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THE SENATE STUDY COMMITTEE
ON TECHNOLOGY EDUCATION
SUMMARY OF FINDINGS:

COMMITTEE MEMBERS

Senator Richard O. Marable, Chair
District 52

Senator Robert Lamutt
District 21

Senator Faye Smith
District 25

2001

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I. INTRODUCTION

A. Charge of the Committee

The Senate Study Committee on Technology Education was created by Senate Resolution 217 which passed the Senate during the 2001 Session of the Georgia General Assembly. Recognizing that emerging technology has sparked economic growth in Georgia, that high-tech jobs require a well-trained workforce, and that effective technology education in Georgia's high schools, middle schools and elementary schools are essential to the future of Georgia's children, the Committee was charged with undertaking a study of the conditions, needs, issues, and problems relating to these circumstances and to make any recommendations it deems appropriate.

The resolution provided for the Lieutenant Governor to appoint three members from the Senate to the Committee and designate the Committee's chairperson. Senator Richard O. Marable was appointed as the Chair, and Senators Faye Smith and Robert Lamutt were also appointed to the Committee.

The Committee held one meeting in Atlanta, Georgia on Wednesday November 14, 2001. During this meeting, the Committee heard testimony from the following individuals: Ms. Angela Powell, past president of Georgia Industrial Technology Education Association (GITEA) and High School Coordinator for Morrow High School; Dr. Robert Wicklein, University of Georgia, Liaison to the Board of Regents and GITEA Legislative Committee member; Ms. Debbie Dlugolenski, Assistant Commissioner for Planning Development and Technology, Georgia Department of Technical and Adult Education; Mr. Dave Richardson, CEO/Owner of "Learning Labs" in Gordon County; Mr. Steve Price, Clayton County High School Information Technology Education teacher; Mr. Phil Sisk, Paulding County High School Teacher; and Mr. Mike Levin, Executive Director, Advancing the Business of Technology.

B. Background and Present Situation

High-tech industry jobs are growing in Georgia and they account for much of Georgia's economic growth. These jobs typically pay more per year than other private-sector jobs. Technology education is essential for providing a skilled workforce in Georgia. How best to provide this education requires an examination of all the components involved.

In Fiscal Year 2001, the state shifted its funding for technology specialists in the local districts from being provided through a categorical grant to being an FTE-based calculation in the QBE formula. This move does allow the item to get annual attention, and it allows for a mid-term adjustment. The FTE funding ratio for a technology specialist is 1 :1100, and receives funding at \$32.82 per student.

In addition to state funds provided through the FTE formula, the lottery provides funding such as the 'computers in the classrooms' initiative. Some of the funding provided by the lottery for computer technology equipment since the 2000 Fiscal Year includes:

- Fiscal Year 1999, Amended: \$3,300,000. (For Applied Technology Labs)
- Fiscal Year 2000: \$32,695,317. (Based on \$23 per FTE)
- Fiscal Year 2001: \$29,485,875. (Based on \$21.42 per FTE)
- Fiscal Year 2001, Amended: \$ 1,710,000. (For Applied Technology Labs)
- Fiscal Year 2002: \$38,223,350. (Based on \$25 per FTE)
- The Governor's recommendation for the Fiscal Year '02 amended budget includes an additional request of \$30,482,004.

All high schools are required to have technology education programs, based on a community needs assessment. Some high schools, especially in rural areas, provide dual enrollment with campuses of the Georgia Department of Technical and Adult Education for their students. Technology career education could include any of the following programs: Agriculture; Business Information Technology; Technology Education; Trade and Industrial; Health Occupations; Family and Consumer Science; and/or Marketing Education.

Graduating high school students receive a diploma designated by a seal indicating Technology Career preparation or College preparation, or both. Diplomas designated with a dual seal indicates that the student has taken all required College preparation courses and four Technology Career preparation courses.

Georgia's middle schools have not received the level of funding for technology education as has been provided for Georgia's high schools. Additionally, the middle school technology education programs were affected by House Bill 1187, the "A Plus Education Reform Act" of 2000. Enacted provisions of the legislation require middle schools to teach a minimum of five hours instruction in the Quality Core Curriculum (QCC), which includes English and language arts, reading, mathematics, science, and social studies. Beyond the five hour

minimum, local boards have the authority to schedule academic or exploratory classes. However, students may be allowed to take additional academic instruction instead of exploratory classes if their parent or guardian requests the assignment. Such requests, along with the required remedial instruction, have compressed the remaining time in the school day that could be used for exploratory classes. Based on these circumstances and the need for additional funding, some middle schools have eliminated technology education all together. Middle school technology education courses are referred to as ‘career connection’ courses and they provide middle school students with an important opportunity to experience technology education before high school.¹

¹ Mr. Jimmy Hogg, Director of Technology/Career Education. Georgia Department of Education Telephone Interview.

II. COMMITTEE FINDINGS

A. Findings - General Comments

Georgia is 11th in the nation for high tech jobs. Nationally, 50 percent of students have exposure of at least one hour per week on the Internet or other information technology use, and of this percentage, most use is for writing reports. One of the major concerns in the technology industry is education in the field. Recognizing that schools are the arena where students are first introduced to career options, and that as much as 70 percent of students go immediately into the workforce upon graduation, Georgia must provide educational programs that produce a technologically skilled workforce. If Information Technology education funding were based on the merits and importance of the program, it would be ranked much higher in funding priority.

B. Comments Regarding Information Technology Education Teachers

There is an insufficient quantity of information technology teachers in Georgia. Georgia has two postsecondary educational institutions with Information Technology Teacher education programs: the University of Georgia and Georgia Southern University. The University of Georgia is only producing about 10 information technology teachers a year; and only 10 - 15 information technology teachers are produced elsewhere. There is an inadequate understanding of technology education which results in an insufficient effort to recruit information technology teachers. Retaining information technology teachers is difficult because the funding available cannot compete with the private sector market.

C. Comments Regarding Information Technology Education Equipment

Funding from the state is based on the FTE formula, and it is mostly used for teachers, not equipment. Funding for information technology lab equipment is insufficient. Some of Georgia's high schools have lab equipment that is seven years old and some do not have labs. Their technology education programs are provided through dual enrollment with local campuses of the Georgia Department of Technical and Adult Education. Furnishing and updating information technology equipment is crucial in producing technologically literate students.

D. Suggestions/Comments for Addressing Identified Issues

- Develop a marketing plan to recruit information technology teachers.
- Develop a plan to recruit undeclared students already attending the University of Georgia and Georgia Southern University.
- Provide a program evaluation for recruiting and retaining information technology teachers.
- Give service credit for teachers who move from the private industry into teaching.

- Look at differential pay for teachers in the information technology field – pay more in line with what the private market demands.
- Provide funding for part-time extended day, especially in middle schools. The funding to allow middle school technology education teachers to be eligible for extended day contracts would compensate them for the additional hours spent doing preparatory work on their curriculum content and lab equipment, and supervising their local and state Technology Student Association Chapters.

E. Testimony/Comments Provided by the Georgia Department of Technical and Adult Education

- The Quick Start program trained 20,000 in Computer Information Systems (CIS) last year.
- Students with certification in this area go out into the workforce and immediately make approximately \$50,000 annual income.
- The department has experienced record enrollments, the fastest growing area being CIS.
- There has been a 300 percent increase in this field of demand in the last three years.
- Programs are aligned with the industry in this field, the placement rate for students is at 99 percent.
- The department has dual enrollment initiatives in some districts.

III. CONCLUSION

The Committee strongly supports Information Technology Education and recognizes the importance of preparing Georgia's youth for their careers in the future. The committee also recognizes that preparing a skilled workforce for Georgia's businesses is vitally important in securing a stable economy. It is the Committees' conclusion to pursue funding when available, and to make Information Technology a priority in Georgia's educational programs.