APPROVED 32-1993 Rockville, Maryland June 17, 1993

The Board of Education of Montgomery County met in special session at the Carver Educational Services Center, Rockville, Maryland, on Thursday, June 17, 1993, 7:30 p.m.

ROLL CALL Present: Dr. Alan Cheung, President in the Chair Mr. Stephen Abrams Mrs. Frances Brenneman Mr. Blair G. Ewing Mrs. Carol Fanconi Mrs. Beatrice Gordon Ms. Ana Sol Gutierrez*

Absent: Mr. Jonathan Sims

Others Present: Dr. Paul L. Vance, Superintendent Mrs. Katheryn W. Gemberling, Deputy

> Mr. Thomas S. Fess, Parliamentarian Ms. Carrie Baker, Board Member-elect

#indicates student vote does not count. Four votes are needed for adoption.

*Ms. Gutierrez joined the meeting at a later time.

RESOLUTION NO. 465-93 Re: BOARD AGENDA - JUNE 17, 1993

On recommendation of the superintendent and on motion of Mrs. Gordon seconded by Mrs. Fanconi, the following resolution was adopted unanimously by members present:

<u>Resolved</u>, That the Board of Education approve its agenda for June 17, 1993.

RESOLUTION NO. 466-93 Re: CLOSED SESSION - JUNE 17, 1993

On recommendation of the superintendent and on motion of Mr. Abrams seconded by Mrs. Brenneman, the following resolution was adopted unanimously by members present:

WHEREAS, The Board of Education of Montgomery County is authorized by the Education Article of the <u>Annotated Code of</u> <u>Maryland</u> and Title 10 of the State Government Article to conduct certain meetings or portions of its meetings in closed session; now therefore be it

<u>Resolved</u>, That the Board of Education of Montgomery County hereby conduct a portion of its meeting in closed session beginning on June 19, 1993, at 10:15 p.m. in Room 120 of the Carver Educational Services Center, Rockville, Maryland, to discuss contract negotiations as permitted under Section 4-106, Education

<u>Article</u> of the <u>Annotated Code of Maryland</u> and State Government Article 10-501; and be it further

<u>Resolved</u>, That such portion of its meeting shall continue in closed session until the completion of business.

Re: BOARD OF EDUCATION ACTION AREA -TECHNOLOGY - POLICY ANALYSIS ON TECHNOLOGY POLICY INCLUDING A TECHNOLOGY CONFIGURATION BASELINE

Dr. Cheung noted that this was the second meeting on a Board of Education Action Area.

Dr. Vance introduced Dr. Joseph Villani, associate superintendent; Ms. Beverly Sangston, director of the Division of Computer-related Instruction; and Dr. Steven Frankel, acting director of the Department of Educational Accountability. He recalled that on October 18, 1993, the Board discussed the report, <u>Educational Technology: Planning for the 21st Century</u>. At that time the Board indicated its support for moving in the direction of a policy on educational technology, and Mr. Ewing requested that distance learning technology be included. He indicated that Dr. Villani and Ms. Sangston had met with Ms. Gutierrez to discuss the issue of setting standards on the technology configuration baseline.

Dr. Villani stated that they were pleased that the Board had taken up technology as an Action Area. He acknowledged the efforts of Pat Cutlip who had done extensive work on the presentation and on the paper before the Board. Their purpose this evening was to present the Board with enough information to persuade them that they needed a technology policy. They would be using a software package called, appropriately, "Persuasion." Staff in Instruction and Program Development worked collaboratively with staff in Educational Accountability, Technology Planning, and Data Operations to produce a policy analysis to assist the Board in determining a course of action for the use of educational technology to support Success for Every Student. They identified purposes for using educational technology, set up models for each purpose or goal, and analyzed the tasks required to move toward each goal. At the end of the presentation they would like to receive the Board's directions and ideas about developing a policy.

Ms. Sangston pointed out that they had a 10-year-old policy on computers which did not mention telecommunications or networks. It did not take into account the dramatic changes in technology in the real world or how computers, television, and telecommunications were merging to create the information highway. The combination of these technologies provided education with opportunities for doing things differently. Technology tools were changing what they taught, how they taught, and how they managed instruction and kept track of student progress. A new policy could provide the framework for a comprehensive look at the use of these emerging technologies in MCPS.

Ms. Sangston noted that today technology tools were fundamental. A Department of Labor report identified the abilities to productively use information and technology as two essential work place skills. Business employers wanted graduates with basic computer skills. MCPS wanted to make sure students graduated with the technological competencies to compete in the workforce or the skills to be successful in college.

Ms. Sangston reported that they had searched electronic databases for educational technology policy statements, talked with staff at NSBA, and contacted NFUSSD. However, they found no comprehensive policy statement that addressed computers, television, and telecommunications. Most school districts had technology plans with detailed projections for investing in and using instructional computers and/or distance learning, and schools and school districts were moving toward the future with technology. For example, Florida had allocated \$17 million to retrofit its schools, wiring them for voice, video, and data. In May NSBA had sponsored a site visit to the West Ottawa school system in Michigan to look at their district-wide fibre-optic network which linked ten schools with the central office. Τn May, the Technology Act for Education was introduced in the U.S. It was a \$338 million bill which proposed an Office of Senate. Educational Technology in the Department of Education to provide national leadership for all educational technologies.

Ms. Sangston stated that school districts viewed educational technology as an important element in school improvement and student success. Technology tools were the teaching tools of the 1990's. In MCPS double-period algebra classes, students used technology and software to explore concepts and review and develop skills. In media centers, students searched on-line catalogues, accessed electronic reference materials, and used national information services.

Ms. Sangston commented that staff would like to convince the Board that there was a need for a comprehensive educational technology policy. If the Board agreed, policy action should be driven by (1) developing student skills in using technology, (2) using technology to augment and/or replace traditional instructional strategies, and (3) providing staff with management information and tools. Staff felt that these three goals were inclusive and covered all students, all curricular areas, and all major technology uses. For the first goal, with technology changing rapidly and societal expectations for technology use increasing exponentially, they had to set technology student competency requirements or outcomes for students by the end of elementary school, middle, and high Currently MCPS had several sets of objectives dealing school. with technology. They had research, media production, information retrieval, K-8 computer education, computer science, and technology education objectives. They needed to review these objectives, add others as appropriate, and develop a comprehensive list of skills expected of all students. For the second goal, technology tools were an essential element of school improvement and student success. Teachers used these tools to present lessons, engage students in active learning, and increase student productivity. Students with disabilities depended on computers and specialized software to communicate and learn. She reported that they were using distance learning to deliver courses not available in some schools, and in September students at Poolesville High School would be able to take mathematics courses offered at three other high schools. The third goal was to provide management information and tools for staff. Information technologies could increase productivity and efficiency and improve the planning and decision making process. They had seen evidence of this in the SIMS project. They needed to look to electronic grade books, automated attendance reporting from the classroom, on-line access to curriculum documents, automated student portfolios, and on-line ordering.

Ms. Sangston thought that the Board might wish to take a position on equity. With the budget constraints of the past three years, the gap in technology access across schools was widening. They might want to look at a technology standard for all schools while keeping in mind that equity must also address student and program needs beyond that standard.

Dr. Frankel explained that they wanted to build a plan that would not be obsolete in six months when the next generation of They came up with the idea of using software would arrive. three-dimensional conceptual models which they hoped would last for five or ten years by updating individual cells. In the first goal, they had four basic skills areas: communication, analyzing and organizing information, telecomputing, and creating and capturing information. They also needed goals for all three school levels, and this would be the second dimension. Finally they recognized there were differences in abilities and interests; therefore, they had three levels: basic skills, standard skills, and extended skills. He demonstrated one set of skills for a fifth grader.

Dr. Frankel said that the second goal was instructional operations. They had four areas including English/language arts, mathematics, science, and social studies. They had the three levels of schools, and three very different strategies. One was

to augment traditional instruction, the second was to replace traditional instruction, and the third was to extend traditional instruction. He showed how this would work for mathematics at the senior high school level.

Dr. Frankel indicated that the third goal was to provide management information. They were looking at three dimensions of users which included central administration, school administration, and teachers. They were looking at communications, analyzing and organizing information, telecomputing, and creating and capturing information. Again this would include basic, experienced users, and extensive users. If the Board approved this approach, they would be spending the next six to 12 months filling in the boxes and developing detailed specifications and costs. He demonstrated how they could capture and use management information for teachers.

Dr. Frankel explained that they could do this with four generic tasks which could be used with all of the models. The four steps were conceptualization, determining and enabling conditions, defining existing conditions and deficits, and alternative solutions.

Dr. Villani stated that the models and tasks provided a conceptual framework from which the Board could take a position supporting educational technology that included computers, television, and telecommunications. They had identified two policy options. The first was to rescind the 1983 policy and develop a new comprehensive policy on educational technology. The other option was to keep the old policy and continue to work within that framework. If they did this, staff would recommend developing a new five-year plan for technology use to include computers, television, and telecommunication. The staff's preference was for the first option. If the Board decided on a new policy, staff would like the Board to focus on the goals to see if they agreed or wanted some other goals.

Mr. Abrams asked whether they had reviewed what was being done with some of the alternative school approaches premised on the introduction of technology. Ms. Sangston replied that they had not looked into this because their search centered on policies developed for boards of education. Mr. Abrams asked whether they had contacted state governments about technology policies that had application to school system. He was thinking about the state of Utah where the legislature had embarked on a distance learning project. Ms. Sangston replied that they would look into this. Mr. Abrams inquired about private sector, corporate policy, and training of staff. Ms. Sangston replied that they had looked at what businesses were doing, and they could spend more time learning about what was going on in the business area and government. Mr. Abrams asked about higher education, and Ms. Sangston indicated that they knew about distance learning there and fiber optics. She said they had not found policies but had examined what universities were doing technically.

Mr. Abrams stated that they were looking to integrate all technology needs within the system, not simply instructional technologies. It seemed to him that the management component, although related to instruction, tended to move toward administration of instruction rather than delivery. Dr. Villani replied they had focused in the policy analysis on those management issues related to instruction. They did not get into the cafeteria computing or the transportation computing. They did discuss the need to integrate information relating to instruction and school management.

Dr. Frankel explained that the delivery of instruction would be viewed as part of Goal 2. Again, it was easy to say that a teacher retrieving materials would be part of the instructional management system, but another issue was that teacher ordering materials from his or her desk. Dr. Stephen Raucher, director of the Department of Technology Planning and Data Operations, added that any equipment in the schools should be multi-purpose enough to service all the needs of the school. It would be inappropriate to have an individual with two terminals, one for the administrative network and one for the instructional network.

Mr. Ewing commented that with respect to Goal 3 he noted that teachers, principals, and administrators would have access to information. However, the Board was not mentioned anywhere. He believed that the time ought to come when Board members should have on-line access to stored budget and program information as well as the ability to do some analysis on this information. He said there was probably good reason to have available some selected indicators as to school operations and even of school success and failure. Dr. Frankel replied that conceptually he would view the Board as part of central administration. He reported that Dr. Cheung had taken staff to the Veterans Administration to see their central administration network which extended to the position level in individual hospitals. He believed that the VA system could serve as a very valuable model. Mr. Ewing thought the staff had provided the Board with an excellent analysis and a very good framework.

Mrs. Fanconi said she was pleased to see that they had included special education throughout. She thought it was important to look at where computers could free up staff, especially specialized staff, to spend more time with students. They had to look at the efficiencies they could accomplish within administration, and she had not heard this as a high priority. She commented that she did not think it mattered what the policy looked like if the policy was a piece of paper sitting in a binder. Currently they had a policy, but they were not implementing it because of funding. She could not approve any policy that did not include an implementation piece that actually said they would get computers to students. She was disappointed in the timelines because there was nothing they could begin doing in September. She called attention to a technology and learning conference in Dallas in October. They were going to talk about using technology to raise money to buy technology. Another topic was learning how to plan and implement landmarks and milestones for a five-year technology plan. She hoped that staff would look at technology plans and the program at this conference.

Mrs. Fanconi said she would focus on what could they have, how soon could they have it, what were the things they could begin on now, how could they use existing computers better, and how could they provide more instructional time for more productivity for professionals and students. She thought they need to look into the kinds of grants they could get. She also asked if they had surveyed the Education Connection and the Corporate Partnership on how they updated their technology and how they would suggest MCPS utilize the resources within the community.

Dr. Villani stated that they thought the October conference was a terrific one, and they had submitted three proposals and two had been accepted to be presented. They would have a team going to look at many of the components cited by Mrs. Fanconi. He commented that some of the issues raised by Mrs. Fanconi were program issues and not policy issues. What they were presenting this evening was the framework for the Board to develop a policy. There would be many things in place in September, and he thought it would be useful to give the Board a briefing on their computer They were trying to develop a policy framework for program. future programs, and once they established the framework it would help them develop budgets and programs. For example, they had worked out the distance learning program at Poolesville through cutting edge telecommunications to bring the classroom from three other high schools into the classrooms at Poolesville without the use of fiber optics which was too expensive.

Mrs. Fanconi remarked that it was the implementation that would reach students, and they were hearing that the community did not care if they had the highest technology in one school because they wanted to know what their child in the average school had or should have. Parents did not see the results of the current policy. She said she would have to have more information on how they would get the things listed in the policy done and where they were on this. Part of it was gathering data on what was in schools and what should be the standard. She only heard from people in the community who were not pleased with how rapidly MCPS had been able to move even though they understood the fiscal constraints.

Dr. Villani explained that they were trying to move away from the concept of implementing technology as a buying problem into the

use of technology as a program issue. The program components would then drive their purchasing decisions. Right now too frequently, technological equity meant counts of how many keyboards and terminals there were in schools. This was not what staff was trying to develop. They wanted to explain to parents how technology was used in the classroom to enhance instruction and keep track of information about instruction.

Mrs. Brenneman agreed with Mrs. Fanconi. When she visited schools, she looked at staff and wondered where they were with the staff's being comfortable in the use of technology. She asked about the background of new teachers in computer literacy. Dr. Villani replied that there were no requirements for computer Mrs. Brenneman asked about the percentage of their literacy. staff systemwide that was computer literate. Ms. Sangston replied that the issue would be to define computer literacy. Mrs. Brenneman said that when she visited schools she saw very few students in the computer rooms. She was concerned about the staff development piece because they could have the greatest policy and equipment, but if the staff wasn't comfortable with technology, the equipment would sit there. Dr. Villani commented that Dr. Frankel had pointed out that the most expensive part of this would be staff training. Once they had a Board policy, they would have a direction in which to move. Right now they had several programs but these were not unified. Dr. Frankel said the key issue was how much longer they could afford to view technology as being an add-on. Right now they tried to find the money for computers after they had paid for other things. It was something they trained for after they trained for other things. He noted that education was the only industry where if a teacher went back to the classroom of 50 years ago they would feel totally comfortable.

Mrs. Brenneman said she had raised the question about how staff development money was spent by schools. She would be curious to know how many schools felt that technology training was a priority. The community was raising questions about equitable For example, some elementary schools did a lot distribution. with computers and others did not, but the students converged into a middle school with some students more capable than others in using technology. They had had a study two years ago telling them what they needed, and now they were going to have another study about technology needs. Ms. Sangston commented that they had many schools begging for technology, but they had lost the flexibility to add technology and reassign other technology to appropriate applications. They hoped to regain this when funding was available. She pointed out that training had to be on-going because the technology was changing so rapidly. When they trained teachers, they had to have all the components. The teachers had to have access to the technology after the training. She hoped that they would get to the point where teachers had access to technology at home where they could spend time using

the technology. She pointed out that many school districts around the country had provided training to teachers and as payment had given teachers a computer to take home.

In regard to the task force, Mrs. Brenneman said they were going to submit it afterwards to some businesses. She wondered why business was not invited to sit in on those task forces and asked staff to consider this.

Mrs. Gordon thought the analysis was excellent. She agreed with some of the concerns expressed by Board members, but she thought they could not continue to say they could not move forward because they had not caught up. Technology was changing, and they never would be able to catch up. She said they needed to be as forward looking as possible and needed to have private industry working with the school system. She had visited a school in Charleston, South Carolina, that was a model for technology. She had been disappointed because some MCPS schools had as much technology as this model school. However, the thing that struck her was that technology was totally incorporated and was being used. The principal had pointed out that technology was being used because of the training and the fact that teachers were able to take home the computers. The school also had the ability for students to take the technology home and use it. Mrs. Gordon stated that she would prefer option 1.

Mr. Abrams stated that they were using the term "cutting edge," and he was not sure their goal had to be the cutting edge. Their goal should be the integration of technology into the curriculum. He was troubled by the term, "equity," because the equity issue tended to be more of hardware terminology. He thought it would be confusing to the public if they failed to define the term appropriately. He was not certain which option should be pursued or if any option should be pursued as a result of this evening's What was already out there might provide them with a meeting. transitional policy as they moved towards total integration. He pointed out that five years ago distance learning meant fiber optic, and they thought they would have connectivity in the schools when they awarded a cable franchise in the county in the early 1980's because every school was to be connected with coaxial cable. Technology was becoming more digitized to use existing rather than new networks. Those concerns gave him some pause as to how comprehensive a policy should be at this time or whether they should have a building block to update what would be primarily a computer application over the foreseeable future. Research and development presented a different kind of policy question outside the scope of what was presented this evening. They had to consider what role MCPS wanted to play in the research and development of new modes of delivering educational They could develop something as a public entity or instruction. offer themselves as a laboratory for a partnership with the private sector. These were threshold things they ought to be

looking at. He thought that in the proposed policy they were foreclosing some of those options, and it might be well to engage in these discussions prior to selection of a policy framework.

Mr. Ewing pointed out that some years ago the Board adopted a countywide plan for the use of instructional technology and ran up against the limits of the budget, imposed in most cases by the Council and at times by the Board itself. It was not that the staff refused to implement a plan, and it was not the staff's fault that the plan could not be implemented.

Mr. Ewing said that when they talked about this issue in a policy they needed to talk about it in terms of not being solely interested in the use of technology in the classroom as a way of equipping students with a skill they needed in order to be successful in high school, college, and the workplace. They also had to look at productivity and the quality of education that technology provided. There was a growing body of research that showed that students of average to low ability could learn higher order thinking skills faster and more efficiently by using the computer. With the same staff and computers, they could improve quality and productivity. He suggested that the Board needed to talk about this in their policy. They needed to think about this as an investment in teaching, and in order for that to work they had to invest in staff development. He felt they needed to do some economic analyses of these questions so they could say to the community that these investments would result in a payoff.

Mr. Ewing thought that in the policy they should speak to a baseline as Ms. Gutierrez had done in her paper. She had called this an educational technology configuration baseline. This spoke to a baseline of technology that would be available in all schools to all students. He felt that this had to be a goal and more evident than the goals in the analysis provided to the Board. He was also of the view they needed to be clear that this was not a policy that was self-executing or would cost more. It would cost, but it would pay off. They should have estimates of cost so that they could budget based on these. He wanted to budget for what they needed, but lately the Board had been budgeting for what was available in the way of dollars. The result was that their policies and their budgets were badly out of line. They could budget based on phased implementation, and he saw this as one of those circumstances and felt they should speak to in the policy.

Dr. Cheung commented that this was an area of great interest to him. He complimented the staff for the good analysis and expanding the matrix into three dimensions. In the 20th century, they had seen the radio generation, the television generation, and now they had the computer generation. Each generation had to adjust to whatever technology was available. Now children were very comfortable with computers and could learn much faster. He said that when they looked at the instructional program and management, they should look at what the computer could help them to improve, not just automation. They were concerned about training teachers, and if they had gone through college, they could learn computers. They had to provide the opportunity for staff to use the computer. Workstations for teachers might include a notebook computer that the teacher could take home. Some stations might include notebooks for students to take home. In their procurement of equipment, they had to creative about the technology. He had not seen this in the analysis and discussion.

Dr. Cheung said another area was management. They had SIMS which had worked very well. However, this was a top down system, and they needed a bottom up system. They talked about teachers who were frontline individuals using the information on a daily basis. Teachers were concerned about individual students, and they needed individual electronic student portfolios. This should be a continuation of trends and learning throughout the 12 years of school. This was what he meant from the bottom up.

Dr. Cheung commented that they needed to look at the networking between classrooms within the school, between schools, and with the central office and the Board. They should have different levels of information. For example, the Board would be interested in trends and forecasting. They might look at areas they would want to monitor to see whether policies were meeting objectives. He had not mentioned hardware or software because Ms. Gutierrez had a proposal for standardized guidelines. Mr. Abrams had talked about research and development, and Mr. Ewing had talked about evaluation. Dr. Cheung thought they needed to look at economic analysis, cost benefit evaluation. They might look at this in terms of piloting some of the concepts including networks, standardized equipment, etc. They might do this in terms of a cluster or two clusters depending on resources. They had mentioned staff training, but he pointed out that support was very important. They had to provide help to staff after that training.

Dr. Cheung pointed out that maintenance was very important. Many years ago offices had typewriters, then copiers, and now they had word processing and faxes. There were major costs to support a clerical person, but technology improved performance. Montgomery County was a technology county, and it was important to bring in the private sector to work with MCPS. With the help of business, MCPS could be a lighthouse school system for technology. There was \$380 million in the proposed technology bill for the U.S. Department of Education, and Montgomery County could try to get some of those funds to develop models.

Dr. Cheung said he was very pleased with the first step taken this evening. Ms. Gutierrez had submitted a proposal for a baseline, and the Board needed to schedule more time to discuss this issue. Dr. Villani explained that they hoped to have a policy which would include some standards for the system in terms of technology baseline and program baseline. After that, they could present the Board with budget proposals and program plans.

Mrs. Gordon recalled that the Council had decided to take \$2 million from the additional state construction funds to enhance technology. She thought they needed to focus on how they would spend that money. She would not like to see them begin purchasing without a comprehensive plan. She suggested that they needed to begin to think about a plan, and part of it would be a response to the equity issue that communities had been raising.

*Ms. Gutierrez joined the meeting at this point.

Mr. Abrams asked how the existing policy or a new policy would affect procurement decisions over the next one to three years. Dr. Villani replied that the initial plan staff developed was consistent with the existing computer policy. It focused on learning hubs in each school and network hubs in relation to that. It focused on using those resources not just for word processing but for telecommunications. Depending on what policy the Board adopted, that configuration might be changed. Ms. Sangston added that the funds would be available in FY 1995.

It seemed to Mr. Abrams that they were looking towards the integration of existing equipment in the system into a new technology policy. He would argue that a continuation of the most recent standards in equipment would still be consistent with any of the options they were looking at. Even if they went with a new policy, there would not be deviations in equipment, but there would be changes in backbone and integration and enhancements in terms of compatibility. Dr. Frankel explained that what the staff had presented was a framework for planning. They had not included specifics deliberately. He commented that the needs of the system were so great that it would be foolhardy to stand back and wait for a 60-page plan before spending money. Mr. Abrams agreed.

Ms. Gutierrez said that she wanted to discuss the technology configuration baseline and share key concepts of what she was proposing as an approach to address the equity issue. Dr. Cheung noted that they had just received the paper this evening, and Dr. Vance had asked that time be scheduled later so that staff could review the proposal. However, she might want to share her concepts.

Ms. Gutierrez said it was her hope that discussion would not end tonight and they would have another opportunity to continue the discussion. She wanted to put some ideas on the table. She had put together a package of relevant concepts that should be considered as they discussed the equity issue. They had come to a point where they had obvious inequities in access to and availability of technology in different schools. The Board had to begin to address this and come up with specific directions to the superintendent and staff. She said it was time for the Board to revisit their decision-making process and come up with parameters to narrow the gap.

Ms. Gutierrez had a summary statement of what the problem was. There was variation from one school to another and from one cluster to another. Mechanisms were not in place for the Board to address this disparity. As long as their policies were tied to facilities issues, they could not address this issue and satisfy goals. She acknowledged the support of Carolyn Hyatt, Walt Lange, and the Churchill cluster. She noted that the problem statement in her paper brought them to the conclusion that it was important for them to develop a policy that helped them plan and coordinate future educational technology acquisitions. She had focused on acquisitions because this was where decisions had to be made. Once they looked at equity in technology access, the Board might want to consider how this decision impacted staff development, training, facilities, and the use of current resources.

Ms. Gutierrez reported that the guts of the proposal were around what she called a technology configuration baseline. This established a line in the sand defining what they had at this time. It was not a goal, and they needed to define that baseline as a minimum to measure against that line. The remainder of the paper went into defining how the baseline would be used. She emphasized that they needed a five-year implementation plan to address the idea of having an instrument that helped them with decision making for the next budget period.

Once they had an acceptable level of equity for the schools, they had to look at next steps and tradeoffs. These were hard decisions that the Board would have to make. As a next step they had to look at the current policy and come up with a new policy. She would propose that whatever policy they adopted contain the concept of establishing a baseline to ensure equity. She recognized that staff resources to support the implementation of the plan as well as to provide training needed to be bundled into their concept of educational technology. It would not do any good to buy the technology if they were not providing the support.

Ms. Gutierrez said she had provided information on where the variability was really evident in the school system. She had used the Watkins Mill cluster as an example by looking at the student-to-workstation ratio, FARMS, ethnic/racial composition, mobility, and ESOL. She pointed out that the older schools continued to have less, and the newer schools had more and more. She had provided some comments from the community, some data about what they currently had, and a collection of interesting articles. She hoped that her proposal would be added to those of the superintendent.

Dr. Cheung thanked Ms. Gutierrez for her report and indicated that the Board officers would review it and schedule it. Mr. Abrams expressed his appreciation to Dr. Cheung for deferring this matter to the staff for analysis before the Board would be asked to vote. He had thought a configuration baseline would have a qualitative aspect and that it would not be merely an inventory-based control. It seemed to him that when they were talking about a configuration baseline there had to be some basic agreement of an underlying architecture that became the standard. He hoped there could be some suggestions on an interim backbone that would be flexible enough to encompass the vision being discussed in the long-range view of integrated technology delivery. He thought that would give them a better way of qualitatively defining equity and ensuring they were not simply trying to meet a standard from yesterday by number but rather doing it in a way that was usable in a forward-looking system.

Mrs. Fanconi asked what the Board needed to decide this evening, and Dr. Villani replied that the Board had been provided with a policy analysis which asked them to identify the goals for a policy. Based on Board discussion, the staff would begin to develop a policy. Mrs. Fanconi inquired about decisions they would have to make this summer to be reflected in the capital budget. Dr. Villani explained that if the Board could come to closure on the goals for a policy, staff could begin to do program planning based on these goals. He believed that their preliminary plan was forward looking.

Ms. Gutierrez did not think that what was before the Board was simply a two-option choice. The current policy addressed some issues that were perfectly valid, and they could continue using it. However, they had identified that they needed a policy that also addressed issues not in the current policy. She totally supported the goals proposed by the staff, but her main objection was the timeframe. The timeframe did not recognize the current situation and needs. She also had a problem with the overall approach to defining the issues because it was somewhat fragmented. There were too many groups and too much duplication of tasks. She suggested they gather the data now and gather all the data they needed, and she believed that a lot of this data was already available. She felt that neither of these options seemed to be sufficient and complete enough for what they needed to do next.

It seemed to Mr. Abrams that they needed to modify existing policy to accommodate where they were going and to indicate where they wanted to go to. Then they could focus those efforts to develop an implementation strategy based on that updated policy. Given the concerns he had heard expressed, he agreed there was a need to have something in place to address the issue of equity in technology access, which was a higher priority as they moved to a longer range approach.

Mr. Ewing thought they ought to go with the first option. This did not mean they would throw away the existing policy, but they could take the valid pieces and incorporate them in a new policy. In regard to phasing, they needed time to develop a new policy which could not occur before the fall. In the meantime they had capital and operating budgets to develop. It seemed to him they needed a resolution saying they were going to deal with these issues in a way that was consistent with current policy, consistent with a commitment to achieving a higher degree of equity, and had a goal of developing a new policy to take effect on January 1. They might want to have a public hearing on this in the fall. He would encourage the staff to include the achievement of equity as a goal.

In regard to the goals, Mrs. Fanconi said she could not take a vote on all the various task forces. She would like to have another discussion on this topic and would leave that up to the superintendent. She noted that they had four goals in Success for Every Student, and one was about staff renewal. This seemed to her to be the piece that was missing here. She wondered about taking the four SES goals as the goals in the proposed policy. Ms. Gutierrez felt that the proposed goals were not options. They were obligations, but the missing piece was equity. She noted that the non-recommended option had something which was very valuable, and this was to begin to develop a five-year plan for technology. She did not understand why this had not been included in the staff's first option. She said they needed a plan that was consistent with their overall mission. Dr. Villani explained that their options were presented in terms of how the Board wanted to proceed with policy.

Mr. Abrams asked whether Mr. Ewing was correct in saying they could have an implementation strategy consistent with a forwardlooking approach towards technology introduction and at the same time be consistent with that existing policy while they were in the development of a longer range policy. He asked whether the existing policy needed to be modified to give better direction towards the current implementation strategies. Ms. Sangston replied that they could certainly do this. The current policy was just dealing with computer technology, and a more comprehensive policy would bring in the other technologies. They had had plans on the table for three or four years that had not been funded, and they knew where they wanted to go and what the priorities were as far as use of computers.

Mr. Abrams noted that they were looking towards integration of technology, and he thought she was saying that even though the

June 17, 1993

policy was limited to computers, this did not stand in the way of making sure that equipment purchased would lend itself to a multi-media and multi-technology application approach. He would agree they could continue with existing policy while moving forward on a long-range approach.

Mr. Ewing suggested that in the implementation strategy in the policy they might want to address the notion of developing a long-range plan. This would begin to address concerns raised by Mrs. Fanconi and Ms. Gutierrez. He hoped that the superintendent would be providing a draft of a policy incorporating the issues raised by the Board about goals and the comprehensiveness of the policy. With that in front of them, the Board could debate the wording of the goals, the timetable, and the implementation strategies. Dr. Vance said that the staff was prepared to do just that.

Mrs. Fanconi agreed that they should work on the comprehensive policy, but she would like to see a September discussion of a plan for next year. She was concerned about the number of task forces proposed. Dr. Villani explained that they would not need the task forces to develop a policy, but the task forces would be needed once the policy was adopted. Mrs. Fanconi said she would like some discussion of what they might look at in next year's budget in terms of a person to do more in the way of obtaining assistance from the business community.

Mrs. Gordon expressed her support for Mr. Ewing's suggestion. She pointed out that policies remained in effect until new policies were adopted. Mr. Abrams shared in the substance of the remarks that had been made. He hoped that staff would consider expanding the view as to where potentially existing policies might be identified as a framework because MCPS might be able to modify an existing policy rather than writing a new one.

Ms. Gutierrez stated that she had a very serious problem with the timeframe and the approach proposed by staff. She believed they could have an assessment of inventories in a much shorter timeframe, and her white paper proposed some alternatives. She hoped that staff would give serious consideration to her proposals particularly the equity issues.

It seemed to Dr. Vance that staff had a strong sense of what the Board was requesting. He and Dr. Cheung thanked staff for their presentation.

Re: PROPOSED ADVISORY COMMITTEE ON TECHNOLOGY, COMPUTER, AND INFORMATION SYSTEM USAGE

The members of the Board expressed their support for such a committee, and Dr. Villani indicated that staff would come back with a proposed resolution.

RESOLUTION NO. 467-93 Re: ADJOURNMENT

On recommendation of the superintendent and on motion of Mr. Abrams seconded by Mrs. Gordon, the following resolution was adopted unanimously by members present:

<u>Resolved</u>, That the Board of Education adjourn its meeting at 10:10 p.m. to a closed session.

PRESIDENT

SECRETARY

PLV:mlw