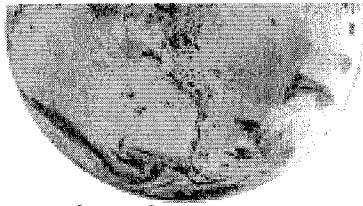
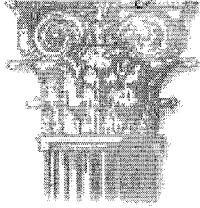


'ON-DEC' PILOT PROGRAM



A Search for New Horizons



Education & Academia

INSTALLATION OF COMPUTERS IN THE HOMES OF EVERY STUDENT IN A MIDDLE SCHOOL WHERE 92% LIVE AT THE POVERTY LEVEL LEVERAGES THE RESOURCES OF A CORPORATE PARTNER TO ENGAGE THE COMMUNITY, STRENGTHEN SCHOOL PERFORMANCE, AND LIFT STUDENT OUTCOMES. [CWH2001509]

APPLICATION DESCRIPTION

The program, called ON•DEC (Our Neighborhood Digital Education Community) represents a serious partnership between Chase Manhattan Bank and a large, overcrowded Title I middle school in New York City. The program is designed to create "digital opportunities" by providing an entire school population with technology resources, support and training. Our intentions are to wrap the school end-to-end in technology with the objective of helping students achieve at higher levels, strengthening parental involvement, supporting professional development for the teaching staff and to develop an educational model that can be replicated by other corporations in partnership with schools.

The scope of this project covers the physical school and extends into the homes of these students, involving parents and other family members. Moreover, a great deal of focus will be on supporting teachers so that they can effectively use technology to support and enrich their students' experience as well as their own. Our end state - a learning environment, producing graduates who are truly literate and competent in core subjects, and a community of life long learners - will be demonstrated over time. A major component of this project is therefore, research based. Our school partner, the Ditmas Educational Complex at IS 62 in Brooklyn, New York, both understands the long-term view, and wants to move forward in the short term with intermediate steps using technology in smart ways to benefit from the resources and support it receives from Chase.

The major goal for the first year of operation of ON•DEC, was to provide a PC and Internet access to the 1500+ members of the school community, effectively eliminating the digital divide in this urban neighborhood. The financial commitment for the first year is \$2 million. Chase has made a multi-year commitment of resources and funding for ON•DEC to demonstrate the effects of technology use in education. This initiative is sponsored by Chase's Community Development Group, managed by the Corporate Social Responsibility area, which houses The Chase Manhattan Foundation.

Each of the 153 teachers and staff members received laptop PCs and printers at the end of school in June 2000 and were offered PC skill training during the summer. The only expectation communicated to the staff was that they get comfortable using the technology and spend time exploring the varied uses of the PC and Internet. This approach appears to have worked in that many staff members were able to discover the value of the PC, not only for personal uses, but also professionally by having the time to explore. In June, very few teachers rated themselves as having any real proficiency in using a computer. However, a few short months later, many are using PowerPoint for presenting daily lessons, surfing the Internet for resources, sending email, and they are becoming more comfortable having their students submit homework in electronic formats.

Later, in October, over the course of two weekends, 1,300 Chase employees volunteered to install computers in the homes of each of Ditmas's 1,300+ students. The only requirement for receiving a computer was that parents/guardians attend a 3-hour

training class at school. School staff, with the support of Chase employees, held over 60 workshops - scheduled at various days and times throughout the month of October to accommodate parents' schedules. Given the diversity of the school population, many of the sessions required interpreters and often the students attended along with their parents for "moral" support and to aid in translation. Almost 92% of the parents/guardians have attended training, and concerted efforts are under way to get the remaining families trained so that they, too, may receive a computer. The level of participation of parents, volunteers from the school and Chase far exceeded everyone's expectation, and has already left an indelible mark on the school community. We will close out Year One of the project having successfully completed our stated mission of providing access and support for these new computer and internet users, and having laid the foundation to provide the next set of tools - an interactive school website and online buddies for parents - to be available in early January 2001.

In providing technology tools and support to this school, the administrators and teachers now have the opportunity to revamp the curriculum, incorporating technology tools to enrich teaching and learning in Ditmas classrooms. Work is under way throughout the entire school to develop new, standards-based curriculum, which takes advantage of technology for instructional purposes. Staff members are diligently creating a thematic, interdisciplinary project-based approach to middle school curriculum that they will launch in September 2001. Teachers are using the Internet to research sites, educational portals, and existing lesson plans to assist in

their efforts. Software packages are being assessed for possible use in the classroom and at home, with particular emphasis on enrichment programs which will increase literacy and basic math skills. Most exciting, though, is the enthusiasm of the teachers in their exploration and discovery of what technology can do for their practice and ultimately for their students. They have accepted the notion that using technology engages their students in learning and they are seeking innovative ways to capitalize on the support the ON•DEC program offers them.

With access and connectivity in place, we are beginning to build an in-school network and make the improvements necessary for Phase II - to provide the school with an intranet with secure access to the Internet enabling parents and students to access school-based information from anywhere. Applying corporate best practices, and leveraging key supplier relationships, we will be able to deliver a robust, school-friendly, state of the art network to ensure that classroom connectivity and uptime are maximized and that administrative processes can be automated. Electronic access will permit many more teachers and staff to have access to data, and to gain efficiencies by moving away from paper based processing and recordkeeping.

One overarching aspect of this initiative is to build a model approach - one that can be easily replicated by other corporations - either in part or in its entirety. All documentation, project plans and lessons learned will be freely shared with other companies who want to impact the lives of a neighborhood school community by providing these technology tools and the required support along with them. We are also working with areas in the New York City Board of Education so that they can utilize this initiative as a learning space - to experiment with and/or pilot their own new programs. This opportunity should prove timely and useful, as the Board is looking to re-vamp its strategic technology programs, including a component involving computers for each student in the system.

In planning ON•DEC, we outlined several high level goals for the project:

- Create a model to improve results in an inner city public school using technology end-to-end to reinforce all aspects of education.
- Provide a PC and access to the Internet for all members of the school community (nearly 1,500 people) creating the nation's largest home-school network in a public school.

- Test the proposition that technology can fundamentally improve educational outcomes.
- Engage and involve all members of the school community: administrators, teachers, parents and students, and encourage the involvement of Chase employees.

Under the leadership of principal Nancy Brogan, our partner school - Ditmas IS 62, continues to undergo major school-wide reform that started over five years ago. One key outcome of the reform process is that the school has been restructured to house four mini-schools (institutes) replacing a single school organization. The four institutes at Ditmas are:

- The International School
- The Institute for Law and Community Service
- The Institute for Academics, Performing and Visual Arts
- The School for Environmental Science

This structure provides all 1,340 students with opportunities for specialization, and creates a caring environment for each student, while empowering administrators and teachers to take leadership roles in defining and managing their students' experience.

Last year, 17% of the students attending Ditmas had arrived in the US within the previous three years. Compared to similar schools, Ditmas has twice the number of immigrant students. Similar Schools¹ are at 8 percent and for all City Schools² the figure is 7.4%. Students at Ditmas come from 44 countries and speak 39 different native languages in their homes.

A Title I school, Ditmas serves a number of students with special needs. Almost 27% are identified as being English Language Learners (ELLs) and over 90% of students receive free lunch. From an ethnicity point of view, over 92% of the student population are people of color.

This information and statistics are cited from the NYC Board of Education 1998-1999 Annual School Report: New York: Board of Education, Division of Assessment and Accountability. 1 Similar Schools are defined as those with a similar % of students eligible for the Free Lunch Program and a similar % of English Language Learners² City Schools refers to all middle schools in New York City

The major components of the ON•DEC program involve:

- Providing personal computers and internet access for every teacher, staff member, student and parent;
- Furnishing initial and on-going training for each of these user groups, with a strong emphasis on supporting the professional development of teachers;
- Creating an engaging website for the school community to provide general school information, links and content specific for each user group, listing of all homework assignments for both students and parents to view, accommodating the language diversity by offering page translations, and a usage/incentive program to encourage continued use of the ON•DEC site;
- Enhancing the in-school network to ensure high operating standards and an electronic platform from which student work, teachers' lessons, school records, forms and information can be easily stored and accessed; and
- Supporting a change in teaching methodology at the school that involves moving to an interdisciplinary, project-based approach to core curriculum. With these tools, teachers can more freely engage their students and take advantage of the new technology tools available to them.

This initiative, though not even a year old, has had profound impacts on all the people involved, and the school may never be the same. The teaching staff is re-energized, administrators are looking for ways to use software to help in their day-to-day work, more parents are contacting the school regularly, and the student body feels special because their school is the only school in NYC that has this type of program. Another major group of people deeply impacted by ON•DEC are Chase employees. Through various means of internal communication most everyone is aware that this initiative exists and that it is especially important to the Corporation. The originator of this project is our Chairman and CEO, William B. Harrison, and as a champion, there is none better. ON•DEC is yet another demonstration of Chase's desire to improve the quality of education in public schools and it responds to the growing public concern over the use of technology in education. What has been especially outstanding is the response of employees who volunteered for this effort. Over 1,300 people helped install computers in students' homes over four days. While most volunteers visited student homes, others were stationed at the school to manage the Command Center, tracking the hundreds of employees in the field. Those employees (and IS 62

teachers who helped on those days) who went into the homes of these families were struck by the difficult conditions they saw and how hard life is for those less fortunate. They were moved by the genuine appreciation of the families, how freely these families welcomed them into their homes, and all feel proud that Chase would take on such an important project. Many employees have pledged to stay involved to help, which is critical to the future success of the program.

BENEFITS

The early benefits of the ON•DEC project have met our expectations and we are well on our way to establishing a foundation with benefits to be realized, for each user group, in the years to come. The project has directly reached over 1,500 students and staff at the school, and over 4,000 family members in whose homes hardware and software have been provided. For most, no computer would have been there except for the ON•DEC program. The initial training programs for teachers and parents have opened new avenues for digital opportunities and inclusion for this community. We chose to give the teachers laptop computers so that they could have the option of portability. The home PCs are desktop computers, so that all family members can use and benefit from the "appliance". Laptops would more likely have been used solely by the students

In this phase, where access to technology is the key goal, having a new PC with a high speed modem, access to the Internet and a common software platform (MS Office Suite) has allowed students to bring work home and/or complete assignments there with relative ease. Now students need not wait for the computer in the Library to do research or stay late at school to use the computer lab to complete assignments. Students are exploring the Internet, using the Encarta encyclopedia software provided and engaging their teachers on ways to use the computer in their classes. Students are also reaching out to their individual teachers via email and in some cases, receive emails from their teachers with homework assignments when absent from school.

For teachers, the initial training accelerated the process of making them comfortable with this tool. Their level of participation, evidenced by their attendance at the workshops, and their requests for more training, is highly encouraging. It indicates a desire to learn more about in-

corporating technology into their instructional practices. Because of the ON•DEC project, the school staff has been reviewing various educational/instructional services that can support on-going professional development and project-based curriculum sharing. With the ON•DEC program, and all the potential it brings, teams of teachers are meeting more often, they are collaborating with each other, and sharing sites and experiences. In general, teachers feel a sense of community with each other, which contrasts with the experience of teachers in other schools who report extreme isolation personally, and a lack of institutional collaboration on curriculum. The Ditmas faculty knows that this project brings a set of expectations for improved academic outcomes, along with support to assist them in their teaching. Moreover, the teachers have seen and now believe that they will have the resources they need, in the timeframes specified. This belief has allowed them to dream of ways to use the computer with their students and to trust that their requests will be heard, and in most instances, acted upon. Lastly, some teachers have already reported an increase in parental communication - through all mediums - email, phone and face to face. They feel this is a direct result of the ON•DEC program and the school's outreach to involve them deeply in the project.

The initial benefit for parents and other family members is access and digital inclusion. Through the ON•DEC website, with links to community outreach programs, ESL and other adult learning courses, and access to workforce development programs, family members' prospects will rise with their children's. Easy access to school information, including their children's homework assignments will open even more doors and opportunities for the parents to take advantage of the tool. Having access to email and the website allow parents to check in at their convenience and gives them an opportunity to be more involved in their child's education.

This project enjoys the support of the New York City Board of Education and is being viewed as a model approach to using technology in education. To that end, the Office of Instructional Technology will work closely with the Ditmas teaching staff, providing professional development and on-going support as the program builds. This division of the Board is responsible for delivering comprehensive professional development, technical assis-

tance, and direct support to the school system in the implementation of standards-based classroom instruction and school leadership at all grade levels. Since the ON•DEC project offers a home-school component, they are eager to work with this project as it offers an additional technology venue which can be highly utilized in instructional practices.

User metrics will be made available to the Board so that it can extrapolate from the experience of this school community as it builds its own new strategic approach to technology access. The Intranet can serve as a living laboratory for forms and processes that the central board may want to replicate. Benefits to the Board can be far reaching, in that the leaders of the country's largest school system can test out new approaches, pilot new technology services and observe how well the home-school communication works without any risk or cost. Our deep partnership with this school also aligns with a strategic goal of the Chancellor, which is to encourage corporations in New York City to enter into full partnerships, including corporate expertise and employee involvement, with all of the City's schools.

Many employees at Chase have embraced ON•DEC and have demonstrated support for this initiative across all areas and levels of the organization. The project is organized around leveraging and capitalizing on the breadth of experiences, background, insights and skills of our employees, so that we involve many employees in the program. Not only does this result in building a superior platform, it has lifted employee morale and makes employees proud that Chase has taken up such a challenging educational initiative, in which they can participate and have a meaningful role.

We envision that the deliberate approach we are taking to institute change in this school has the potential to transform the way work is done in the educational workplace. By applying corporate best practices, this program will significantly impact the productivity of teachers and staff, while improving communications throughout the entire school community.

IMPORTANCE

Deploying and providing support for information technology is the cornerstone of this program. Not only does the project call for PCs and Internet access for all members of the school community, we will be installing additional hardware, soft-

ware and middleware applications in the school to support the objectives of the program. Their new LAN environment will support an Intranet platform for sharing databases, applications, communications, and collaboration among teachers and students. The LAN and the internetworking infrastructure will ensure classroom connectivity to the Internet and a space where shared files are easily accessible under secure conditions. An important component of the school network is monitoring software so that the Technology Coordinator at the school can manage the 275+ (and growing) PCs and use the latest state of health tools for preventive maintenance and troubleshooting. In addition to the hardware and software, Chase will contract a technical professional to maintain the PCs, provide technical support for the home PCs and perform network troubleshooting so that school personnel (teachers) are not accountable for fixing equipment. This information technology resource is key since teachers should be teaching, not spending time fixing or troubleshooting equipment in their classroom that may not be working.

With the understanding that multimedia plays a significant role in the underlying technology needs at schools, the plan also calls for ensuring adequate bandwidth and capacity for all applications including video teleconferencing, multimedia hardware (e.g. scanners, digital cameras) and high speed access to the Internet. Also, software that the teachers and staff identify as important for learning and administrative efficiencies will be purchased or built. Since this school has four institutes - with specific themes - there may be specialized requests for targeted technology which can positively impact teaching and learning in each. For example, in the Academics, Visual and Performing Arts school, the dance teacher wants choreography software so that she can teach her students how to create dance steps, in addition to performing. The Art teacher is anxious to get a suite of graphics software for his classes and mice that are pen shaped to make drawing more natural for students. In the School of Environmental Science, teachers are looking into computer-based microscopes and other equipment to enhance instruction. The Law and Community Service School has working relationships with a number of attorneys and judges, and teachers in that institute envision using video teleconferencing to increase communication with these sub-

ject matter experts. In the International School, which houses many of the English Language Learners, staff are eager to use translation software to more easily convert information into the various native languages spoken at the students' homes. Speech processing - interactive or reading back - is also a powerful tool to help these students learn English. Translation capabilities are being incorporated as part of the ON•DEC site to address the diverse language requirements at this school and in the homes, enabling the school, for example, to send messages in the native language of the parent/guardian.

In terms of the home computer program, the next sixth grade class, entering in the fall of 2001, will also receive computers, after their parents attend training. The eighth graders graduating from IS 62, who meet the school's contract for achieving a certain level of academic achievement, good attendance and behavior, will be allowed to keep the computer for use in high school.

Ongoing professional development will improve teachers' skills in the use of technology to support specific learning goals, and will encourage teachers to utilize technology in innovative ways. Access to online courses, collaborative workspace and educational portals will be easily accessible from the ON•DEC website to provide teachers with an anytime, anyplace e-learning environment. In this way, teachers can experience directly the value of an online learning community via the Internet and be able to share their experiences with other teachers, students and parents. Parents will be able to take advantage of the online learning community that the website offers them - courses targeted to their needs and access to a broad range of information can provide innumerable benefits. With an enhanced in-school network, students will be able to store their work in individual portfolios on the server at school, and access their work folders from home. Employing an intranet/internet approach, students will also be able to create multimedia projects with ease - eliminating the frustration of transporting large files - and be able to work on projects from any PC with Internet access. This design also allows for an organized approach for cataloging and archiving student work.

Utilizing this network, the school will benefit from the latest technology products and services, tried and true in corporate settings, but not usually found in large urban schools. Moreover, the development

of in-house databases to support such applications as school programming for both teachers and students, student information, assessment and grading, email directories, PC inventory, lesson plans, homework assignments, and policies and procedures will empower the staff in significant ways, and provide efficiencies over the paper based processing that predominates in schools today. We are hopeful that the time saved in using automated processes will give precious time back to teachers and free up the additional time needed for communicating electronically and more frequently, particularly with parents.

ORIGINALITY

The idea for this project came directly from our CEO, William B. Harrison, who felt Chase could be doing even more to support our local communities, particularly in the area of education. He wanted a focused approach that would leverage the technology resources of the corporation. Given the growing public concern over education, the issues of the digital divide and inclusion, and Chase's long history of supporting public schools, his vision was seamlessly and quickly integrated into the Pre-Collegiate Education program, housed in the Community Development Group at Chase. The senior managers of the Corporate Social Responsibility area (which also manages The Chase Manhattan Foundation) worked his vision into a framework, which became the basis for ON•DEC.

There are a number of programs like this around the country, some even in the NYC school system, but none have the breadth and depth of this project. Chase defined the school community as all members - teachers, staff, students and families - bringing technology and training to over 1,500 in only two implementation phases. Every member of the school's staff (153 people) received a laptop computer and printer. The equipment was given not only to teachers, but to school aides, custodial staff, guidance counselors and other school personnel. In similar programs, usually just the teachers receive equipment - and within these programs, not every teacher gets his or her own PC. Including the entire community is a differentiating aspect of the program and deemed necessary to establish an online community where all members participate, receive the same tools and training on how best to utilize the tool in their day-to-day work at the school.

Similarly, Chase opted to provide access to all students at the same time, versus staging or staggering the implementation either by grade or by institute, over time. This, alone, makes this project different from others like it, since similar programs usually start the provision of PCs to a smaller number of students at first. The student population at Ditmas is close to 1,300 students, making this program the nation's largest home-school computer program. There is no cost for the equipment in the ON•DEC program. In similar programs, particularly with student computers, there usually are monthly fees for the equipment, with some schools charging on a sliding scale based on family income.

Also, many of the programs that involve providing computers to students, supply them with laptops. For at least the early years of this program, the policy is to give desktops for the students to use at home, so that all family members can benefit from the computer, too. Secondary considerations in providing desktops to students involved such issues as transportation of laptops to and from school (most of these children take public transportation), the desire and/or readiness of the teachers to require a PC for every student, and the need for on-site secure storage for over 1,300 laptops. As the teachers progress in their use of technology in the classroom, they may see a need for a computer for every student, in every class. When and if that day comes, there may well be a PDA (Personal Digital Assistant), a highly portable device that would better suit the needs of the new classroom which Chase would then supply.

Another exceptional aspect of this project involves the employees of Chase. The outpouring of support, demonstrated first by a core team of colleagues who embraced this project and treated it with the same priority and professionalism as other major Bank initiatives, cannot be overstated. The Project Director, who has no direct support staff, managed a cross-functional team comprising 55 employees who organized and supported the effort - with particular emphasis on the installation of the home computers. As an institution that manages complex projects, Chase put its best practices to work in organizing a multi-faceted operation - involving over 1,300 volunteers visiting over 1,000 homes over two weekends. Homes of the families were mapped to determine clusters, buses hired to transport employees to the homes, breakfast and lunch

brought in to feed employees and a Command Center established to track the whereabouts of the volunteers and monitor progress of the installations. Recruiting the number of employees needed was also no small feat - and the response from employees was remarkable. The timing of the home installations, where we needed a large volunteer force, coincided with the Bank's annual Global Days of Service, a corporate, world-wide initiative involving over 15,000 employees who gave their time over the last weekend in October to volunteer in various community based projects. But volunteering for ON•DEC is not just a one-time experience for many, and employees want to stay involved. We have created the important on-going role of online buddy to a family. The online buddy communicates regularly via email with a parent to encourage use of the computer, provide support and in particular, get the parent used to using email. Many employees, after visiting particular homes, and establishing a rapport during the time they were installing the computers, are requesting to be those parents' buddies. For other employees, who could not participate in the actual installations, there is an opportunity to help the ON•DEC program by being an online buddy and they are grateful for this on-going role in the project.

The response of the school staff who volunteered in large numbers over the four days was also remarkable. For many, it was the first time that they were in their students' homes and they found it an experience they won't forget. The commitment of the school leadership, as demonstrated in their direct involvement with planning the project from the beginning, hosting the Global Days of Service, and installing the computers in the students' homes was nothing short of extraordinary.

In terms of uniqueness in approach, we took special care to plan for the families to have the best possible experience when technology was introduced into their homes. Each home received a table for the computer, a surge protector, a 3-prong plug adapter, an extra long telephone cord and a phone splitter, so that they would not have to keep plugging and unplugging the phone line to use the modem. This attention to details was greatly appreciated by the families and made for a "stress-free" first time experience. Each installer had a set of these tools (the table was pre-delivered) with them for each home they visited, with all the supplies contained in a Chase Yak-Pak, which was

intended to be a thank you gift for the volunteers. Not surprisingly, many of the students wanted the Yak-Paks, and our volunteers graciously gave them their own gifts.

While a number of private schools have in-school networks in operation as described here, no large urban school has the information technology, capabilities, and support that the ON•DEC program provides. The fact that we are working in a New York City school - in the nation's largest public school system - also makes this project unique. This challenge has been embraced by Chase as an opportunity to create a technology-based, learning environment that can be used in virtually any school, in any town.

SUCCESS

This project directly impacts over 1,300 students along with the school staff of 153, and nearly 4,000 family members (including parents and siblings). As we reach out to other organizations to help add value to the initiative, more people are exposed to the project and will derive benefits from being engaged in ON•DEC. The design of the program is such that many more students, teachers and families can ultimately benefit from this type of project, and there are numerous organizations that want to be involved, contribute their expertise, and learn from what has been established. Our success to date in meeting the key goal of developing a solid partnership between Chase and this New York City public school has exceeded expectations. New relationships have been established between school and Bank staff, all centered around working together to deliver the best for the students, and the surrounding school community. Corporate expertise in project management, accountability, teamwork and inclusion has been embraced by the school and is becoming part of the way in which the school does business. The key deliverable for year one - providing hardware, software and Internet access for the entire school community - has been accomplished, along with training all users on the general use of the PC. There is evidence of changes in attitudes among teachers, students, and parents. For example, this school usually sees annual teacher turnover of about 8-10. This year, only 3 teachers left the school, and none for teaching positions in other schools. In terms of the students, behavioral incidents are down, attendance is high and student turnover reduced. At IS 62, there is an extraordinarily high rate

of student turnover (defined as a function of admissions and discharges throughout the year). Over the course of the years of grades 6 - 8, only 55% of the student body remains for the full three years. However, comparing the same time period last year to this, the school has experienced a drop in students discharged of nearly 70 students, a 26% change from the prior year. A real measure of success for ON•DEC will be a drop in mobility permitting continuity in instruction and higher student achievement. As we continue to build the ON•DEC program, we will look to leverage the corporation's existing and new technology practices and products where possible. For example, Chase piloted an extensive use of the smart card, primarily as an electronic wallet, and has the infrastructure and experienced staff to deploy this technology in a school environment. Just as smart cards are used in universities for several functions, there are similar uses for a smart card in a school. We will explore the potential of smart card technology as part of the ON•DEC program. In other areas, such as network security, Chase maintains the highest level of control on servers and access to and from the Bank's systems. Applying the same controls over the school network will ensure data integrity, and that all users access sites and services that are appropriate for them. In light of research aspect of this project and the need to track student performance over many years, we are developing a MIS repository that will house a variety of metrics. Much of this information is housed on the NYC Board of Education's mainframe computers, which allow for little or no manipulation of data. For this project, the baseline data has been established and the Board Of Education's technology staff will support extracting this data from the central systems so that it can be housed in a more robust database with an interface that enables teachers and staff to access the information, in views that are meaningful for them. Moreover, criteria have been established to measure the effectiveness of the program with outside consultants performing the evaluation. In addition to student performance and test data, there are other dimensions with which to assess the impact that technology has on learning. These are being incorporated into the evaluation process. The user community will be surveyed periodically to see how they feel the program is working and their feedback will be sought for improvements. The data re-

trieval and evaluation aspect of the program will be fully operational in September 2001, when the enhanced in-school network is in place.

DIFFICULTY

A key obstacle we had to overcome involved an administrative issue - that of having accurate home addresses for the students. An incredible amount of time and energy went into ensuring that the addresses on file were in fact correct and if not, that a change control process was followed. Significant discrepancies existed between the address provided for the ON•DEC project and the school's official address records. At the onset of the project, each student conducted an interview of his or her parents, in the form of a home survey, which helped to gather pertinent information for the project (e.g., home address, whether they had a phone, etc.). We required each parent who attended training, to sign a parent agreement that included their current address. In many cases, that address was different, too. As the equipment was being shipped directly to each home, having the correct address and contact information was of paramount concern, so that we could ensure that the PCs would be delivered to the right home. The addresses were also key in planning the bus routes so that we could efficiently group installers on buses by neighborhoods. Though this was an obstacle, the end result is that this New York City school now has the most accurate home information possible on file. It has also required parents to maintain consistent address information for all school purposes. The biggest ongoing challenge, however, centers on time, particularly for the teachers. It is difficult to provide teachers with time during the day to attend training, work on new lesson plans, explore the Internet for resources and practice skills they are learning. Though this problem is not new for teachers, it becomes more of a challenge when many of the teachers need the time to gain the proficiencies and hands-on experience they feel is necessary to fully utilize technology tools. We are working closely with the school to figure out the best ways to handle classroom coverage to free up time during the school day for teachers to develop their skills, attend workshops and prepare new materials for classroom use.