

INTERNAL AUDIT REPORT

**Follow-up Review of the December 1999, "Review of Education
Technology Services' (ETS) Technology Upgrade Process (Plan 4)"**

March 2002



**BROWARD COUNTY
PUBLIC SCHOOLS**

The Nation's Fifth Largest School District



To be presented to:

Audit Committee

On

March 27, 2002

School Board of Broward County, Florida

On

April 23, 2002

The Office of Management/Facility Audits

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Superintendent of Schools

March 15, 2002

Members of The School Board of Broward County, Florida
Members of The School Board Audit Committee
Dr. Frank Till, Superintendent of Schools

Ladies and Gentlemen:

In accordance with the 2001-2002 Audit Plan, the Office of Management/Facility Audits performed a follow-up review of the December 1999, "Review of Education Technology Services" (ETS) Technology Upgrade Process (Plan 4). The primary objective of the follow-up review was to determine whether recommendations brought out in the original report have been implemented and whether the recommendations have created stronger internal controls and business practices over the Plan 4 project.

In our opinion, the ETS Department has nearly completed their commitment to the original Plan 4 project. ETS has implement several recommendations that were in the original review that have created stronger internal controls. There still remain several open items that need to be addressed. However, the success or failure of Plan 4 depends on the establishment of components including: Specific educational goals, benchmarks to measure these goals, increase training available to staff and students, determine the effective placement of technological resources and whether portables are to be retrofitted.

The review was discussed with the appropriate administrative staff and whose responses are included herein. We concur with the responses.

This review will be presented to the Audit Committee at its March 27, 2002 meeting and to the School Board at its April 23, 2002 meeting.

Submitted by:

Patrick Reilly, CPA
Executive Director
Office of Management/Facility Audits
2001-02/#1081

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EXECUTIVE SUMMARY

SCOPE, OBJECTIVES, METHODOLOGY AND OPINIONS

The following follow-up report of the Education Technology Services' (ETS) Technology Upgrade Process (Plan 4) was conducted in accordance with the Office of Management/Facility Audits 2001-02 Audit Plan and as required by School Board Policy 1003. We examined the operations as they related to the observations that were made in our report dated June 1999. The objectives of our current status were to:

- determine whether the operations of the department are consistent with the responses received from the Associate Superintendent, Superintendent Support and the Executive Director as related to the previous audit, and
- whether the practices implemented based on the previous audit have created stronger internal controls and are adequate, pursuant to sound business practices and are in compliance with applicable laws, regulations and board policies.

Our examination was conducted in accordance with generally accepted auditing standards and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgement and conclusions regarding the function under audit. An audit includes assessment of applicable internal controls and compliance with requirements of laws, rules and regulations, when necessary to satisfy the audit objectives.

It is our responsibility that the review be performed under these standards as well as report on recommendations to improve the operations, strengthen internal controls, and those compliance matters selected for review. It is the administrations' responsibility to implement those recommendations deemed necessary, to maintain an internal control environment that is conducive to the safeguarding of District assets, to preserving its resources, as well as complying with applicable laws, regulations and board policies.

The procedures performed to gather data to satisfy these objectives included the following:

- A Review of ETS' current status as presented to the Office of Management/Facility Audits on August 31, 2001.
- A Review of accounting records and related revenues and expenditures.
- A Review of reports generated by ETS related to computer purchases throughout the District.
- A Review of reports generated by Budget related to appropriations and expenditures related to Public Service Funds (PSF).
- The Distribution/completion of surveys of students, teachers and schools related to the impact of Plan 4.

SCOPE, OBJECTIVES, METHODOLOGY AND OPINIONS (cont.)

- Site visits to schools and centers.
- Other auditing procedures deemed necessary.

We did not examine the records of vendors, consultants, or other governmental agencies beyond the extent that the documentation obtained and filed by ETS as part of their required records.

Our original report disclosed twenty (20) observations and recommendations for improvement. During our current status we noted that:

- *seven (7) of these observations and recommendations have been resolved,*
- *four (4) have been partially resolved,*
- *three (3) have been improved, and*
- *six (6) are unresolved.*

While we reviewed the original report and we labeled six (6) of these observations as unresolved, it should be noted that ETS does not have the ability, by themselves, to have resolved any of these six (6) conditions. The inability of the District's departments to work cooperatively to resolve issues brought out in this and other operational reviews, is a major barrier that must be overcome in order to improve operations in the District. We have also included a Supplemental Observation that intended to improve contract administration of existing contracts with tele-communication vendors. In our opinion, as we near the completion of Plan 4 and attempt to determine whether the project is a success we found that the following components must be established and a commitment made to ensure that:

- Specific educational goals are set for technology in the District, and in the classroom. Without these goals, the overall vision and accountability for technology within the District is unclear.
- There are specific outcomes for technology use in an educational setting so that we can determine any benchmarks that may exist to assist in determining success or failure of this and all future projects.
- District Departments ensure that they undertake a collaborative effort to expand the technological training and education that currently exists for our students and staff. Our survey showed that only those schools who have the "funding" for a technological proficient staff have been able to overcome the lack of educational goals and objectives from Plan 4.
- The objectives for Plan 4 be reviewed so that a determination is made as to whether four (4) computers in each room or labs of computers for use, is more effective in reaching the goals established.

SCOPE, OBJECTIVES, METHODOLOGY AND OPINIONS (cont.)

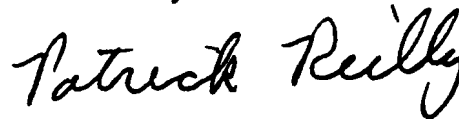
- Once a determination is made as to the best placement of computers, classrooms vs. labs, than those schools who currently do not have the resources to complete their requirements under the original agreement for Plan 4 (four (4) computers in each classroom) be the first to receive adequate funding to make the necessary purchases to meet the proper placement of computers.
- The retro-fitting of portables be completed to ensure that students who are being educated in this setting will be receiving the same technological advantages as other students. (See comments on pages 20-26) Alternatively, a decision may need to be made as to whether placement of four (4) computers in each portable is needed, or whether one hard-wired lab for portable use is a better solution.

SUPPLEMENTAL OBSERVATIONS

1. *Improve Contract Administration of Existing Contracts with Tele-Communications Vendors. (Cable & Network Wiring Services).* The lack of contract administration of current contracts with tele-communication vendors has resulted in not identifying overpayments to vendors, allowed numerous questionable charges to be made for overtime and "general contractor" work to these vendors, allowed questionable participation and payments to M/WBE firms, some of whom never received the proper security clearance to work in schools and who have not complied with State Statutes as they relate to the need for State filing requirements.

We would like to thank the Associate Superintendent, Superintendent Support, the Executive Director, ETS, the Director of Custom Systems Integration, ETS staff and all students, teachers, schools and District personnel who aided in the completion of this current status report. We greatly appreciate this cooperation, without which we could not have completed our report.

Submitted by:



Patrick Reilly, C.P.A.
Executive Director
Office of Management/Facility Audits

SECTION I
Background

BACKGROUND

This report represents a follow-up review of our Internal Audit Report dated December 1999, "A Review of Education Technology Services' (ETS) Technology Upgrade Process (Plan 4)." The original report was issued after the first year of the project was underway. This follow-up report is being issued as the project is nearing completion. Currently, only three (3) schools remain to have their schools "retro-fitted" according to standards established in School Board Policy 5306.

This project was started by previous ETS administration. Currently, Dr. Everett Abney, is the Associate Superintendent for Superintendent Support. Dr. Abney oversees the operation of the ETS Department. Recently, Mr. Isidore Mason was hired as the Executive Director of the ETS Department. Mr. Mason reports to Dr. Abney. Angela Coluzzi, is the Director of the Customer Systems Integration Services section of ETS. Ms. Coluzzi assumed the oversight for the Plan 4 project, when the former Director, Robert Caplan retired.

In perspective: The initial budget for this project exceeded \$216 million. This budget would be equal to the cost of approximately five (5) new high schools, or nine (9) new middle schools, or fifteen (15) new elementary schools. This was a tremendous undertaking. The \$216 million dollar budget *did not* include expenses that all the schools in the District would incur. Due to the current financial management structure it is necessary for a third party to request the necessary information to determine the actual expenditures made by ETS for Plan 4. In requesting this information from ETS the actual expenditures for the items outlined in the original June 1998 Adopted District Facilities Work Plan for the technology related to Plan 4 was approximately \$191.7 million dollars or 11% *under budget*. SEE EXHIBIT I for a detailed breakdown of the original proposed funding and the actual expenditures as given to us by ETS.

Basically, the Plan 4 initiative was a project that would implement a minimum quality based technology system within every school and department. It is the upgrading of schools and departments infrastructures including equipment and wiring for setting up a local area network (LAN), connectivity to the wide area network (WAN) and the Web, upgrading the telephone and emergency management and security systems, where necessary and adding electrical power as needed. Plan 4 provides that every classroom in the District will be outfitted to meet current District standards. These standards include:

- 4 micro-computers per classroom *
- 1 laptop computer per full-time classroom based teacher *
- 1 printer per classroom *
- 1 server per campus
- 1 micro-computer for every qualified administrator
- 1 printer for administrative use

BACKGROUND (cont.)

- 1 scanner per campus
- 1 Energy Management and Security System
- 2 quad communications outlets (network) per classroom
- 2 quad receptacles (electric) per quad communications outlet per classroom
- 1 quad receptacle per quad communication outlet per administrator.

* These items are considered to be end-user devices as defined by the ETS Technology Project Upgrade Cycle, and as such as subject to the 50% purchase by ETS and the 50% purchase by schools.

Technology is prevalent in all aspects of our lives. Several years ago this wasn't the case. Many well respected "visionaries" believe that the upcoming technological revolution, will make the industrial revolution look insignificant. In fact, many of these visionaries believe the next cultural revolution will be known as the "digital divide." This "digital divide" will not make distinctions by color, by paychecks or by gender, but by those individuals who can connect to the internet and those who can't. Many believe the impact of technology on education will be tremendous. But the lessons that have already been learned by several communities and educators is that it is "dangerous to assume that technology in and of itself is any panacea for today's educational challenges."¹ Many non-educators believe that the introduction of computers in the classroom will allow teachers to teach more students. This is not a valid concept, before any type of education begins, teachers must have a manageable class size, regardless of the technology within the classroom. Educators across the Country generally agree that there are three type of general approaches to technology plans:²

- *If you build it they will come* – This model sees the installation of the technical infrastructure installed first, with the apparent assumption or intent that curriculum integration and teacher training will follow.
- *Implement now, the planning will follow* – In this approach the curriculum is integrated from the start, sometimes even before any formal technology planning takes place.
- *Technology only follows curricular goals* – This approach establishes a set of essential student learnings, defining what they want students to learn and only after these learnings are defined and it is determined the methods of accomplishment, do they begin to think about the installation of computers.

¹ "What's Working in Education", Benton Organization @www.benton.org.

² "What's Working in Education", Benton Organization @www.benton.org.

BACKGROUND (cont.)

Only time will tell if any of the approaches are superior. In October 1995, the CELT Report was published and Broward County began the first steps towards the project that would become known as Plan 4. By choosing this first method of integrating technology into the schools the County may be able to integrate technology more widely into the District, quicker. But without the buy-in and adoption by the teachers, no method will ever succeed. This is the District's next hurdle. Teachers remain the driving force behind any technological advances in the classroom. Technology must be viewed as a tool to impart their lessons. During our research for technology in the classroom we found a quote from a teacher in California. This teacher was quoted as saying, "Technology is simply a tool to help enhance and extend what teachers are already doing. Don't forget we've (teachers) been using multi-media for generations. A pencil with an eraser on paper with words and pictures and crayons."³

School climates have not always supported changes of the traditional pedagogy. In order to change teaching methods, a time consuming process, which creates a substantial level of support and encouragement by educators is required. This process may take three to five years in technology rich schools and even longer in technology poor schools.⁴ Sit and get trained sessions or one-time only workshops have been ineffective in creating an atmosphere where educators feel comfortable or confident in the adoption and the use of technology in the classroom. Instead a well planned, ongoing professional development program that is tied into the school's curriculum goals, designed with built-in evaluations and sustained by adequate financial and staff support is essential if teachers are to use technology appropriately to promote learning for all the stakeholders of the District.⁵

Hundreds of thousands of dollars are being expended by this District on technology, but is that equipment being used well, or used at all? The following information was found at www.essdack.org and outlines the three components of computer use. The three components (3 C's) of effective computer use, include:

- *Content* *Students gain content knowledge while working at the computer.*

- *Critical Thinking* *Students should be engaged in higher level thinking and developing those skills while they are using the computer.*

- *Computer Skills* *Students should gain technical skills while they are working at the computer. Computer skills include things like keyboarding, formatting text, inserting graphics, cutting and pasting, recording sounds, creating animations and special effects, etc.*

³ "What's Working in Education", Benton Organization @www.benton.org

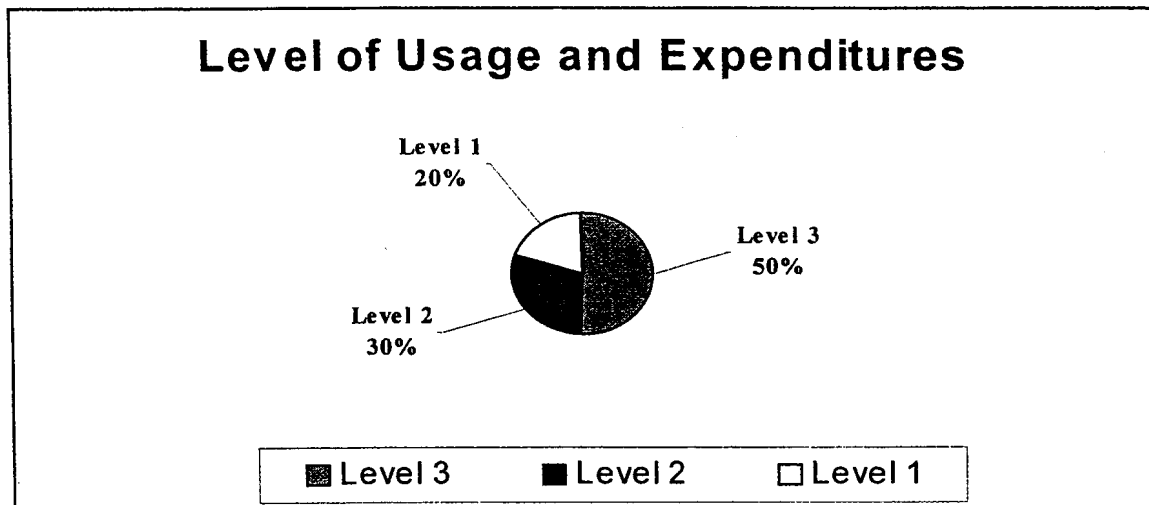
⁴ "Critical Issue: Providing Professional Development for Effective Technology Use", @www.ncrel.org

⁵ "Critical Issue: Providing Professional Development for Effective Technology Use", @www.ncrel.org

BACKGROUND (cont.)

Common computer uses which integrate these three components include: Drill and Practice, Keyboarding, Word Processing, Integrate Learning Systems (CCC or Josten Labs) Learning games, Browsing the Internet and school Projects.

The following chart suggests the time and funds educators could spend on technology based on level of usage:



*Level 3 includes all three components and should consume 50% of the time and expenditures.
Level 2 includes any two components and should consumer 30% of the time and expenditures.
Level 1 includes 1 component and should consume 20% of the time and expenditures.*

As we near completion of Plan 4 and move towards the next “phase” we found that several components for the success or failure of the implementation of technology into the classroom were missing:

- Although the CELT Report outlined the grand scheme of integrating technology throughout the District, it did not set specific educational goals. We found that there were no concrete educational goals incorporated into Plan 4. Without these goals, the overall vision and accountability for Plan 4 is unclear.
- Inability to measure specific outcomes to determine any benchmarks that may exists for determining success or failure of the project.
- No collaborative effort was undertaken, and therefore the educational piece of the project has been somewhat neglected. Our survey showed that only those schools who have the “funding” for a technological proficient staff have been able to overcome the lack of educational goals and objectives from Plan 4.

BACKGROUND (cont.)

The District must grapple with many, many questions regarding Plan 4 and advancements needed to keep pace with technological advances, but we must first determine:

- Where does the District see the use of computers helping the students in 2 years? In 5 years? In 10 years? Do we have a blueprint for achieving these objectives? What Department should be responsible for the actual integration of technology into the classroom? Should ETS? Should Curriculum? Should a new Department be created?
- Is the technology that has been installed into the classrooms being utilized by educators in preparing our students for the information age? Benchmark students progress using computers versus using paper and pencil. Determine what subjects best utilize technology, and which ones benefit least.
- Are all schools and students receiving equitable resources, both from internal sources and external sources? Determine what items need a recurring flow of funds, versus those items which need a one-time infusion.
- Whether the schools' staff and teachers have been properly trained in the use of, maintenance of, and minor repair of, these tools for education?

Only after answering these questions and reviewing the available data should we begin to introduce any new technology into the schools and classrooms or increase technology expenditures.

SURVEY RESULTS

While conducting the original review, we felt it was imperative to request input from the customers of ETS; the schools, to determine how effective the implementation of Plan 4 was going. (The results of this survey can be found in the original report Section IV Exhibit 4.)

As Plan 4 has progressed, and nearing completion, we felt all the stakeholders that were impacted by Plan 4, should be heard from. Therefore, we personally interviewed 270 students at 24 locations throughout the District. In addition, we sent a similar questionnaire as was used in the first audit, to all schools in the District, and delivered questionnaires to 2,130 teachers at 24 locations. (These locations can be found in EXHIBIT IV)

A breakdown of the responses received shows:

	No. of Surveys Sent	No. of Responses Received	%
Schools	209	141	67%
Teachers	2,130	496	23%

As with any survey you attempt to gain information from the respondents, and at the same time receive sufficient responses to obtain a representative sample of the overall population. We would have liked to have received at least a 75% response rate, so that we could feel comfortable with the information that was obtained.

We realize that interviewing 270 students out of a student population in excess of 245,000 may not be scientifically valid, but we felt the responses received from these students were very incisive, and have used this information in drawing some of the conclusions found in this report. Due to the low response rate received from the schools and teachers, we have not based any of our conclusions on the information obtained, but we have utilized some of the information received in our Follow-up Report to show how the persons who did respond felt.

An example of the surveys issued and the responses received can be found in SECTION IV of this report. The following are key highlights from the surveys received.

STUDENTS

We were careful to try and focus on the “typical” student. We did not include *students’ experiences* from computer type classes, as a use of the computer in the classroom, as the use of the computer for these students it’s required as part of the curriculum. In addition, we did not include *students’ experiences* whose extra-curricular activities included yearbook, newspaper, etc., where again the use of the computers in the classroom, would be required as part of their extra-curricular activity. Even though we attempted to try and focus on the students answers to their use of computers in their classrooms, we were not always successful. The information was derived from these interviews, included:

- *Overall, 90% of the students questioned, own personal computers. In many instances, the students household had more than one computer.*
- *On average, 45% of the students, regardless of the Area that the school was located in, stated that they had less than two computers in their classroom(s).*
- *On average, 32% of the students, regardless of the Area that the school was located in, stated that they had never used a computer in their classroom to complete an assignment. (SEE EXHIBITS VI & VII, which are broken down by Area and By Type, respectively.)*
- *Overall, 30% of the students had never used a word processing application, 58% of the students had never used a spreadsheet application and 69% had never used a database application.*

TEACHERS

The number of responses that we received from teachers was low, although we feel that the information we did receive was very good. However, due to the low response rate we do not feel that these responses can be used to support any conclusions or findings of fact, so we did not base any of our observations or recommendations made in this report based solely on these responses.

The respondents on average, have been teaching for 15.6 years, and have been teaching at their respective schools for 7.8 years. Approximately, 91% of the respondents were full time teachers. Other information that was found that may assist the District as it attempts to expand and increase technology in schools, includes:

- *Overall, 47% of the respondents stated that there were less than 2 computers in their rooms. This compares favorably with the 45% of the students who made this similar statement.*
- *Overall, 70% of the respondents have been issued laptops.*
- *Overall, 87% of the respondents have personal home computers.*
- *Overall, 59% of the respondents have integrated technology into 50% or more of their instructional programs.*

TEACHERS (cont.)

- Overall, 67% of the respondents stated that there was not enough or limited access to computer hardware at their location, and that this was a barrier.
- Overall, 69% of the respondents stated that there was insufficient time in school to schedule the use of technology, and that this was a barrier.
- Overall, 79% of the respondents stated that the students did not always have access to the necessary technology at home to complete assignments. This seems to contradict the students questioned, who answered that 90% had personal computers at home.

SCHOOLS

The response rate for the schools was significantly better than for teachers, but still not at the level in which we feel the results accurately reflect the District. We will indicate some of the responses within this follow-up review, but will not rely on these as the reasons for any observations or recommendations. Our review of the responses, included:

- Overall, 96% of the respondents stated that Plan 4 has been completed at their school.
- Overall, 87% of the respondents stated that the staff at ETS worked well with the school staff. (The original survey stated this figure at 76%)
- Overall, 79% of the respondents stated that any problems which arose during the installation were handled in a timely manner. (The original survey stated this figure at 60%)
- Overall, 76% of the respondents stated that more than 50% of their classrooms were fully equipped and operational. (The original survey stated this figure at 50%)
- Overall, 76% of the respondents stated that it will take more than 2 years to have 100% of the classrooms fully equipped and operational. (The original survey stated this figure at 55%)
- Overall, 68% of the respondents stated that ETS had met or exceeded their expectations. (The original survey stated this figure at 81%)

SITE VISITS

In addition to interviewing students, and sending questionnaires to schools and staff we visited nine (9) schools to speak with them regarding their experiences with Plan 4. These schools were:

<i>Dillard High School [1]</i>	<i>McFatter Technical Center[2]</i>	<i>Atlantic Technical Center</i>
<i>Stoneman Douglas High[1]</i>	<i>Margate Middle School</i>	<i>Piper High School</i>
<i>Cresthaven Elementary[2]</i>	<i>Apollo Middle School</i>	<i>Orangebrook Elementary</i>

[1] At these schools we also distributed questionnaires to staff.

[2] At these schools we also interviewed students.

These site visits were very informative. What some of these schools are doing with technology is impressive. Two schools of special note are McFatter Technical Center and Piper High School.

McFatter Technical Center has placed technology on the forefront and is ensuring that every student that passes through their doors is not only capable but will be on the leading edge of the "digital divide." At McFatter:

- There is no computer used by the students which is older than 1997. In fact, nearly all computers in the schools labs are 1999 or newer.
- Every 10th grade student is required to take a World History course on-line.
- All A/P (Advance Placement) classes are taken on-line. The students work in a lab type setting and a staff member (Non-instructional) is there to watch over the students.
- McFatter has purchased the software applications used by Florida's On-Line High School and has this available to interested students.
- McFatter is one of two schools in the entire District (Coral Springs High School is the other) that is rolling out a part of their electronic gradebook called parental viewer. McFatter funded the purchase of an electronic gradebook themselves. (Pinnacle) This application allows parents access to instructor's gradebooks to look over assignments and to see how their child is doing.
- McFatter decided that they were having too many problems with the District's internet service, so they have allocated over \$15,000 annually for an outside provider to assist with the internet service at the school.
- As part of our student survey we found that 100% of the McFatter students surveyed stated that they used the computers daily to complete their assignments. No other school's students surveyed, reported this level of usage.

SITE VISITS (cont.)

We realize that not all schools have the funding or the favorable class sizes that McFatter currently has, but as for models of what and how to do it, McFatter would be a place for the District to start. The District will see teachers utilizing technology to not only teach, but to motivate the students. This environment has not only assisted the students, but many of the teachers have surpassed their "peers" in their day to day activities using technology.

At Piper High School, the use of technology is encouraged, and in one teacher's case is required. When you walk into Mr. Ted Beverly's classroom you are awestruck by the site. Mr. Beverly has taken old computers (such as the IBM Eduquest) and placed these monitors and keyboards on every student's desk. The students do all their work and take all their tests on these computers. The tests are automatically graded and placed into Mr. Beverly's gradebook. (Piper has also invested its own money into the purchase and maintenance of an electronic gradebook: Pinnacle) Each and every child observed in Mr. Beverly's class were working with the computer. We can not help but believe that this experience can only help these students as they prepare themselves for the information age.

Unfortunately these two schools proved to be more of the exception, than the rule. With class sizes at some schools nearing 30-35 students, how do you allocate time to utilize any resource, other than paper and pencil? While visiting schools, the staff provided some keen insight into problems facing their attempt to integrate technology into the day. Some of the issues raised during these visits included:

1. Many schools have had to use available resources to replace the original equipment that was installed at the school (Tandy Computers, EPSON Printers), and therefore have been unable to keep up with their share of the Plan 4 purchases.
2. There does not appear to be anyone in the District responsible for matching the Standards of Service with the credits needed to graduate, and how we are to utilize the technology installed to meet these standards.
3. All the Departments impacted by the installation of computers in the classroom have been unable to agree as to what is needed for the *good of the District*, instead of the *good of the Department*.
4. When schools attempt to fully implement the technological resources available, and attempted to further these resources, they are thwarted by barriers, including the District's firewall.

SITE VISITS (cont.)

5. The inability of the District to determine an "electronic gradebook" and then purchase and roll this gradebook out to the schools, in a timely manner. Instead, the District has allowed this decision and these funds to come out of school's budgets. For many schools, these purchases are quite costly. This cost is a major factor. This inequity and lack of conformity throughout the District may have a great impact on the staff of the District, in trying to attract and maintain the best quality teachers. This has led to a number of different gradebooks being introduced throughout the County. In fact, as of the writing of this report, we have been told that Pinnacle is not currently compatible with Windows XP, and that they are testing the gradebook application on Windows 2000. Windows 2000 is what the District appears ready to roll out for the Servers in the District.
6. The failure of the District to upgrade all the schools from Base 10 to T-100 lines has impacted what the schools are able to do. Some school's staff members were attempting to go out over the internet for training, but were unable to successfully connect, or if they were able to connect the delay in response proved to be too time consuming for most teachers. Again, the District faces some inconsistency in that some schools can afford to fund the upgrade themselves, and some have had the District upgrade the lines. Yet, some schools can not afford to do this, and the District has not yet upgraded the lines, so ultimately students and staff are effected.
7. ETS has created refreshers and plans for schools without talking with the school regarding its current needs. For example, at one high school in the North Area, the technology specialist needed an additional "rack" because the current rack was over loaded and numerous "crashes" were occurring causing loss in communications and time. ETS was in the process of delivering in excess of 32 brand new Dell Computers for a lab. The specialist stated that this was nice, but the school could use a rack much more than the lab and it would have saved money. ETS stated that there were no funds for the rack, but there were funds for 32 brand new Dell Desktop Computers. Another high school is ready to have its computers refreshed. But the school stated for a mere \$300 per computer the school could upgrade the existing Tandy's that they have (this school is very pleased with their Tandy's performance) and get computers that are on par with the brand new computers that the District is paying in excess of \$1,300.
8. Although the original concept of Plan 4, four (4) computers in every room, was a good idea, the actual use of these four (4) computers by a classroom of 30 students may be unwieldy at best. Many schools believe now, that the strategic placement and use of labs by departments may be the better use of computers, and may actually save the District money, since fewer computers may be needed to create the lab than to outfit "every" classroom. The schools also believe that these labs will ensure that the student's interaction with the computer is valuable.
9. Every school visited had complaints regarding the removal of surplus/obsolete computers. (See Pages 48-54 for comments regarding this issue)

SITE VISITS (cont.)

10. Every school visited complained that the cost for licensing of the software is expensive, sometimes prohibitively so, (See comment 5 above, regarding electronic gradebook), and that the District should seek to purchase District wide site licenses, instead of making the school purchase them. The District could use some of the PTF (Public Technology Funds) monies at the District level to make strategic purchases that will benefit the majority of the District, and then reallocate the remainder of the monies to the schools.
11. The District needs to analyze the equipment that is now included as "Basic Equipment" for new schools. It is not enough to provide computers. You also have to provide the tables that they sit on, the tables needed for printers, scanners, phones, etc. The "Basic Equipment" list does not take all of these items into consideration. In addition, there are many schools that open above students projections. These openings create shortages of items considered to be "Basic Equipment" such as computers for rooms that are now classrooms, which were not originally intended for that use. For the new teachers that were hired to teach the children who were above the original projections so that they can have laptops and quads to plug their computers into, and on and on.
12. The plans for the electrical power in the classrooms falls woefully short for old schools, but should have been addressed for new schools. Plan 4 provides for the electrical upgrades for each quad. But all of these upgrades are normally found against a wall. This means that the computers have to be close to walls to be functional. Yet, if power was placed in floor outlets around the rooms, this would enable the teachers and students some flexibility in the placement and use of computers throughout the room, not just where the power is.
13. All the schools praised ETS' staff for the support they received during the initial implementation of Plan 4. But after the completion of ETS' part in Plan 4, the level of support drops precipitously, and yet, this is the time that most schools are in need of the greatest support. The schools did not state that they felt it was ETS' who was responsible for this support, but ETS is the only department that deals with technology related issues.

Many of the concerns raised by the schools and staff members, parallel the concerns raised in the Background Section of this report, and are not just ETS' concerns, but the Districts':

- Where does the District see the use of computers helping the students in achieving the goals and objectives set for them in 2 years? In 5 years? In 10 years?
- Do we have a blueprint for achieving these objectives?
- What Department should be responsible for the actual integration of technology into the classroom? In evaluating this integration? In taking the necessary steps to ensure that the goals and objectives set, are met?

SITE VISITS (cont.)

Only after answering these questions, can the Board, the District, schools and staff know the direction to go to ensure that the nearly \$200 million investment made at the District level, in technological resources outlined in Plan 4, has enabled the students and staff of the Broward County School system to become leaders of the information technology age that is occurring, instead of just coping with this investment and lagging in practical uses of what may be one of the greatest tools available to teachers today.

The remainder of this report is divided into the following Sections:

SECTION II	<i>Follow-up Report on the report entitled "Review of Education Technology Services" (ETS) Technology Upgrade Process (Plan 4) dated June 1999.</i>
SECTION III	<i>Supplemental Observation</i>
SECTION IV	<i>Survey and Results</i>
SECTION V	<i>Exhibits</i>
SECTION VI	<i>Administrative Responses regarding the Follow-up of Plan 4</i>

SECTION II

Follow-up Report on the Report entitled, "*Review of Education Technology Services' (ETS) Technology Upgrade Process (Plan 4)*"

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

The Office of Management/Facility Audits

Follow-up Report on the report entitled "Review of Education Technology Services' (ETS) Technology Upgrade Process (Plan 4) dated June 1999"

OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p>1. REVISE PLAN 4 BUDGET REQUIREMENTS TO ENSURE THE COMPLETION OF THE PROJECT.</p>	<p>We recommend that ETS meet with District Financial Management staff and the Comptroller's office to determine from what sources the additional monies needed for Plan 4 can be derived. Once these sources have been identified, ETS needs to approach the Board for additional funding. If adequate financing is not obtained the District will not be able to provide all the computer equipment and/or peripherals outlined by current District Technology Standards.</p>	<p>ADMINISTRATIVE RESPONSE FROM ETS:</p> <p>The Audit Department has calculated an additional need for \$38.6 million, which includes roughly \$24 million to upgrade portables, \$2.4 million to adjust for a first-year revenue shortfall from the E-rate program and \$12.2 million to cover increased equipment costs. The Audit Report states that the district will not be able to provide all the computer equipment and peripherals required by District Standards unless additional financing is received.</p> <p>The responses relative to differences in projected costs for portables and e-rate discounts are detailed in responses to recommendations #2 and #3. Regarding the Audit Department's calculation of the need for an additional \$12.2 million to cover increased equipment costs, ETS disagrees with the finding. In calculating the projected need, the Audit Department used cost figures for computer workstations and laptop computers based upon the highest cost available equipment - administrative workstations.</p>	<p><i>Partially Resolved.</i></p> <p>The rationale behind considering this observation only Partially Resolved, as opposed to improved or resolved, is that the Office of Management/ Facility Audits has had to rely on ETS for all the hard data associated with the actual expenditures for Plan 4. ETS stated that the information for the budget was taken from the CAP 120B report, issued by Capital Planning Department. In our June 1999 Report we felt that the Projected Budget for Plan 4 was inadequate, as it did not appear to have sufficient funding for:</p> <ul style="list-style-type: none"> • User Costs (Computers, Peripherals, etc) • E-rate • Portables <p>As Plan 4 nears completion, we have found that:</p> <ul style="list-style-type: none"> • New bids and advancements in technology have decreased computer prices by 35% to 45%, since the original audit, depending on the purchase of Mac or PC, respectively.

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THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA
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Follow-up Report on the report entitled "Review of Education Technology Services' (ETS) Technology Upgrade Process (Plan 4) dated June 1999"

OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE <i>(continued)</i>	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>1. REVISE PLAN 4 BUDGET REQUIREMENTS TO ENSURE THE COMPLETION OF THE PROJECT.</p>		<p>This cost was assigned to all workstations being purchased, including lower cost student workstations. In addition, the cost of all computer workstations has declined, and the cost savings are not reflected in the audit calculations.</p> <p>If the audit's total equipment cost shown in Exhibit 5 is adjusted to correct for the overstated cost, the audit should reflect a projected user cost of approximately \$47 million instead of \$56.6 million. The remaining difference between the ETS estimate and this adjusted figure is roughly \$2.6 million.</p> <p>Since the School Board this year changed the focus of Plan 4 implementation to give priority to upgrading infrastructure ahead of providing end-user equipment in elementary schools, almost all remaining Plan 4 equipment purchases are being delayed until 2000-2001.</p> <p align="right"><i>(continued)</i></p>	<ul style="list-style-type: none"> The original audit, projected a shortfall of \$12.8 million in E-rate funds. The actual shortfall of E-rate funds, to date, based upon information obtained from www.sl.universalservice.org/funding/v4/FCRESULT.asp, was \$14.93 million. (See additional comments under Observation 3, page 27). The District has appropriated approximately \$15 million dollars over the next five (5) years for retro-fitting of the portables. Depending on which report you review, and with whom you speak, the number of portables in the District needing to be retro-fitted varies. (See additional comments under Observation 2, page 20) <p>In comparing the actual expenses reported by ETS, to the original budget that was approved, Plan 4 is currently approximately \$23,190,469 Under Budget. SEE EXHIBIT I, which outlines how this figure was derived.</p> <p align="right"><i>(continued)</i></p>

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA
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**Follow-up Report on the report entitled "Review of Education Technology Services' (ETS) Technology Upgrade Process
 (Plan 4) dated June 1999"**

OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE <i>(continued)</i>	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>1. REVISE PLAN 4 BUDGET REQUIREMENTS TO ENSURE THE COMPLETION OF THE PROJECT.</p> <p align="right"><i>(continued)</i></p>		<p>Based on industry trends, ETS believes that the cost of end-user equipment will continue to fall, and that the savings will equal at least \$2.6 million on purchases of the remaining equipment in 2000-2001. ETS will monitor costs closely, and, following now ongoing site surveys and determination of actual needs, if it appears that the remaining savings cannot be garnered, adjustments will be made within the Plan 4 capital budget in the next planning cycle. If, for some reason, the \$2.6 million difference cannot first be found in further price reductions or from other areas within the Plan 4 budget, then ETS will request additional funds.</p> <p align="right"><i>(continued)</i></p>	<p>This project was not given its own location number and account cost structure so that captured expenses could separately be tracked. All costs for Plan 4 are commingled with up in the costs for the operation of all ETS, and therefore it required ETS to give us this information.</p> <p>The retro-fitting of the District schools has almost been completed, the District must grapple with the continued budgeting of funds for the upkeep and costs associated with technology. A pair of recent studies conducted by the RAND Corporation estimated that in 1994-1995 the existing technology in schools was \$3.2 billion or approximately 1.3% of total expenditures that year. It is estimated for a "technology rich" school environment will cost between \$10 -\$20 million, annually, or approximately 5.3% of schools' budgets.^a</p> <p align="right"><i>(continued)</i></p>

^a "The Challenges Facing School Districts in Budgeting for Technology," Lawrence O. Picus, Associate Professor and Director Center for Research in Education Finance, School Of Education, University of Southern California.

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

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Follow-up Report on the report entitled "Review of Education Technology Services" (ETS) Technology Upgrade Process (Plan 4) dated June 1999"

OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE <i>(continued)</i>	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>1. REVISE PLAN 4 BUDGET REQUIREMENTS TO ENSURE THE COMPLETION OF THE PROJECT.</p>		<p>FOLLOW UP RESPONSE BY THE OFFICE OF MANAGEMENT/FACILITY AUDIT: The information to determine the cost of the computer equipment was based upon a price list available in March 1999, during our audit fieldwork. The audit was completed and a draft copy of the report was issued on June 4, 1999.</p> <p>We acknowledge that prices for computer equipment will not remain constant. We have not audited the current cost of computer equipment presented above.</p> <p>ADMINISTRATIVE RESPONSE FROM ASSOCIATE SUPERINTENDENT, FINANCIAL MANAGEMENT & SUPPORT SERVICES: Adjustments to the Plan 4 project budget can be made when the District Facilities Work Program (DFWP) is completed covering the period 2000-01 through 2005-06. This will be done during the months of May and June, 2000. Changes to the budget will be consistent with Policy 5306.</p>	<p>In Mr. Picus' paper on, "The Challenges Facing School Districts in Budgeting for Technology", he summarized what we covered in the Background section of this report, in the following manner:</p> <p><i>"If technology is a high priority for a school or district, finding the resources to adequately develop and maintain the systems is critical. Schools should take advantage of any and all sources of funds for their technology programs, but should be aware that securing one-time funding for the purchase of computers or other equipment is, by itself, inadequate for operating an important program..."</i></p> <p><u>FOLLOW-UP RECOMMENDATION</u></p> <p><i>We recommend the Comptroller review the Adopted District Facilities Work Plan and the appropriation for the retro-fitting of portables over the next five (5) years in light of the amount that is shown as being under-budget, to determine whether these funds may be able to be used elsewhere in the District for other projects.</i></p>

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA
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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p><i>(continued)</i></p> <p>1. REVISE PLAN 4 BUDGET REQUIREMENTS TO ENSURE THE COMPLETION OF THE PROJECT.</p> <p align="right"><i>(continued)</i></p>		<p><i>(continued)</i></p> <p>The background statement has inferred that Policy 5306 has established a deadline for completion of Plan 4 technology improvements, and this is not the case.</p> <p>ADMINISTRATIVE RESPONSE FROM COMPTROLLER:</p> <p>The Six-Year Adopted District Facilities Work Program (the capital outlay plan) represents a complex and highly collaborative effort involving the School Board, members of the community and staff members.</p> <p>The capital outlay plan required several public hearings before its final adoption in June 1999. The work program is an ambitious one that properly applies all available resources, yet the district is not financially over-extended. In the next few years, the debt service for certificates of participation will reach 97% of the recommended level of debt service.</p> <p align="right"><i>(continued)</i></p>	

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p><i>(continued)</i></p> <p>1. REVISE PLAN 4 BUDGET REQUIREMENTS TO ENSURE THE COMPLETION OF THE PROJECT.</p>		<p><i>(continued)</i></p> <p>The shortfall of \$38.7 million identified by the auditors is a very significant amount. The funding for the shortfall should be brought up in the development of the next five year capital outlay plan.</p> <p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>Sufficient capital budget requests were made and approved to enable ETS to complete all the projects scheduled through the 2000-01 project year within budget. Three schools scheduled in the 2001-02 school year are fully funded and on schedule. These three schools have construction projects scheduled and the upgrade will be aligned with the completion of the construction.</p>	

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA
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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p>2. ESTABLISH FUNDING FOR "RETROFITTING" OF PORTABLE CLASSROOMS AS ESTABLISHED BY SCHOOL BOARD POLICY 5306.</p>	<p>We recommend that ETS meet with District Financial Management staff and the Comptroller's office to identify funding sources needed to ensure that portables are equipped as outlined in accordance with Plan 4 standards. We further recommend, subject to the additional funding, a written plan for the retro-fitting of the District's portables be established as part of the Plan 4 project.</p>	<p>Although upgrade of portable classrooms is required under a revision made to School Board Policy 5306 on December 15, 1998, the School Board did not fund upgrade of portable classrooms when that additional funding option was presented to the School Board by ETS at the time of Capital Budget development for 1999-2000. ETS will again present this option to the School Board when the Capital Budget for 2000-2001 is prepared. If funded, ETS will comply with the audit's recommendation and prepare a written plan for retrofitting the district's portables. It should be noted that the audit based its estimate of funds needed to accomplish this task on the district needing to upgrade 1403 portables at a cost of approximately \$24 million. On the other hand, ETS based its estimate in the proposal submitted to the School Board on a more conservative number equal to 1106 portables requiring upgrade at a cost of approximately \$18.9 million. The number of portables used by ETS is the number of permanent portables estimated by the Property Management Department to be owned by the school district on July 1, 2003.</p>	<p><i>Unresolved.</i></p> <p>Although, originally this issue appeared to be relatively clear cut, after nearing completion with Plan 4, the piloting of wireless computers at some schools, and the replacement of portables throughout the District, this is no longer an easy decision for the District or the School Board.</p> <p>Currently, the District has approximately 1,600 portables being used as classrooms, which have not been retro-fitted.</p> <p align="center"><u>HEALTH ISSUES</u></p> <p>There continues to be considerable debate in the scientific community regarding the potential health effects to individuals, especially children from exposure to extremely low frequency electromagnetic and radio frequency radiation. Recently, the National Institute of Environmental Health Sciences/ National Institute of Health concluded that enough evidence exists to support the classification of electromagnetic radiation as a possible human carcinogen.</p>

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THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA
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Follow-up Report on the report entitled "Review of Education Technology Services' (ETS) Technology Upgrade Process (Plan 4) dated June 1999"

OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE <i>(continued)</i>	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>2. ESTABLISH FUNDING FOR "RETROFITTING" OF PORTABLE CLASSROOMS AS ESTABLISHED BY SCHOOL BOARD POLICY 5306.</p>		<p>FOLLOW UP RESPONSE BY THE OFFICE OF MANAGEMENT/FACILITY AUDIT: The Office of Management/Facility Audits does not believe the "retrofitting" of portables to be an option, as indicated by School Board Policy 5306.</p> <p>ADMINISTRATIVE RESPONSE FROM ASSOCIATE SUPERINTENDENT, FINANCIAL MANAGEMENT AND SUPPORT SERVICES: Adjustments to the project budget, to take into consideration the retrofitting of portables, can be made when the next DFWP is developed.</p> <p>ADMINISTRATIVE RESPONSE FROM COMPTROLLER: The Six-Year Adopted District Facilities Work Program (the capital outlay plan) represents a complex and highly collaborative effort involving the School Board, members of the community and staff members. The capital outlay plan required several public hearings before its final adoption in June 1999.</p>	<p>These health questions pose potential questions to be addressed, including:</p> <ol style="list-style-type: none"> 1. Health risks from the introduction of wireless computers into portables and/or classrooms; 2. Equitable learning environments for main campuses vs. portable classrooms. <p><u>PORTABLES/RELOCATABLES</u></p> <p>There is no definitive answer within the District as to the number of portables that will be replaced in the District in the next five years. In addition, competing status reports from the Facilities and Construction Management Division and the Education Technology Services Department are not clear as to the number of portables to be "retrofitted." In looking over the Technology Upgrade Status Report that is dated August 21, 2001, it reflects that in excess of \$15 million has been requested for the Upgrade of Portable Buildings over the next five (5) years.</p>

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THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p><i>(continued)</i></p> <p>2. ESTABLISH FUNDING FOR "RETROFITTING" OF PORTABLE CLASSROOMS AS ESTABLISHED BY SCHOOL BOARD POLICY 5306.</p> <p><i>(continued)</i></p> <p><i>(continued)</i></p>		<p><i>(continued)</i></p> <p>The work program is an ambitious one that properly applies all available resources, yet the district is not financially over-extended. In the next few years, the debt service for COPs will reach 97% of the recommended level of debt service.</p> <p>The total cost of \$24 million associated with retrofitting portables, identified in the audit finding is a significant amount and should be brought up for discussion with the School Board during the development of the next capital outlay plan.</p> <p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>A revised estimate was done to complete the portable upgrades. In 2000-01 project year, a budget item was approved to upgrade portables at the "all portable" annex sites. We have requested additional funds in the 2001-02 year to continue retrofitting portable classrooms. All portable upgrade projects are aligned with the Facilities Work plan.</p> <p><i>(continued)</i></p>	<p><i>(continued)</i></p> <p>This Update shows that for 2001-02 ETS will need \$3.2 million for the upgrade of portables at 28 locations.</p> <p>The Adopted District Facilities Work Plan (ADFWP) dated August 14, 2001 reveals a different picture than is shown above:</p> <ul style="list-style-type: none"> • For 20 out of 28 locations, (71.4%) shown in ETS' report, the ADFWP shows funding for the replacement of portables in the 2001-02 school year. The Executive Director, Facilities Planning, Management and Site Acquisition Department states that this indicates the funding for new classrooms, new additions or new schools has been approved, and that these jobs <i>MAY ASSIST IN THE REMOVAL OF PORTABLES</i> at these locations. This <i>does not</i> indicate that the portables will be replaced in the 2001-02 school year. • For four (4) of the 28 locations shown in ETS' report, the ADFWP shows locations that have no portables to be replaced, but will likely have expenses related to retro-fitting. <p><i>(continued)</i></p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p><i>(continued)</i></p> <p>2. ESTABLISH FUNDING FOR "RETROFITTING" OF PORTABLE CLASSROOMS AS ESTABLISHED BY SCHOOL BOARD POLICY 5306.</p>			<p><i>(continued)</i></p> <ul style="list-style-type: none"> For two (2) of the 28 locations shown in ETS' report, the ADFWP shows funding for the replacement of portables occurring in the school year 2003-04. For two (2) of the 28 locations shown in ETS' report, the ADFWP shows the replacement of 12 portables. <p align="center">RETRO-FITTING OF PORTABLES</p> <p>Aside from the health issues and the funding for the retrofitting of portables, the original audit report questioned the number of portables that were in the District and the cost to retro-fit those portables to the standards required in School Board Policy 5306. In a report that was issued by Facilities Planning, Management and Site Acquisition Department, dated August 21, 2001, the District had 2,022 portables. Our review revealed 1,621 of these portables were being used for classrooms.</p> <p align="right"><i>(continued)</i></p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>2. ESTABLISH FUNDING FOR "RETROFITTING" OF PORTABLE CLASSROOMS AS ESTABLISHED BY SCHOOL BOARD POLICY 5306.</p> <p align="right"><i>(continued)</i></p>			<p>EXHIBIT IV shows that when our office calculated the space that will be provided for by Modular Buildings, the District will still be responsible for "retro-fitting" 1,345 portables.</p> <p>Using the costs established by ETS for the retro-fitting of the 28 locations cited above, (\$3.2 million divided by 261 portables) the District would need to expended \$16,546,715 for the portables that <i>will not</i> be replaced by modular buildings, as currently funded by the District.</p> <p>During our site visits we found one entrepreneurial technology specialist who needed to create a wireless solution for the staff in portables. The technology specialist was not aware of any pilot program that the District was conducting, or any of the health issues that are being raised here. They were only concerned in ensuring that their staff and students were able to communicate with the main building effectively.</p> <p align="right"><i>(continued)</i></p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 (continued)
<p>2. ESTABLISH FUNDING FOR "RETROFITTING" OF PORTABLE CLASSROOMS AS ESTABLISHED BY SCHOOL BOARD POLICY 5306.</p>			<p>So using Apple iBook laptops they installed airport stations, as needed, and airport cards for the laptops for the fourteen (14) portables on campus. The TOTAL COST for all the items necessary for this wireless solution was \$4,148. This enables the staff to connect to the internet, use the email etc. The staff at this school have overwhelmingly applauded this specialists' ingenuity and creativity in completing this project, which has allowed staff the needed safety and security in being able to communicate with the main building and other staff members immediately.</p> <p align="center"> <u>FOLLOW-UP RECOMMENDATION</u> Currently, School Board Policy 5306 as amended on May 1, 2001, requires that portables receive the same type of technological resources as the main classrooms. Since this Policy was created, other concerns have now surfaced, including: <ul style="list-style-type: none"> • Health Issues • Portables/Relocatables • Actual Replacement time frames • Unfunded expenses for the retro-fitting of portables. </p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p>2. ESTABLISH FUNDING FOR "RETROFITTING" OF PORTABLE CLASSROOMS AS ESTABLISHED BY SCHOOL BOARD POLICY 5306.</p> <p><i>(continued)</i></p>			<p><u>FOLLOW-UP RECOMMENDATION</u> (cont.)</p> <p><i>When these concerns are considered School Board Policy 5306 needs to be amended.</i></p> <p><i>We recommend that the Associate Superintendent, Superintendent Support convene a committee to study the concerns outlined in this report, and make appropriate modifications to School Board 5306.</i></p> <p><i>In addition, we recommend that ETS review the "costs" associated in connecting portables via wire-less technology to ensure that the costs be forwarded to the Board represent real costs which satisfy the needs and wishes of the Board, the District and staff.</i></p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p>3. RE-EVALUATE FUNDING REQUIREMENTS FOR PLAN 4 BASED UPON LOWER UNIVERSAL SERVICE FUND COMMITMENTS RECEIVED FOR THE INITIAL YEAR.</p>	<p>We recommend that ETS:</p> <ul style="list-style-type: none"> Meet with the District's Financial Management staff and the Comptroller's office to determine whether the \$2.4 million shortfall can be funded through other sources. Report E-rate commitments so that they are considered to be a funding source for reducing costs for the Plan 4 project, rather than allocated on a per school basis. 	<p>ADMINISTRATIVE RESPONSE FROM ETS:</p> <p>As noted in the audit, the Federal Communications Commission changed many of the e-rate program rules and limited funding in the first year of the program. As a result, in 1998-99 the School Board received \$2.4 million fewer discounts than anticipated. To adjust for the shortfall, in developing the 1999-2000 Plan 4 budget, some ETS district-wide project budgets were reduced or projects were delayed in order to ensure that funds would be available for the Plan 4 schools to be upgraded on schedule. For 1999-2000 ETS applied for all possible discounts, but ETS, based upon the prior year results, also adjusted the budget to anticipate revenue only from projects funded at the 60% funding level and above. Preliminary indications are that all applications for 1999-2000 will be funded and that full funding will continue in future years. This may result in a small budget surplus, rather than the budget shortfall forecasted by the audit.</p>	<p><i>Partially Resolved.</i></p> <p>The previous administration for ETS was overly optimistic with the unveiling of Plan 4 and the expected revenues that would be generated by E-rate. The audit report showed that the District received only 56% of the E-rate dollars that were initially projected for the first year of the project. In response to this observation, the previous leadership of ETS stated, "Preliminary indications are that all applications for 1999-2000 will be funded and full funding will continue in future years..." EXHIBIT III shows the commitments and actual funding received from E-rate since 1998-1999. The funding commitments received by the District were 65% of the original projections made by ETS, while the actual receipts were only 49% of the original projections. This equates to \$14.93 million less in discounts than was originally planned for this project. [Although funding commitments are made for projects, the actual receipts received are based on the actual expenditures made by the District.]</p>

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Follow-up Report on the report entitled "Review of Education Technology Services' (ETS) Technology Upgrade Process (Plan 4) dated June 1999"

OBSERVATION (continued)	RECOMMENDATION	MANAGEMENT RESPONSE (continued)	CURRENT STATUS AS OF FEBRUARY 2002 (continued)
<p>3. RE-EVALUATE FUNDING REQUIREMENTS FOR PLAN 4 BASED UPON LOWER UNIVERSAL SERVICE FUND COMMITMENTS RECEIVED FOR THE INITIAL YEAR.</p> <p>(continued)</p>		<p>Currently, e-rate funds can be claimed either as reimbursements of expenses already incurred or as discounts on bills for work performed. ETS has elected to receive reimbursements and, as recommended in the audit, these are being applied to reducing costs for the Plan 4 project, rather than being allocated on a per school basis.</p> <p>ADMINISTRATIVE RESPONSE FROM ASSOCIATE SUPERINTENDENT, FINANCIAL MANAGEMENT AND SUPPORT SERVICES: Adjustments to the project budget, as a result of E-rate changes, have been taken into consideration. Increasing the project budget at this time is not necessary but can be accomplished with the next update of the DFWP.</p> <p>ADMINISTRATIVE RESPONSE FROM COMPTROLLER: With regard to the \$2.4 million shortfall, we will discuss the funding shortfall issue in the next capital outlay plan development process. The amount of the E-rate revenue has fluctuated considerably in the past.</p> <p>(continued)</p>	<p><u>FOLLOW-UP RECOMMENDATION</u></p> <p>As the District contemplates continued technological projects, the use of E-rate monies must not be used as a primary source of revenue, but as a source of funding to reduce project costs. Since E-rate is closely tied to legislative interests, which can best be described as somewhat volatile, the dependency of the District on these funds for project financing could seriously jeopardize these potential projects must be obtained with minimal reliance on E-rate dollars, so that regardless of future commitments or actual receipts, the project will be completed.</p>

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<p><i>(continued)</i></p> <p>3. RE-EVALUATE FUNDING REQUIREMENTS FOR PLAN 4 BASED UPON LOWER UNIVERSAL SERVICE FUND COMMITMENTS RECEIVED FOR THE INITIAL YEAR.</p>		<p><i>(continued)</i></p> <p>We will budget it as a funding source in the year when these funds are actually received.</p> <p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>E-rate was re-evaluated in order to fulfill the commitment made to funding the technology. Based on changes in technology, we were able to complete projects at lower costs than anticipated. For FY 2001-02 the E-rate funding allocation to the capital budget was reduced from \$7 million to \$5 million to align with funding guidelines. Currently, the district has collected over \$13 million in E-rate funds.</p>	

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p>4. REVIEW SCHOOL'S FUNDING RESPONSIBILITIES UNDER PLAN 4</p>	<p>We recommend that ETS meet with District Budget personnel to review school obligations and determine whether the District may be able to increase funding sources. If additional funding is not available, ETS may need to seek Board approval in changing current District standards for a more cost effective solution for the schools. Considering the survey responses we received, it appears that current funding allocations are impacting the schools' ability to meet their obligations.</p>	<p>ADMINISTRATIVE RESPONSE FROM ETS: This Recommendation calls for ETS to find ways to obtain more funds to assist schools in meeting the 50% end-user device matching requirement. Schools are provided with PTIF (now PSTF) funds, and schools can use operating funds to assist in this effort. Schools may also apply for grants, and ETS supports this effort on a regular basis through the Grants Department. ETS will seek funds to support each school's needs through the Budget Analysts in the Area Offices and the Area Superintendents.</p> <p>ADMINISTRATIVE RESPONSE FROM ASSOCIATE SUPERINTENDENT, FINANCIAL MANAGEMENT AND SUPPORT SERVICES: For a number of years, schools and centers have utilized available operating budget funds to purchase computers and other end user devices. For each of the last two years, the purchases have conservatively totaled \$10 million. These items are compliant with current district standards.</p>	<p><i>Unresolved.</i></p> <p>Current bids and technological breakthroughs have allowed ETS to save between \$35 to \$45 million dollars on end user equipment needs. These savings are based upon estimates made in the original report, and are dependent on MAC vs. PC purchases, respectively.</p> <p>ETS has generated reports from District purchasing records that shows that the majority of schools have purchased sufficient end-user equipment to meet their match. (EXHIBIT VIII shows the breakdown of equipment needed by Board Member District, and EXHIBIT IX shows the breakdown of the cost of these items by Board Member District).</p> <p>The weakness in these reports is that EVERY computer that has been purchased by the location is counted; including computers purchased for administration, computers purchased for clerical help, computers for labs, computers that were purchased for various programs, including ESOL, ESE, Title 1 and Headstart.</p>

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OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE <i>(continued)</i>	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>4. REVIEW SCHOOL'S FUNDING RESPONSIBILITIES UNDER PLAN 4</p>	<p>As such, we believe that the schools will be able to obtain the end user devices necessary to fully equip their facilities. A review should be undertaken to determine which schools continue to have a funding problem so that specific prescriptive actions can be taken.</p> <p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>During the Plan 4 upgrade, PSTF funds were allocated based on the Plan 4 schedule of schools being upgraded in the project year. ETS continues to support schools and the grants department in applying for additional funding through grant programs. In addition, Upward Bound Schools received additional funds through PSFT funding in order to assist them in their matching requirements. ETS is currently completing an audit of all schools to identify which schools have not completed their 50% purchase of end user devices.</p>	<p>It is quite possible that computers that have been purchased for these aforementioned programs will not be used as resources for the Plan 4 initiative, but are being counted in determining whether locations have sufficiently purchased end user equipment to meet their match. We contacted six (6) schools to ask for a breakdown of the uses of the computers which were purchased since 1996-97. Of these six (6) schools, ETS claimed the schools had purchased 2,702 computers since 1996-97. The schools responded stating that they purchased 3,395. A difference of 693 computers.</p> <p>Of the computers purchased, an average of 53% were purchased for labs. On average 28% of the computers were for classrooms and 4% were for laptops for staff.</p> <p>During our site visits, we found that many schools have made site based decisions that have emphasized the use of labs over classroom computers, as a way of integrating technology into the curriculum.</p>	<p><i>(continued)</i></p>

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OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>4. REVIEW SCHOOL'S FUNDING RESPONSIBILITIES UNDER PLAN 4</p>			<p>In many instances we found that these labs were set-up for CCC, Jostens, ESOL, Business Classes and Adult Education. In fact, it was only through the use of "Community School" funds that these schools were able to purchase the number of computers shown.</p> <p>In addition, the responses received from our surveys disclosed that:</p> <ul style="list-style-type: none"> • 41% of the students claimed they had less than two (2) computers in their classrooms. • 47% of the teachers claimed that they had less than two (2) computers in their classrooms. • 45% of the schools stated that less than 75% of their rooms are fully equipped and operational, and 76% of these schools state it will take more than two (2) years to make the purchases necessary to comply with Plan 4 initiatives. <p align="right"><i>(continued)</i></p>

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OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p align="center"> 4. REVIEW SCHOOL'S FUNDING RESPONSIBILITIES UNDER PLAN 4 </p>			<p>ETS assisted schools who were searching for other funds to aid in their purchases. This is commendable, but this possible one time infusion of cash, may only purchase the items to get them into the schools. This infusion will not assist the school in teaching the students, teaching the teachers or even repairing themselves. (See additional comments in Current Status of Observation no. 5, on page 35)</p> <p align="center"> <u>FOLLOW-UP RECOMMENDATION</u> </p> <p>As was stated in the Background Section of this report, the Board, District, and staff need to make decisions about the way we utilize technology in achieving educational goals. Only when these goals have been set, can a decision be made on the determination of whether schools have been properly funded for their technological needs.</p> <p align="right"><i>(continued)</i></p>

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OBSERVATION <i>(continued)</i>	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>4. REVIEW SCHOOL'S FUNDING RESPONSIBILITIES UNDER PLAN 4</p>			<p><u>FOLLOW-UP RECOMMENDATION</u> (cont.)</p> <p>Based upon our site visits and survey results we still believe that there exists an inequality among the schools, and that as many as half of the schools have almost ¾ of their rooms without the necessary equipment to fulfill the standards established by Plan 4. 76% of these schools stated that it will take more than two (2) years to complete their end of Plan 4. With the opening of new schools, it is imperative that the Board look at the funding sources and determine the best use of funds to ensure that the "digital divide" does not grow into a chasm, so that the schools which are able to generate monies based upon the geographical location do not gain advantages over schools which exist in low economic areas.</p>

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<p>5. MONITOR SCHOOLS' PURCHASES USING TECHNOLOGY FUNDS</p>	<p>We recommend that ETS amend current guidelines related to the school's purchase obligations for end-user devices under Plan 4. Specifically, the latitude currently existing for uses of ITIF monies should be more stringent. We suggest that a formula be established which would allocate monies to schools for specific items such as computers, peripherals, etc. Any other use of these allocated funds would require approval, in writing, by ETS or designee. By establishing guidelines for the use of ITIF monies, the District can ensure that each of the schools are expending the monies in accordance with the Plan 4 agreement that was entered into by ETS and the Schools.</p>	<p>ADMINISTRATIVE RESPONSE FROM ETS: ETS agrees with the recommendation to tighten procedures so that schools must spend their PSTF monies on computers and peripherals, and action has been taken to implement this recommendation. When the 1999-2000 PSTF allocations were distributed to schools, the transmittal letter reminded recipients that funds should be used to purchase end-user equipment, and the letter further indicated that spending of the funds would be monitored by the Associate Superintendent for Technology, Strategic Planning & Accountability.</p> <p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>As part of the school improvement plan, each school is required to indicate how they have spent their previous years' PSTF money on hardware and software using the technology section of the school improvement plan. ETS monitors the school equipment purchases but we do not monitor how their total PSTF funds are spent.</p>	<p><i>Improved.</i></p> <p>Annually, the State allots funds to Schools for technology related purchases. These funds are called PSTF. These monies are generated based upon the weighted-FTE for schools. For the current year, a decision has been reached to distribute these funds sometime in March 2002. EXHIBITS X and XI show the funds generated and the uses of these funds over the last several years.</p> <p>Previous administration for ETS insisted that schools not only use PSTF funds but other budgeted funds to meet their purchase obligations under Plan 4. But as school's non-salary budgets have been over-burdened by State budget cuts, the flexibility once given to schools does not exist. A quick analysis of seven (7) schools (2 Elementary, 3 Middle and 2 High Schools) revealed that these schools would have needed to expended between 2% to 26% of their non-salary budgets since 1997-98 to 2000-01, to meet their purchasing obligations for Plan 4.</p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p>5. MONITOR SCHOOLS' PURCHASES USING TECHNOLOGY FUNDS</p> <p align="right"><i>(continued)</i></p>			<p>A study that was conducted by McKinsey & Company (1995) estimated that the ongoing technology costs for school districts were to range from \$45,000 to \$165,000 per school or \$80 to \$275 per enrolled student, per year. To put this in perspective:</p> <ul style="list-style-type: none"> This year's 20th day enrollment figure at North Side Elementary School was 639 students. Using the low funding figure this would indicate the funding of technology at this school would need to be between \$45,000 to \$51,200, annually. For the period 1997-98 through 2000-01 this school received a total of \$40,470 in PSTF monies. This is a deficit ranging from \$139,500 to \$164,330 for the four-year period. <p align="right"><i>(continued)</i></p>

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<p><i>(continued)</i></p> <p>5. MONITOR SCHOOLS' PURCHASES USING TECHNOLOGY FUNDS</p>			<p><i>(continued)</i></p> <ul style="list-style-type: none"> This year's 20th day enrollment figure at South Plantation High School was 2,646 students. Again using the low funding figure for technology, this school would need between \$165,000 to \$211,680 annually. For the period 1997-98 through 2000-01 this school received \$305,887 in PSTF monies. This is a deficit ranging from \$354,113 to \$540,833 for the four-year period. <p>Regardless of data that has been compiled by departments, this type and level of expenditures cannot not be burdened to a school level administrator who may need to decide between teaching alternatives: supplies for teachers or computers.</p> <p align="right"><i>(continued)</i></p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 (continued)
<p>5. MONITOR SCHOOLS' PURCHASES USING TECHNOLOGY FUNDS (continued)</p>			<p>FOLLOW-UP RECOMMENDATION Again, as with the other observations in this report, we feel that the Board, the District and staff can not make necessary decisions upon funding issues, until such time as a "blueprint" exists for the educational goals of the District. This "blueprint" must resolve the issues of what equipment is needed at the school level to implement the strategies needed to reach the educational goals and objectives established by the District.</p> <p>We recommend that the necessary District staff (ETS staff members, Deputy Superintendent, Curriculum & Instruction/Student Support, Comptrollers Staff) meet to create this "blue-print" to ensure that the educational goals and objectives as set forth by the Board is created, and that the funding issue be addressed in this "blueprint" document.</p>

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<p>6. REVIEW SCHOOLS' PURCHASES FOR SERVERS WHICH DUPLICATE THE FUNCTIONALITY OF THE SERVERS SUPPLIED UNDER PLAN 4.</p>	<p>The Office of Management/Facility Audits considers the purchase of servers, which duplicate the functionality of the servers being supplied under Plan 4 guidelines, not a good use of District funds. We recommend that ETS meet with the Deputy Superintendent, School Operations to eliminate this practice and redirect District funds for other needs.</p>	<p>ADMINISTRATIVE RESPONSE FROM ETS: The Audit Department recommends tightening of procedures to prohibit schools from buying Windows NT servers that duplicate functionality of Plan 4 supplied servers. ETS agrees, and, in light of the recent purchase by ETS of new AS/400 servers for all schools that can also be configured as Windows NT servers, ETS sees little or no reason for schools to be purchasing any additional servers.</p> <p>ETS has therefore taken action with the Purchasing Department to block the purchase of any windows NT servers unless the purchase requisition is accompanied by an ETS waiver request.</p> <p>ADMINISTRATIVE RESPONSE FROM DEPUTY SUPERINTENDENT, SCHOOL OPERATIONS: Full Text of Administrative Response(s) are located in Section IV pages 54 - 55, 57 - 68.</p>	<p><i>Resolved.</i></p> <p>ETS' program of Waiver Requests for purchases of servers has been achieving its goals of curbing duplication of servers. The program was put into effect after the June 1999 audit of Plan 4. Since this waiver request procedure has been employed, we sampled six of the servers that were purchased. We found that:</p> <ul style="list-style-type: none"> • Three (3) of the servers were purchased as part of the Plan 4 upgrade process for Annexes. • Three (3) of the servers were purchased by a Technical Center to handle the growth of the programs at the center.

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p><i>(continued)</i></p> <p>6. REVIEW SCHOOL'S PURCHASES FOR SERVERS WHICH DUPLICATE THE FUNCTIONALITY OF THE SERVERS SUPPLIED UNDER PLAN 4</p>		<p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>In light of the AS 400 ability to be configured as a server, ETS is not recommending the purchase of site based servers without a waiver request. The Purchasing Department blocks purchase of NT servers unless the purchase requisition is accompanied by an ETS waiver request.</p>	

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<p>7. CONSIDER ESTABLISHING AND FUNDING A TECHNOLOGY SPECIALIST POSITION.</p>	<p>Subsequent to the completion of our audit field work for Plan 4, steps were taken by the Ad Hoc Budget Preparation Committee to upgrade some of the current technology positions available to the schools. We support this initiative and would recommend that the District provide a full time technically trained school based position to support the location, have the teaching skills required to instruct staff members and who is responsible for supporting Information Technology.</p>	<p>ADMINISTRATIVE RESPONSE FROM ETS: The Audit supports funding of a school-based technology specialist position to support technology installed in the schools, and ETS has been working within the Ad Hoc Budget Preparation Process to achieve a similar goal. For 1999-2000, this effort resulted in a priority 2 request for \$6.5 million, which was not funded. In 2000-2001, ETS will again work to achieve this goal.</p> <p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS: ETS has been working with Ad Hoc Budget Preparation Process to achieve this goal. Job descriptions were created and forwarded to the Personnel Department for their consideration. As of yet, these positions have not been approved or funded.</p>	<p><i>Unresolved.</i></p> <p>The District has expended nearly \$200 million in creating an infrastructure that will enable our educators to lead our students into the 21st century. But with all the brilliance of this plan the failure of the District to adequately fund a technology specialist for schools and locations, has placed many locations in a precarious position. The creation of this technological marvel has given the rise to positions, which require a level of expertise that five (5) years ago was not required. Until now, this District did not need to contend with the need for system operators and/or computer repair technicians at school locations. Yet today, keeping a school wide network or even a simple computer lab operating requires substantial attention from someone skilled in computer networking and repair. In many instances teachers or other clerical staff have attempted to take on these responsibilities in addition to, or in place of their normal duties. This type of division usually results in staff's inability to perform both tasks at optimal efficiency.</p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p><i>(continued)</i></p> <p>7. CONSIDER ESTABLISHING AND FUNDING A TECHNOLOGY SPECIALIST POSITION.</p> <p align="right"><i>(continued)</i></p>			<p><i>(continued)</i></p> <p>Although the funding of this position will require an investment in the millions of dollars, the continued failure to fund this position may eventually lead to added costs for the District.</p> <p>In reviewing the responses received from the schools, we noted that the number of persons employed by schools to handle their computers and networks varied greatly by type of school, and how much money the school had available. (SEE EXHIBIT XII which outlines the position and number of hours expended)</p> <ul style="list-style-type: none"> • 38% of the respondents stated that they employed a Micro-Technical Specialist. (MM-85)-Dr. Abney has reported that "Over the years, the Micro Computer Technical Specialist position has been misused. Schools have used this position as a means to promote clerical staff in order to give them more money. However, the employees continue to perform their same office clerical functions while failing to perform any technology functions." <p align="right"><i>(continued)</i></p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002 <i>(continued)</i>
<p><i>(continued)</i></p> <p>7. CONSIDER ESTABLISHING AND FUNDING A TECHNOLOGY SPECIALIST POSITION.</p>			<ul style="list-style-type: none"> • 32% of the respondents stated that they paid a Computer Liaison. (This is a supplemental position) • 30% of the respondents claimed they employed other persons to oversee their technological needs. (We found that these other positions included, Media Specialists, Teachers and Administrative Staff) <p><u>FOLLOW-UP RECOMMENDATION</u></p> <p><i>The District and the School Board has made a substantial investment in technological resources. If this investment is to reap benefits, the District MUST fund a position that will enable each and every location the ability to fully utilize all the resources that have been provided.</i></p> <p><i>We recommend that ETS provide the Division of Human Resources with the information needed to develop a job description and determine the appropriate pay level for a job classification to assist the District in attracting and retaining qualified personnel to perform the needed technology support function.</i></p>

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<p>8. ADHERE TO THE TECHNOLOGY UPGRADE PROJECT CYCLE TO ENSURE COMPLETION OF PROJECTS IN A TIMELY MANNER</p>	<p>Subsequent to our audit fieldwork, we have learned that the "electrofitting" and roof repair work has begun at the Nova complex. ETS anticipates that this work will be completed by August 1999.</p> <p>We recommend that ETS review the Technology Project Upgrade Cycle to ensure that the phases outlined, and the steps being taken are critical to the success of Plan 4, and that there are no preventable time delays present in the cycle. ETS may want to consider a revision to the Technology Project Upgrade Cycle that would include the Critical Path Method (CPM) of scheduling. Once the Technology Project Upgrade Cycle has been reviewed/ revised it must be followed, to ensure successful completion of each project.</p>	<p>ADMINISTRATIVE RESPONSE FROM ETS:</p> <p>This Recommendation calls for greater cooperation between ETS, Facilities and District Maintenance. The report calls for a joint meeting, and although ETS meets regularly with Facilities, no formal meeting has ever been scheduled involving all three parties. ETS will schedule it. (The recommendation was based on the Nova High School Electrical Upgrade delay, which, incidentally, shortly thereafter moved forward to completion on schedule).</p> <p>ADMINISTRATIVE RESPONSE FROM ASSOCIATE SUPERINTENDENT, FINANCIAL MANAGEMENT & SUPPORT SERVICES:</p> <p>District Maintenance will assist in the development of guidelines to address future problems related to Plan 4 implementation.</p>	<p><i>Resolved.</i></p> <p>Plan 4 projects have consistently met time frames established. In fact, our survey showed that 72% of the schools stated that Plan 4 was started on time or within two (2) to four (4) weeks of the date that was established. In addition, 57% of the schools stated that Plan 4 was completed on time, or within two (2) to four (4) weeks from the date scheduled.</p>

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OBSERVATION <i>(continued)</i>	RECOMMENDATION <i>(continued)</i>	MANAGEMENT RESPONSE <i>(continued)</i>	CURRENT STATUS AS OF FEBRUARY 2002
<p>8. ADHERE TO THE TECHNOLOGY UPGRADE PROJECT CYCLE TO ENSURE COMPLETION OF PROJECTS IN A TIMELY MANNER</p>	<p>Furthermore, we recommend that:</p> <p>2. The Facilities and Construction Management Division immediately review the proposals submitted to ETS for the roof work to ensure the proposal encompasses all the work required, and that the work will be completed in a timely fashion. This is a Facilities and Construction Management Division area of concern, and should not be under the purview of ETS.</p> <p>2. The Facilities and Construction Management Division should be an active participant in the review of the design drawings, load increases, and other items crucial to the success of Plan 4. Without the Facilities and Construction Management Division input and expertise, ETS is having to accept the work of vendors who have little or no responsibility to the District, or they are attempting to review and consider items for which their staff has not been properly trained.</p>	<p>ADMINISTRATIVE RESPONSE FROM TASK ASSIGNED ASSOCIATE SUPERINTENDENT, FACILITIES & CONSTRUCTION MANAGEMENT:</p> <p>3. The Facilities and Construction Management Department will immediately begin to work with appropriate staff at ETS to review and facilitate all roof work proposals needed by the ETS Department to complete their tasks.</p> <p>3. The Facilities and Construction Management Department will review design drawings, load increases, etc., submitted by ETS to ensure the proper and timely implementation of Plan 4.</p> <p>3. While we agree with the substance of the recommendation, ten (10) working days must be allotted for review, in lieu of the five (5) day review period suggested. We will meet again with ETS to revise the timeline.</p>	<p><i>(continued)</i></p>

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OBSERVATION <i>(continued)</i>	RECOMMENDATION <i>(continued)</i>	MANAGEMENT RESPONSE <i>(continued)</i>	CURRENT STATUS AS OF FEBRUARY 2002
<p>8. ADHERE TO THE TECHNOLOGY UPGRADE PROJECT CYCLE TO ENSURE COMPLETION OF PROJECTS IN A TIMELY MANNER</p>	<p>3. The Director of Facilities and Construction Management Division ensure that the power design drawings are approved within the five days as shown in the Technology Upgrade Project Cycle, and that ETS is properly notified of these approvals. If the designs are not approved, ETS must be notified as soon as possible, so that they may make the necessary corrections and resubmit the design drawings.</p>	<p>4. ETS, Facilities and Construction Management Division, and District Maintenance jointly creates guidelines that establish each department's responsibilities ensuring that future problems are addressed in a timely manner and under the supervision of the proper department.</p>	
	<p>4. ETS, Facilities and Construction Management Division, and District Maintenance jointly creates guidelines that establish each department's responsibilities ensuring that future problems are addressed in a timely manner and under the proper supervision of the proper department.</p> <p>5. ETS and the Facilities and Construction Management Division work closely together to prevent delays in the implementation timeline for Plan 4.</p>	<p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>ETS, Facilities, and District Maintenance coordinate all projects to ensure their timely completion. The Facilities Department includes ETS in all of the design reviews and other items crucial to the success of all projects. ETS includes Facilities in all projects as well.</p>	

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p>9. CLARIFY PROPERTY INSURANCE REQUIREMENTS RELATED TO LAPTOP COMPUTERS THROUGHOUT THE DISTRICT</p>	<p>We recommend that Risk Management and issue a memo which:</p> <ul style="list-style-type: none"> outlines procedures for the theft or loss of equipment issued to staff, clearly states financial responsibility, and details the budget impact of such thefts or losses. <p>Once issued, the rules and procedures outlined:</p> <ul style="list-style-type: none"> must eliminate the need for staff to purchase an insurance policy or rider for lap top computers, and must be applied consistently by District personnel regarding all items which may be lost or stolen by employees of the District. 	<p>ADMINISTRATIVE RESPONSE FROM DEPUTY SUPERINTENDENT, SCHOOL OPERATIONS:</p> <p>Full Text of Administrative Response(s) are located in Section IV pages 54, 57 - 58.</p> <p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>Risk Management to respond.</p> <p>OFFICE OF MANAGEMENT/FACILITY AUDITS COMMENT FEBRUARY 2002</p> <p>Based on the action taken by the Superintendent and Director of Risk Management we did not solicit a response from Risk Management.</p>	<p><i>Resolved.</i></p> <p>The Superintendent of Schools through the Area Superintendents and the Director of Risk Management has ensured that staff has been made aware of the liabilities and issues surrounding equipment issued to staff, students and other personnel.</p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p>10. EXPEDITE REMOVAL OF OBSOLETE COMPUTERS AND OTHER PERIPHERALS WHICH DO NOT CURRENTLY MEET DISTRICT TECHNOLOGY STANDARDS AND HAVE BEEN DECLARED SURPLUS</p>	<p>Subsequent to the completion of our audit fieldwork, tentative arrangements have been made to begin the removal of surplus equipment at the school sites. However, we recommend that ETS and the Associate Superintendent, Financial Management & Support Services work together to expedite the removal of surplus equipment. We further recommend that ETS meet with the Associate Superintendent, Financial Management & Support Services to review the current state of the District and the impact of Plan 4 on the surplus and disposal of computers and peripherals and to ensure:</p> <ul style="list-style-type: none"> that procedures are created which will ensure that this "surplus/disposable" equipment be removed as expeditiously as possible from the schools and centers. This rapid removal is necessary to create room for the storage and security of new equipment. that the review of this equipment outline what if any use this equipment may have for other schools which have not been upgraded to the latest District standards. 	<p>ADMINISTRATIVE RESPONSE FROM ETS:</p> <p>Auditing recommends new procedures for transfer and disposal of surplus and obsolete equipment. While property management is not the responsibility of the ETS Department, ETS agrees and in fact has begun working with the Property and Inventory Department to develop a new web-based system/procedure. The Property and Inventory Department anticipates that this new process will be piloted in October with district-wide introduction at the BETS Conference in November.</p> <p>ADMINISTRATIVE RESPONSE FROM ASSOCIATE SUPERINTENDENT, FINANCIAL MANAGEMENT & SUPPORT SERVICES:</p> <p>A plan has been implemented by the Division of Financial Management and Support Services to remove surplus/obsolete computers and peripherals according to priorities established by the area offices for final disposal by the Accounting Department. (The Accounting Department is responsible for the final disposal of surplus/obsolete computers and peripherals).</p>	<p><i>Unresolved.</i></p> <p>The administration of ETS and the programmers are to be commended for their actions that have led to a web-based surplus process. Although this process is in its infancy, it will greatly assist locations in the movement of equipment from one location to another. But this web-based process is not the solution that is needed to move the overwhelming number of obsolete equipment that has greatly impacted the schools abilities to house its students.</p> <p>Over the last two years the District has:</p> <ul style="list-style-type: none"> Expended in excess of \$200,000 for an outside vendor to pick-up salvage/obsolete equipment. Held numerous auctions to sell this salvage/obsolete equipment. Raised some monies from these auctions. For example, the latest auction raised just over \$4,000 for the sale of 182 pallets of equipment. <p>During our site visits we found that every school complained about the salvage/obsolete equipment at their schools.</p>

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OBSERVATION (continued)	RECOMMENDATION (continued)	MANAGEMENT RESPONSE (continued)	CURRENT STATUS AS OF FEBRUARY 2002 (continued)
<p>10. EXPEDITE REMOVAL OF OBSOLETE COMPUTERS AND OTHER PERIPHERALS WHICH DO NOT CURRENTLY MEET DISTRICT TECHNOLOGY STANDARDS AND HAVE BEEN DECLARED SURPLUS</p>	<p>In addition, we recommend that the "web page" that has been experimented with recently be expanded and publicized. This "web page" can not only be used for technological resources but other equipment that the schools have that they would like to get rid of can be listed here. We believe that by expanding the use of this "web page" all the parties benefit; the donor school as it relieves itself of these surplus items, and the receiving school benefits from the increase in technological resources. In addition, procedures for a periodic auction should be included as part of the disposal project.</p>	<p>AUGUST 31, 2001, RESPONSE FROM EXECUTIVE DIRECTOR ETS:</p> <p>ETS has completed a web-based system/procedure for tracking technology inventory and facilitating the surplus process. This system gives the schools the ability to post surplus equipment and other locations the ability to adopt it. ETS worked with Property and Inventory and the Auditing Department in the development of the system. ETS is continuing to work with schools to train them in the use of this web-based system.</p>	<p>In fact, we found this to be a problem that is also costing schools in classroom space, common ground space and sometimes operating funds:</p> <ul style="list-style-type: none"> • EXHIBITS XIII, XIV, XV show various schools and the salvage/obsolete equipment that is currently on hand. <p>Recently the oversight of this process was turned over from the Accounting Department to the Purchasing Department. The Director, Purchasing Department oversees the operations of the Central Warehouse. The Director, Purchasing Department has not yet created procedures for the pick-up and removal of salvage/obsolete inventory.</p> <p>The Board and the District has to create an on-going solution for the removal of surplus/obsolete equipment. It appears that there has been no solution for this overwhelming problem, so schools are made to do whatever possible to find storage areas to accommodate the equipment that has been deemed salvaged/obsolete.</p>

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OBSERVATION	RECOMMENDATION	MANAGEMENT RESPONSE	CURRENT STATUS AS OF FEBRUARY 2002
<p><i>(continued)</i></p> <p>10. EXPEDITE REMOVAL OF OBSOLETE COMPUTERS AND OTHER PERIPHERALS WHICH DO NOT CURRENTLY MEET DISTRICT TECHNOLOGY STANDARDS AND HAVE BEEN DECLARED SURPLUS.</p> <p align="right"><i>(continued)</i></p>			<p><i>(continued)</i></p> <p>The hiring of an outside vendor, by the District, to perform these tasks cleaned a small portion of the items that had been declared surplus/obsolete, but also contributed to new problems for the schools, such as:</p> <ul style="list-style-type: none"> • The lack of attention paid by the outside vendor to the District's staff, the directions they received from staff or the needs of the locations being serviced. • The lack of reconciliation between what the vendor was to have picked up and what was actually picked up and placed for auction. This lack of reconciliation has led to a large increase in the number of missing items being reported as part of the Office of Management/Facility Audits' Property and Inventory reports. • The lack of reconciliation has also led to allegations that the outside vendor may not always be making all the items that they have collected available for auction. Although, we have found no evidence that has corroborated these allegations, there are no forms that are available for corroboration. <p align="right"><i>(continued)</i></p>