nations. Fortunately, there are more funding models for technology purchases than ever before. To take advantage of these, schools and governmental agencies need to learn about these options, think creatively about maximizing revenue, and develop robust mechanisms for supporting

those who need assistance. In doing so, they will create much brighter future for everyone involved.

The funding approaches presented in this paper are designed to provide an introduction to a wide variety of solutions available to educational systems. By following their lead, schools throughout the world can provide more opportunities for all their citizens.

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"If technology is to be truly effective, it must be carefully and thoughtfully woven into the entire fabric of the school and learning. Done right, it changes both the appearance and nature of education."

Calvin Baker
Superintendent, Vail School District
Vail, Arizona
from Project RED*

Sustainable Funding

One of the keys to any successful technology purchase and implementation is that the selected funding model be sustainable. That is, to achieve the goal of moving schools to a new paradigm of teaching and learning, investment in technology cannot be a one-time effort. Schools must identify and prioritize the factors that make some technology implementations perform dramatically better than others and implement the research-based solutions that transform teaching and learning.

In October 2010, Project RED released The Technology Factor: Nine Keys to Student Achievement and Cost Effectiveness. This study details the two aspects of effective technology funding for schools:

- Major project initiatives often require substantial funding sources outside a school's regular budget
- Day to day purchases and support benefit from funding through the regular budget

Many respondents to Project RED's survey noted that they started with a grant but continued to fund their programs through regular operating expenses. In order to be successful, effective leaders and policy makers need to be able to adapt to the changing funding landscape. For instance, many schools have invested in providing robust wireless Internet access in all their sites so that students and teachers can connect to the network with their own devices.

For schools to reap the benefits of an effective technology integration plan, leaders, policy makers, parents, and the community must come together to support long-term, sustainable funding. By selecting one or more of the models described in this paper, schools can change the appearance and nature of education.

Saving Money with Technology

Successful technology integration in schools can also lead to significant financial savings. Project RED's report, *The Technology Factor: Nine Keys to Student Achievement and Cost Effectiveness* documents a wide variety of ways that effective technology use in schools can save money. For instance, the report details how the reduction in dropout rates due to the use of technology can produce savings of more than USD 56,000 per student.

In the US, the National Education
Technology Plan suggest a variety of
innovative practices to make the most
of limited resources. Included is the
recommendation to reallocate funds
from textbooks, traditional instructional
supplies, and computer labs to allocations
for digital content delivery in the
classroom. Additional cost savings can
be found be reducing initial technology
purchases by considering leasing and
creating a technology innovation fund
available across budget years.

Despite the seemingly high up front cost, effective planning and implementation of major technology initiatives can result in significant cost savings to schools. By creating a detailed implementation plan and sourcing a sustainable, long-term funding model, schools can use technology to shift the paradigm of teaching and learning.

MORE INFORMATION

Project RED: The Technology Factor: Nine Keys to Student Achievement and Cost Effectiveness

US National Education Technology Plan

Public Funding & Public-Private Partnerships

Many institutions and companies around the world have formed partnerships to create programs that help schools and individuals acquire technology for education. These programs address needs for Internet access, computers, and digital literacy skills.

Government-Backed Loans

A government-backed loan is a loan secured by the government, thereby protecting lenders and allowing borrowers to secure lower interest rates. These loans provide schools and regions an affordable option for purchasing technology goods and services. Some government-backed loans may also be available for individual purchases by teachers and parents. With low interest rates and flexible repayment schedules, these loans are a viable option for funding technology integration.

One example of this type of initiative is the School Technology Revolving Loan Program funded by the Illinois State Board of Education. This program provides 2% interest loans to approved

districts, charter schools, lab schools, area vocational centers and nonpublic schools. Eligibility alternates each year between schools that serve grades K-8 and those that serve grades 9-12. Since 1999, 530 loans totaling over \$75 million have been given to Illinois educational institutions for the purchase of technology hardware.

A similar program in nearby Indiana, the School Technology Advancement Account, encourages innovation by funding technology projects designed to improve student instruction. All schools that file a three-year technology plan with the Indiana Department of Education's Office of Learning Resources are eligible to apply for a 1% interest loan of up to \$20,000. In addition, schools may borrow funds from the Common School Fund Educational Technology Program, when available, may be borrowed for purchasing or leasing technology equipment, as well as for teacher training.

Government-backed loans have also proven to be a successful funding initiative outside the U.S. In Argentina, a pioneering 1:1 technology integration

program called *Conectar Igualdad* is rapidly transforming the education system. The program, which will distribute three million netbooks into the nation's schools, is primarily funded through government subsidies. ANSES, the national retirement and pension fund, is financing the program in exchange for government bonds. *Conectar Igualdad* secured a USD 300 million investment in 2010 and continued funding the program with an estimated USD 1 billion for 2011 and 2012.

Bundled Service Agreements

Technology businesses, such as cable providers or computer service companies, often partner to offer special collections of services and equipment. These bundled service agreements allow schools to obtain much of the required technology infrastructure, equipment, and services at a more competitive rate than purchasing separately. In addition, bundled service agreements provide a purchasing opportunity for households where prohibitive technology services and software make computer ownership impractical.

Internationally, bundled service programs are being used to fund technology initiatives in countries and schools that have been traditionally under-served. The Partnership for Lebanon is a collaborative effort between corporations, including Intel, Cisco Systems, GHAFARI Inc., Microsoft and Occidental Petroleum, with the goal of revitalizing Lebanon and improving economic growth. In 2007, this public-private partnership provided wireless networks, computers, software, training, and support at a competitive bundled rate.

Governments in developing markets are recognizing the need to connect their citizens to technology, leading to lasting social and economic benefits. Public-private partnerships with Intel, PC manufacturers, and telecommunications companies (telcos) have helped develop



an innovative sales model to address the desirability and affordability concerns of first-time buyers. In China, the government is taking the lead in making broadband and PCs more affordable by offering specially priced technology packages that include broadband Internet service and PCs preloaded with valuable digital content. Telcos in China are working with PC manufacturers to promote prepaid broadband and PC packages through advertising in telco stores. Technology packages are available at conveniently located telco outlets, reaching a broad range of first-time buyers.

Individuals can also take advantage of bundles that include a variety of products and services for a reduced price. In the United States, the Federal Communications Commission, in an effort to reduce the digital divide, initiated the Connect to Compete program. This partnership between multiple cable providers and computer manufacturers provides affordable technology bundles to families with children who qualify for the free or reduced school lunch program. Additional partners, including Morgan Stanley and Microsoft, offer low-cost loans and digital literacy training for families that purchase computer service bundles.

Seed Funding and Micro-Financing

Programs that provide small loans, called micro loans, to people in poor areas around the world have become more and more widespread in recent years. These funds can be used to purchase a variety of critical goods, including computers and other technologies.

One such program is the No Interest Loans [Plan] (NILS) in Australia. It was developed by the Good Shepherd Youth & Family Service, a charitable organization that works with a variety of local agencies

to give loans to low-income individuals for essential household items, such as computers. When the loan is repaid, the money is reallocated to other community members.

In the United States, micro-financing programs also provide low-interest loans for households that would otherwise be unable to afford technology hardware and services. One of these programs is Tech Goes Home, a Boston-based program that offers computer loans to poor families. Each computer purchase includes digital literacy classes, and non-English speaking participants receive a free online subscription to Rosetta Stone. Other similar programs are the Work Loan Program in Buffalo, New York, and Project Café in Jackson and Owsley County, Kentucky.

Implementation Profile

In 2011, Colombia doubled the number of Internet connections in the country, and the government has an ambitious plan to eventually provide every citizen with access to the Internet. The plan includes a government partnership with local telcos to provide subsidized broadband service for low-income households, using the telco's large customer base to increase desirability and affordability. This model has produced positive results. In 2012 Columbia was awarded the prestigious annual Government Leadership Award from the GSMA, recognizing the government's technology-related development efforts.

Likewise in Portugal in 2008, the *e.Escholinha* project has helped to deliver broadband Internet access to all school in the country. The project is part of a broader, government-led initiative that combines age-appropriate technology and content with the training, support, and Internet connectivity students need

to develop 21st century skills. Since its inception in grades 1-4, more than 750,000 students have used a Magellan PC - a locally produced computer that uses the Intel-powered classmate PC reference design.

The core vision of the *e.Escholinha* project is the modernization of the Portuguese educational system. The initial financing for the *e.Escholinha* program came from the government's sale of 3G mobile licenses through a spectrum auction which raised EUR 460 million.

MORE INFORMATION

Government Backed Loans

- School Technology Revolving Loan Program
- School Technology Advancement Account
- Conectar Igauldad Initiative
- Charter School Revolving Loan Fund

Bundled Service Agreements

- Connect to Compete
- Partnership for Lebanon
- Intel USF and ICT Programs
- Prepaid Telco Programs

Seed Funding and Microfinancing

- Tech Goes Home
- No Interest Loan Schemes
- Ways to Work Loan Program

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Technology Grants

When considering education funding options, grants provide an opportunity for valuable endowments that can support innovative technology programs. The two main types of grants, public and private, can supply funds for initial capital outlays as well as staggered deployment of technology in a school. Although the grant writing process can be difficult and the decision making timeline can seem endless, the rewards and benefits to students far outweigh the challenges Public grants are especially useful for projects that require a large budget, due to the fact that public grants are backed by large legislative bodies which typically increase the resources available for the grant project. However, the increased accountability associated with public grants needs to be considered when applying for government funding. In some cases, the funding of public grants is subject to political swings and resources may vary annually, making them more ideal for one-time purchases or short-term funding needs.

There is also enormous potential for technology support to schools and regions through private grants. Local education foundations are non-profit organizations whose boards represent

local community and education leaders and who are financially accountable to their communities. An example is the Palo Alto Foundation for Education (PAFE), which gave a grant of USD 200,000 to Palo Alto's middle school science program in 2010. According to the teachers, "Their gift of laptops, as well as large-screen LCD projectors has made an enormous difference in science classrooms, helping students to conduct research and then to pick out key ideas." Local education foundations like PAFE raise funds to provide private grants that enhance education programs and represent a longterm capital investment in technology. In addition to a straightforward application process, the limited amount of regulation and documentation of program gains is one main advantage attributed to private grants. Furthermore, the qualification process can potentially be much simpler for applicants of private grants, making them more ideal for innovative programs lacking the research needed to qualify for a public grant. However, small private foundations do not have the same resources as large publicly-funded grants and therefore the amount of the grant may be limited.



EU: Multiple Funding Models

In 2007 the European Union launched a new set of programs: up to € 975 billion over a seven year period. These new funds will be easier to access, more transparent and better accounted for than in the past thanks to the reform, of the EU financial management rules.

The new rules will provide better, simpler and more practical solutions for all those working with EU funds, while insuring effective control over public spending.

Learn more

Palestine: Project NETKETABi

The NETKETABi represents a unique multi-dimensional opportunity for the children and youth of Palestine to acquire 21st century skills. The main goal is to provide over 280,000 netbook computers to Palestinian children and youth.

Given that netbook is designed as a cost-effective educational solution, the NETKETABi grants Palestinian children and youth of all socioeconomic backgrounds educational and learning opportunities.

Learn more

Implementation Profile

Like many developing countries, Egypt recognizes that computer literacy is a world-wide language required to participate in today's competitive global marketplace. Unfortunately, the poverty level in Egypt means that only a small percentage of its 71.2M citizens can afford a computer. Looking at low PC penetration rates (2.3%), the Egyptian government saw an opportunity to help their citizens embrace new technology. With support from private international funding partners and local manufacturing plants, the Ministry of Communications and Information Technology (MCIT) developed a plan to put technology within reach of this vast population.

In 2002, the PC for Every Home initiative was launched with the goal of providing affordable and relevant technology solutions for all of Egypt's citizens. A partnership with Egypt Telecom allowed every customer to apply for the PC program, provided that they maintained a land phone line and a positive payment history. Eligible households were given an opportunity to purchase a personal computer and pay in small monthly installments over 3 years, amounting to as little as USD 15 a month. Additional

subsidies from this government program provided access to reliable broadband Internet service and software training.

The funding solution for Egypt's PC for Every Home initiative came from a strong public-private partnership between the government, international corporations, and local computer vendors. MCIT partnered with international ICT companies, including Intel and Microsoft, as well as local computer assembly plants to creatively fund the distribution of an anticipated six million computers throughout the 7 year program. This cooperation was credited with realizing discounts of up to 50% on the price of hardware.

Ashraf Mashhour, an engineer for the Ministry of Communications and Information Technology, says that the initiative has fostered financial predictability to the IT industry in Egypt and has been responsible for creating more than 5,000 new jobs. Additionally, MCIT reports strengthened domestic computer manufacturing and export opportunities for the region. Improved computer literacy throughout the country has fostered an increasingly skilled and competitive workforce and has decreased unemployment.

MORE INFORMATION

United States

- US State by State Programs
- Technology Grant News
- The Foundation Center
- Grants.gov
- National Council for PTAs
- ICT Regulation Toolkit

International

- Intel International Grants
- Grants for Schools
- HP Innovations in Education Program
- Computer Aid International
- ArabDev: ICT Initiatives in Egypt
- Egypt's PC for Every Home Initiative



Bonds, Leasing, and USF Support

To meet the technology funding challenge, states and regions may look toward long-term financing options that ease the burden of large initial expenditures. Capital bonds and technology leasing programs offer funding advantages for schools seeking a sustainable funding model that promotes long-term success.

Technology Bonds

The deployment of technology in schools requires a substantial budget, often requiring community investment and funding. However, taxing property owners to pay for large education expenses in the year they are incurred produces large hikes in tax rates and wide fluctuations in tax bills from year to year. As a result, local government bonds are traditionally used for funding large capital expenditures in the school system. Although bonds can offer a large monetary investment and foster community involvement, there are some obstacles that may impede schools trying to fund their technology initiatives. They may face difficulty in passing bond elections, particularly in economically depressed areas or those with falling enrollment. Furthermore, overburdened staff must prepare a large public campaign to secure the passage of bonds. Even if a bond is passed by voters, this financing method has limits set on the total amount schools can borrow, usually expressed as a percentage of their assessed property value.

There are two basic types of bonds, term bonds and serial bonds. Term bonds have a set maturity date (for example, 20 years) and interest is paid annually, with the entire principal falling due only at the end of the term. Typically, a school will establish a fund into which annual contributions are made to accumulate the needed principal amount for repayment. Long-term bonds are most useful for funding projects in which the taxpayers will continue to benefit from

the investment throughout the entire term (for example, a new school building). Unfortunately, the period over which long-term bonds are repaid is usually longer than the relatively short life of most technology assets, making term bonds an unsatisfactory option for technology funding.

In serial bonds, a portion of the outstanding bond matures at regular intervals until eventually all of the bonds have matured. The varying maturity dates are arranged so that the sum of interest and principal paid each year is about the same. For short-life technology purchases, a serial bond ensures that only the current generation pays for technology that will need to be replaced or upgraded at the end of the bond term.

In 2008, Denver voters approved the DPS Bond Program for USD 454 million, the largest bond ever approved by a Colorado school district. With variable issue dates, this bond continues to actively fund both construction and technology projects today. Using 2008 Bond Program savings, DPS was able to cover 70% of the cost for a new laptop for all teachers in Fall 2011. Schools matched the remaining 30%, allowing affordable equity of technology resources across all schools. Instructional technology bond funds were also approved for the purchase of new media equipment and wireless upgrades. USD 1M was allocated to a grant project to encourage the development of innovative student-based technology projects, supported by a project website that allows schools to share and collaborate on best practices. The DPS Bond Program is managed entirely by an in-house DPS Program Team comprised of field professionals who plan and manage the bond's construction services.

Leasing

Technology leasing is another option for funding technology and keeping it

current. One advantage of leasing is that it takes considerably less time and effort than other funding options, including grants and bonds. It also allows schools to stretch their technology budget and provide a greater amount of equipment across schools than what could be afforded through traditional purchasing methods. This tax-exempt financing option is useful for schools with limited available capital who wish to keep pace with technology development. A lease agreement can be made through a vendor, a financial organization or another agency. Leasing through a vendor usually results in the most competitive pricing options. However, one advantage of leasing through a third-party organization is that it gives schools the freedom to choose from multiple vendors simultaneously to meet their specific technology needs.

Lease purchase agreements are considered to be one of the most flexible technology funding models because they extend the initial purchase costs over several years. While providing competitive interest rates, they also have the ability to offer flexible payment terms that fit into a school's budget and timetable. Because leases are generally structured to be funded from the operating budget, they preserve capital dollars. In addition, lease agreements often include nonappropriations language that allows the lease to be terminated if the school does not approve the technology funding in subsequent years. The equipment can be returned without additional monetary obligations, making lease agreements a relatively safe investment without fear of long-term debt.

In Europe, 2004, the States of Guernsey Education Department effectively used leasing through Hewlett-Packard to fund their technology program. They stated, "By leveraging HP Financial Services, we were able to fund our school system's technology refresh more

flexibly. Instead of having to upgrade our school's equipment in phases, we were able to do the entire system at once. Leasing our technology also makes our technology costs more predictable over time." Similarly, a school district in a small Alabama town of 15,000 used technology leasing to fund 158 Intelligent Classrooms, 10 mobile labs and more. Leasing agreements allowed them to place more technology into more classrooms right from the project's start, rather than spreading out technology purchases to meet budget constraints. The lease agreements also ensure that outdated equipment is continually replaced to meet changing technology demands.

Universal Service Fees

Schools are also funding technology initiatives through the use of Universal Services Fees (USF). With an increased global reliance on information and communication technology (ICT), emerging countries are recognizing the need to find affordable and sustainable ways to provide widespread access to digital devices and broadband connections, especially in rural and remote areas. ICT-Broadband programs combine the purchase of digital devices, broadband

Internet access, and local software applications at a reduced rate. In June 2005, the government of Turkey instituted its USF to fund USD 8 billion for the Fatih program, which aims to transform Turkey's education system with 1:1 eLearning.

In remote regions where broadband access has thus far been cost-prohibitive, universal service/access funds can be used to subsidize new broadband infrastructure and network rollouts. In countries such as Chile, Turkey and Malaysia, governments have successfully created and reformed universal policies and funds to extend voice, data and Internet services to citizens in even the most remote regions, often using costefficient wireless technologies. Many other countries are in the process of creating similar policies.

Implementation Profile

Technology equipment leases can be extended towards students' families as a method of bridging the digital divide for disadvantaged children. The E-Learning Foundation works with schools, parents, and other stakeholders to ensure that all students have equal access to

learning technologies at home as well as school. In this model, school funds are complemented by parents making small monthly donations to the school's technology program. In return, students gain access to current technology that is leased for an affordable price. One school that has benefited from the E-Learning Foundation is St. Edmund's School in Wolverhampton, England. Financing from the foundation facilitated a three year strategic plan to embed eLearning through the use of mobile devices for all students and teachers.

Another innovative implementation was that of Portugal's *e.Escholinha* project begun in 2008. The core vision of the *e.Escholinha* project is the modernization of the Portuguese educational system. The initial financing for the *e.Escholinha* program came from the government's sale of 3G mobile licenses through a spectrum auction which raised EUR 460 million. The results of this program include broadband Internet access in all of Portugal's schools as well as over 750,000 students using the Magellan PC - a locally produced computer that uses the Intel-powered classmate PC reference design.



MORE INFORMATION

Technology Bonds

- Colorado DPS Bond
- Ann Arbor School Board Bond
- Newberg Public Schools Bond

Leasing

- E-Learning Foundation
- Technology Leasing in Alabama
- Guernsey Education Department

Parent or Individual Student Funding

Two options are available for parent or individual funding--technology fees or Bring Your Own Device (BYOD) programs. Both of these funding options allow students to access technology in school and at home.

Funding Through Fees

Most schools that fund technology through fees are privately funded schools. They charge students a fee for using a mobile device that has all the required software and applications that students need to be successful. The fees charged cover the cost of the device, technical support, software, and professional development for teachers. This approach allows all students to have the same equipment and software that helps a school provide more unified professional development for all teachers. It also helps to build a strong support network for educators as they update their teaching methods to include new methodology.

Across the globe, many schools are turning to individual student fees as a method of funding technology initiatives. U.S. schools have also found success with individual student funding models. Bishop McNamara Catholic High School in Kankakee, Illinois, has a four-year payment plan with a buyout option where the student maintains ownership at the end of the four years. Brophy College Preparatory, in Phoenix, Arizona, requires students to purchase their own tablets at the beginning of their high school experience. After four years the tablet belongs to the student, but all software applications become the property of the school and are removed. Other schools implement a gradual technology access and fee structure. The Northland Christian School Tablet/Laptop Program in Houston, Texas provides shared mobile labs for students in Grades K-6 without charging additional fees. However, students in 7th grade access computer labs in every classroom and are responsible for yearly technology fees of USD 400, while students in grades 8-12 participate in a 1:1 initiative where they use a tablet for the school year and pay UD 825 in fees. At the end of the school year, the tablet is returned and maintained as property of the school.

Bring Your Own Device

Bring Your Own Device (BYOD) programs make use of the technology that students already own. Since many schools have the infrastructure to support wireless devices, allowing students to bring their own devices gives educators access to immediate technology integration in the classroom. Effective BYOD programs have strategies in place to help with classroom management of different devices and activities. Schools that implement BYOD programs must also provide mobile technology solutions for students who do not have their own device, and they must support the mix of the school's technology with the students' own devices. This technology financing model requires schools to use their own funds to provide infrastructure and professional development.

The use of individual personal devices in a BYOD program highlights the shifting roles of both teachers and students in a technology-rich classroom environment. Teachers are moving towards a facilitator role as students take more ownership of their learning and share what they have learned using integrative technology tools.

Argentina: Implementing the One-to-one Model

The 1 to 1 model: a commitment for educational quality and equality addresses high school management teams that are starting to implement one-to-one learning environments.

Its objective is to provide orientation and help to reflect on important issues related to ICT management. It also promotes decision-making to plan for ICT integration in the institution, its implementation, follow-up and evaluation.

Learn more

Egypt: A PC for Every Home

MCIT's PC for Every Home initiative provides citizens PCs at a reasonable price through monthly installments.

In collaboration with Telecom Egypt and Banque Misr, the seven-year program was initiated to distribute six million PCs while expanding the domestic computer industry.

Learn more

Implementation Profile

In 2009, the Forsyth County Schools in Georgia began implementing a Bring Your Own Device (BYOD) program. Through these efforts, they hope to move students and teachers along the digital learning continuum and create 21st century classrooms. The district strives to create a 1:1 environment but, like many districts, they are limited by funding constraints. The BYOD program allowed extended student access to technology with minimal effects on the schools' budgets.

They approached the implementation of the BYOD program by first looking at policy change – what current policies needed to change in order to support teachers and students with their own devices?

After a small high school group piloted the program in 2009, they revisited their plan in August of 2010 and by September of that year more than 44% of the district teaching staff was participating in the BYOD program. Educational practices changed as the type of work and projects evolved to incorporate more technology and lifelong lessons. Equitable access to technology devices was addressed by the purchase of netbooks for students to check out and use for schoolwork. In many classrooms, students had a choice to use classroom equipment or their own devices, empowering students to be more involved in their learning process.

MORE INFORMATION

Funding through Fees

- Brophy College Prepatory
- Northland Christian School Tablet/Laptop Program
- Bishop McNamara Catholic High School
- University of Maryland

Bring Your Own Device

- Bringing Your Own Technology
- Make EdTech Happen
- Six Reasons Why Ed Leaders
 Should Encourage Kids to Bring
 Their Own Devices to School
- Going Mobile: Key Issues to Consider for Schools Weighing BYOD
- Forsyth County Schools



Advantages

Disadvantages

| | Auvantages | Disduvalitages | |
|-------------------------------|--|---|--|
| Public-Private Partnerships | | | |
| Government-Backed Loans | A low-interest option for immediate funding with a flexible repayment schedule. Suitable for large technology purchases. | Limited availability, dependent upon government programs and funding incentives. | |
| Bundled Service Agreements | Collaboration among businesses allows for competitive purchasing rates. Ideal for first-time technology initiatives and household PC programs. | Requires bundled purchases, not designed for schools or households with existing technology infrastructure and Internet service. | |
| Seed Funding/Micro-financing | Low to no-interest loans provide affordable technology financing for individuals. Useful for household PC programs. | Small funding amounts, not suitable for larger school technology initiatives. | |
| Technology Grants | | | |
| Public Grants | Backed by large legislative bodies, useful for substantial technology initiatives. Ideal for one-time purchases or short-term funding needs. | High accountability, funding is subject to political swings and resources may vary annually. Requires documented research of program gains. | |
| Private Grants | Simplified qualification process with limited regulation and documentation. Ideal for innovative technology programs. | Smaller funding resources and limited grant amounts. Grant applications require significant time and effort without guaranteed results. | |
| Community Bonds & Leasing | | | |
| Technology Bonds | Long-term financing option ideal for large initial expenditures. Fosters community involvement. | Requires a large public campaign to secure bond passage. Not a viable option for economically depressed schools. | |
| Leasing | Long-term tax-exempt financing solution for keeping technology current. Flexible repayment options, preserves capital dollars. Safe investment with no long-term debt. | Technology equipment must be returned, no long-term capital. Funding is subject to budget changes from year to year. | |
| Universal Service Funds (USF) | Offer great promise in helping developing nations provide affordable broadband Internet access and bridge the "Digital Divide." | The geographic size and challenging topography for many developing nations can make implementation very costly. | |
| Individual Funding | | | |
| User Fees | Shared responsibility between the school and families. Ideal for 1:1 technology initiatives. | Predominantly limited to privately funded schools, not suitable for low income households. | |
| BYOD | Allows for immediate technology integration. Funding sources required for infrastructure and professional development only. | Requires management of different devices and unequal access. Places responsibility on the family to provide technology equipment, not ideal for lowincome households. | |

"Collaborative efforts between government and industry aim to create favorable policy, frameworks, and conditions that will increase access to and usage of information and communication technology (ICT) for all citizens."

Conclusion

Educational institutions looking for ways to fund technology have a variety of needs and come from a variety of environments. They all share a strong desire, however, to improve the educational and life prospects of their students by giving them access to technology.

Governmental and private entities, alone, or in partnerships, provide support for educational technology through lowcost financing, grants, and innovative programs around the world. Many of these programs, such as low-cost loans and bundles that can include inexpensive computers, software, and Internet access, benefit families in poorer areas who face multiple challenges to student success. Many of these funding options recognize the critical link between the students and their families and the schools, providing computers and computer training for home and family use, along with schoolbased technology.

In more technology-enhanced areas, some programs take advantage of the devices that students already own to integrate technology into classroom activities, and some schools have been successful in asking their communities to support additional technology through bonds and levies.

All these options provide a range of opportunities for schools to give students the technology they need to learn, whether it is basic computer education or access to the latest and best available technology.

For assistance realizing your eLearning vision and more information, visit www.intel.co.uk/itfored

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