



Minnesota State Department of Education

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February 24, 1983

Chairman, House Appropriations Committee
and
Chairman, Senate Finance Committee

Dear Sirs:

Pursuant to Minnesota Laws 1981 Regular Session, Chapter 359, Section 2, Subdivision 6(e), I am herewith transmitting you the progress report of the development of the Department of Education's Management Information Systems. This report covers the period June 30, 1982 through December 31, 1982.

If you have any questions regarding the content of this report, please do not hesitate to contact me.

Sincerely,

JOHN J. FEDA
Commissioner of Education

JJF:MM

cc: Legislative Reference Library (10)
Ronald J. Laliberte
Gerald Kleve
John Ostrem
Charles Coskran

**REPORT TO THE LEGISLATURE
JANUARY 1, 1983**

I. INTRODUCTION

This report is submitted to the Chair of the House Appropriations and the Chair of the Senate Finance Committee pursuant to the Laws of 1981 Regular Session, Chapter 359, Section 2, Subdivision 6(e), and covers the period June 30, 1982 through December 31, 1982. The report is organized as follows:

Section II State Department of Education Information System
 (SDE-IS)

Section III Data Management Within the Department

Section IV Instructional Computing - The Minnesota Timeshare System

Section V Instructional Computing - Microcomputers

Section VI Elementary, Secondary, Vocational Information System
 (ESV-IS)

Section VII Budgets

II. STATE DEPARTMENT OF EDUCATION INFORMATION SYSTEM (SDE-IS)

The State Department of Education Information System, commonly referred to as the SDE-IS, is now being used to collect all financial data from the 560 K-12 reporting units. This data is transmitted to the department on magnetic tape sent by the seven regional computer centers. Users of the financial data, in addition to the Department of Education, include the Governor's Office, the Department of Finance, the Legislature, other units of government (local, federal, metropolitan council, and other state agencies), public and private organizations and individuals. As a result of the fruition of this system the FY1981-82 Financial Condition Report was completed by September 30, 1982. Information on the FY1982 Unappropriated Fund Balance was projected for House/Senate Research on August 27, 1982. If the FY1982 fund balance data had not been available, the FY1981 fund balance data would have been used and there would have been a \$28 million difference in the base amount upon which the budget cuts were made. Additional reports were provided to the appropriate agencies, the Governor's Office, and the Legislature for use in the development of the legislation passed in the December special session.

Additional benefits of this automated collection and reporting system include the reduction of forms. Concurrent with the consolidation of financial data into one reporting system there has also been a consolidation of non financial data from nine forms onto one form.

A major undertaking this past year has been providing post

secondary vocational financial data for Area Vocational Technical Institutes (AVTI'S), thereby eliminating the collection on forms of approximately 80,000 data items annually. This paper process is being eliminated in several steps. After developing a report showing revenue/expenditure and budget data for each program, a format was designed to load the data directly into the SDE-FIN system. Following this, three pilot AVTI'S submitted paperless financial reports and received from the SDE-IS hard copy budget reports validating the data they had submitted. In addition to the reduction in paper reports, the State Treasury was paid back \$2 million by using the FY 1982 Fund Balance Report rather than the FY1981 report to determine the Support Services Aid for AVTI'S.

Increasingly, the SDE-IS financial data is requested for such purposes as developing historical and projected financial conditions for bond rating purposes, auditor work papers developed prior to school district audits, and as a substitute for collecting financial data from school districts by independent organizations such as the Metropolitan Council, Minnesota Education Association, the Energy Office, and the State Auditor. In a continued effort to automate this process, some reports are produced and transmitted on magnetic tape.

III. DATA MANAGEMENT WITHIN THE DEPARTMENT

The Department has established a data management policy whereby all new data must be reviewed by the Data Acquisition Review Committee (DARC) whose membership includes department staff who use data, department staff who manage the collection of data, and school district representatives who are responsible for reporting data. The focus of the DARC thus far has been the consolidation of data collection, reduction of the reporting burden, and standardization in data definitions.

Development of the data standards has been completed by the task forces on student and personnel/payroll data. These standards have been reviewed by the ESV Computer Council and recommended to the State Board of Education. Upon their approval, the standards will be in pilot status until June 30, 1983 and will be in use by November 1, 1983. In order to maintain this schedule, the Data Acquisition Unit which provides technical services to the department and staff assistance to the DARC has been augmented with the addition of two professional staff persons to provide expertise in systems development and data standards and definitions. Since the unit began full operation October 1, 1982, twenty-five forms have been reviewed. Of these, four forms were substantially reduced when it was determined that the financial data could be provided by the SDE-IS, one form was completely rejected and considered not justified, and three survey forms were revised in format and reduced in content. The remaining 17 forms were determined necessary, approved, and incorporated into the system.

When the Legislative Auditor recommended the department identify and acquire a commercially available data dictionary, the department retained Arthur Young and Company to define the data element dictionary and assist in the selection and implementation

of the dictionary. Their review has been completed with the finding that there is no commercially available data dictionary which meets the department's needs and that the department should redevelop its data element dictionary software to meet its needs. The department is reviewing these recommendations to determine their implications and method for implementation.

IV. INSTRUCTIONAL COMPUTING - THE MINNESOTA TIMESHARE SYSTEM

The 1981 Legislature provided reduced subsidies for support of the telecommunications network which allowed schools to access the larger central computer at MECC. The original purpose of having a large central computer was to provide the necessary computer power to handle the needs of the 435 school districts through one central development effort, and to eliminate the costly duplication of each district having its own computer. Since MECC was formed in 1973, the technology has changed and computer power has become inexpensive and available locally through the use of microcomputers.

The 1981 Legislature provided that the districts themselves should become directly responsible for the support of the telephone network, as they have for the costs of the central computer, and encouraged MECC to transfer all instructional computing programs, from the large computer to the microcomputer.

In addition, the Department, through MECC, was required to study the use of the central timeshare computer and its associated telecommunications network, identify the changes caused by the funding reduction, and assess the impact of these budget reductions on instructional computing.

The telecommunications study was completed and it was found that:

1. The reduction in funding resulted in higher service fees to non-metropolitan school districts, shortened the service period, and caused the outstate school districts to reevaluate their need for continuing timeshare computer services. The majority of non-metropolitan schools have dropped timeshare service.
2. Timeshare service by non-metropolitan schools is purchased primarily to access the BIS and MCIS guidance database packages which, because of their size, could not be transferred to the microcomputer.
3. Purchase of timeshare service by metropolitan school districts has not changed because the costs to these school districts have not increased significantly since they are located within the local dialup area surrounding the timeshare computer.
4. The original intent of the Legislature to provide a subsidy for telecommunications was to provide equal access by each school district to the computer. This concept has been eliminated because the central timeshare computer has been

replaced by the microcomputer with the exceptions noted in (5) below.

5. The principal advantages of the timeshare system gives the user the ability to communicate with other users, to share programs, and to use multiple and sophisticated languages and application packages. These features of the central timeshare computer are not readily available in an environment where microcomputers predominate.

The final conclusion resulting from the study is that insufficient revenues will be generated to support the operational costs of a central computer and associated telecommunication network, and that MECC will terminate its operation of the timeshare system as of June 30, 1983.

V. INSTRUCTIONAL COMPUTING - MICROCOMPUTERS

With its increasing use of microcomputers, the Minnesota education system is being recognized as the foremost state using this technology.

Over 5,000 APPLE and 2,500 ATARI microcomputers have been ordered through the statewide contract sponsored by MECC. It appears that the APPLES are being used at the secondary level while the ATARI micros are designated for use in the elementary classes.

Ninety five percent of school districts have at least one microcomputer and two thirds of all school buildings have a microcomputer.

As a result of the leadership position in developing microcomputer software which has been established by MECC, the sale of courseware has doubled over the previous six month period. This includes sales to Minnesota schools and residents, MECC members within and outside Minnesota and other MECC customers. The staff to handle this increased business has also doubled and now has become self sustaining.

"MECC 82" was the first national conference sponsored by MECC. There were six all day workshops, 150 conference sessions, and over 1,200 paid registrants principally from Minnesota and the upper midwest, but also from as far away as the Orient and Europe.

In view of this activity in microcomputer technology and the elimination of a central timesharing system, MECC is taking the opportunity upon the departure of Executive Director Dale Schneiderhan to reorganize itself.

VI. ELEMENTARY SECONDARY AND VOCATIONAL INFORMATION SYSTEM (ESV-IS)

Continued development of the Elementary, Secondary, and Vocational Information System was temporarily halted until the decision was made whether to establish a central development group. The decision has been made NOT to establish a central development group

outside of the MECC structure. In a move to give the ESV regions more direct control over the development of each system within the ESV-IS, a management team has been formed to make decisions on development or modifications to the finance system (ESV-FIN), personnel/payroll system (ESV-PPS), and student support system (ESV-SSS). The actual maintenance and modification will be done by the MECC-MIS group subject to the decision of these management teams.

In an additional effort to provide strong coordination between the development group and the regional teams, Mr. Don Thomas has been placed on mobility assignment to perform the duties of the manager of the MIS group.

The master contract with Burroughs Corporation for computer equipment will not be renegotiated. It was decided that the regional computer centers all have sufficient computer capacity to perform the services requested by their member districts and will not need to use the umbrella of a master contract in order to add or upgrade their equipment. The only region considering an upgrade to its equipment at this time is ESV Region VII (TIES). They are negotiating with Burroughs to secure a newer and larger computer in order to meet their district needs.

There is an effort to develop a master contract for a microcomputer to be used for administrative computing. The effort thus far has resulted in the development of a set of specifications which attempt to incorporate the specifications for a microcomputer to be used in the administration of state and local government, as well as school district administration. This microcomputer contract is being developed by the Information Services Bureau of the Department of Administration.

VII. BUDGETS

The following table presents a summary of the biennial budget which is proposed by the Department in support of the Department's MIS effort, support of MECC and support of the ESV regional computer centers.

| | <u>FY1983</u> | <u>FY1984</u> | <u>FY1985</u> | <u>BIENNIAL TOTAL FY1984-85</u> |
|--|---------------|---------------|---------------|---|
| Department of Education Line 17 Budgets | 767.2 | 836.5 | 815.8 | 1652.3 |
| MECC Support | 1648.6 | 1769.8 | 1888.3 | 3578.1 |
| ESV Regions | 3321.8 | 3634.5 | 3634.5 | 7269.8 |

The Department of Education Line 17 Budget includes use of the computer at METRO II, the Department of Administration, and the University Computer Center. It also includes the use of

contractual programming and systems design staff. The budget does not include the cost of materials, supplies, or Department staff assigned to program, develop, or otherwise support computer systems.

The MECC budget includes the costs of administration, instructional services, special projects and management information services. It does not include the MIS telecommunication services provided to the ESV regional computer centers.

The ESV regional computer center support is presented without an increase in the biennium. The regions and the State Board of Education have endorsed a five percent increase in subsidies for each year of the biennium to offset the impact of inflation.