



Minnesota State Department of Education  
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**850507**

July 30, 1984

Chairman, House Appropriations Committee  
and  
Chairman, Senate Finance Committee

Dear Sirs:

Pursuant to Minnesota Laws of the 1981 Regular Session, Chapter 359, Section 2, Subdivision 6 (e), I am herewith transmitting to you the progress report of the Department of Education's Management Information Systems. This report covers the period of January 1, 1984 to June 30, 1984.

Sincerely,

CURMAN GAINES  
Deputy Commissioner  
Department of Education

CG:MTM

cc: Legislative Reference Library (10)

## **I. INTRODUCTION**

This report is submitted to the Chairman, House Appropriations Committee, and the Chairman, Senate Finance Committee, pursuant to Minnesota Laws of 1981, Regular Session, Chapter 359, Section 2, Subdivision 6 (e). The period covered is January 1, 1984 through June 30, 1984.

The report covers the present status and work accomplished in the following areas:

State Department of Education Information System (SDE-IS)

Elementary Secondary Vocational Information System (ESV-IS)

Data Management Within and By the Department

Microcomputer Systems and Uses

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

The State Department of Education Information System (SDE-IS) has been maintained in all areas with enhancements made where required or requested. Representative activity occurred but was not limited to the following areas:

1. Numerous teacher staff reports were printed for Department use.
2. Transportation Aid payment and district worksheet programs were modified.
3. Legislative staff requests for data were supplied.
4. Modifications to MINCRIS were made.
5. Requested changes to SDE-FIN were made.
6. The state aid payment system (IDEAS) was modified to handle small aid payments in a different manner. Various programs to load data were also modified.
7. Numerous ad hoc reports for Department personnel were provided.
8. The Special Education Child Count system was modified.
9. The Teacher Licensing portion of the Teacher Personnel System was implemented. System development of the assignment portion of the system continued.
10. Reports were produced on micro fiche from print-image tapes for State Aids and Special Education.
11. Revised and new reports were provided to meet the data requests for Common Core of Data (CCD).
12. A very generalized label printing capability was developed using SDE-IS data rather than data maintained on ISB resident files.
13. Revisions were made to the school district profiles system and the projections system.

**DOCUMENTATION.** The special effort to write the documentation of the SDE-IS for the user has now been completed with the exception of those systems currently in development or modification. Review of technical manuals is now completed by each system's user. Recommended changes in the EDSS documentation standards have been completed.

### III. ELEMENTARY/SECONDARY/VOCATIONAL INFORMATION SYSTEM (ESV-IS)

MECC provides administrative data processing services which support the statewide ESV-IS. MECC is currently providing these services through the ESV-IS Management Teams, whose purpose is to work towards the development, maintenance, and operation of problem-free, comparable system software in each of the ESV Regions. The Management Teams also advise MECC on regional and Department of Education needs and priorities and the effect of proposed changes to the ESV-IS systems and approved alternate systems.

A significant cutback in funding was given to MECC in July 1983. This has required MECC to make several staffing changes as well as changes in maintenance philosophies.

**ESV-FIN.** This mandated system provides school districts with important operating information and also provides the State with critical financial data. The Finance System Management Team has responded to cuts in funding by increasing the amount of testing, preferring error free system patches. This has resulted in a decrease of time available for programming. In 1983-84, MECC developed and distributed a total of 160 changes to ESV-FIN 5.0 software through the patch release procedure, maintained user and technical documentation, and provided software maintenance. The Finance Management Team has approved and prioritized a total of 78 enhancements to the ESV-FIN system for FY1985.

**ESV-PPS.** This non-mandated system provides payroll processing, checks, payroll reports, W-2s, and personnel reports to the districts who choose to use it; at this time, there are approximately 280 users. The Personnel/Payroll Management Team has expressed satisfaction with the ratio of correct system patches to total patches; consequently, there is an increase in time allocated to programming and a decrease in time allocated for testing. In 1983-84 MECC developed and distributed 180 changes to the ESV-PPS 2.0 application software through the patch release procedure, maintained user and technical documentation, and provided software maintenance. The Personnel/Payroll Management Team has approved and prioritized approximately 25 enhancements to be made to ESV-PPS during FY85. The Personnel/Payroll Management Team has also added a new category to their structure known as the Study Group. The function of this group will be to perform user analysis of new enhancements in order to provide initial design materials that will assist MECC in programming. The Study Group will be opened to all Personnel/Payroll Management Team members with meetings and work publicized.

**REGIONAL FUNDING.** The ESV Regions appreciated the decision of the 1984 Legislature to reinstate the reporting subsidy for an FY85 total of \$3.1 million. For many districts, especially those located outside the metropolitan area, this decision prevented substantial rate hikes. Current discussion within the Regions regarding the reporting subsidy has focused both on the desired level of funding for FY86-87 and the method or formula for distributing the anticipated appropriation. The Regions question the advisability of a special categorical aid to districts for reporting, but have also discussed modifications to the current distribution formula.

#### IV. DATA MANAGEMENT WITHIN AND BY THE DEPARTMENT

This past year, 90 percent of all MDE staff data collection was coordinated through the Data Acquisition Unit (DAU), Education Data Systems. In 1982 and 1983 the percentage was 50 percent and 70 percent respectively. The long term goal of central coordination for all MDE data collection has for the vast majority been realized. This past year, the DAU worked with Department of Education staff in the development and revision of 147 data collection activities.

The Data Acquisition Review Committee (DARC) marked its second anniversary this past May. Representation on the DARC was expanded to allow additional local education agency input. The additional seat brought the DARC membership roster to 5 local education agency representatives and 4 Department representatives (one of the 2 Department chairs was assigned to the new Vocational Education agency). This past year, the DARC reviewed and acted upon 147 data collection activities. Six forms did not meet justification requirements, and therefore were not approved for district completion. Substantial changes were incorporated into 31 forms in an effort to allow districts more time to comply, clarify instructions, use UFARS data rather than manual collection of finance data, reduce the amount of information requested, and better organize forms design. The DARC made recommendations to further improve another 29 forms prior to this school year.

The first phase of the Data Base Element Dictionary was completed (M.S. 121.931, Subd. 2). This resulted in the definition of the 4,150 data items currently on the SDE-IS database. The items have been reviewed by Department staff for accuracy and appropriate changes made. The programming and systems design for Phase II has been completed. DAU staff will input the systems and dataset definitions prior to October 1, 1984. Formal training of MDE staff and other user staff will be conducted this fall. The Data Base Element Dictionary (DBED) Quality Assurance Procedure is 95 percent completed. This procedure provides a complete review and final approval of each data element description and definition by the user, the programmer/analyst, and the systems supervisor. The DBED Purpose, Objectives, and General Description Section and the DBED Procedure for Data Element data entry section of the User Manual have been completed. These documents have been issued along with the Quality Assurance Procedure and have been extremely effective in obtaining Department-wide support of the entire DBED System and Quality Assurance Procedure.

This past year, a Uniform Terminology and Coding Committee (UTAC) was established. The purpose of this committee is to implement uniform terminology for the Department of Education related data reporting. The committee is continuing the efforts of the Task Forces on Data Reporting as outlined in M.S. 121.938, Subd. 1-3, and M.S. 121.93, Subd. 6. The goal is to resolve and implement uniform terminology by July 1, 1985. This terminology will be listed in the Annual Data Acquisition Calendar.

The DAU is in the process of finalizing this year's Annual Data Acquisition Calendar. The project is on schedule. This year's calendar will include a section containing the uniform terminology that has been reviewed and resolved by the UTAC. This year's calendar should contain over 150 terms as a result of the UTAC process. The number of forms in the calendar has remained at 199. There were 24 forms eliminated this year, however, new programs and projects have necessitated the addition of 24 new forms. It should be noted that the overall number in the calendar in the past eight years has been reduced by over 500 forms. Further reduction in the number of forms listed in the calendar will be directly related to the sharing of data via the SDE-IS. The emphasis is no longer how many forms have been reduced, but

rather how many redundant data items have been reduced through sharing via the SDE-IS.

This year, the DAU is conducting a Staff Data Pilot. The goal of this pilot is to test and confirm the notion of sharing staff data via the SDE-IS. The method will be to utilize information taken from the Teacher Assignment system on the SDE-IS to meet other Department data needs. The pilot will allow a comparison of manually collected data to that data already on the database and to test the validity of data.



## V. MICROCOMPUTER SYSTEMS AND USES

The microcomputer continues to be a useful tool in the Department of Education. There are currently 57 microcomputers located in the Department, and most of these are Apple II+ or Apple IIe models. The remainder are IBM PCs; in the last fiscal year, the Department of Administration negotiated a contract for the purchase of these machines. The Education Data Systems Section now publishes a monthly newsletter that is distributed to microcomputer users in the Department of Education in order to share information and experiences. Education Data Systems also has a staff member who assists users in adapting commercial software to fit their needs and provides training on various commercial software packages available to the Department.

The microcomputers are used as multi-purpose machines for a wide variety of applications including word processing, database handling, spread sheet analysis, and graphics. Some examples of this are:

- Mailing list maintenance,
- Workshop registrations,
- Personnel record maintenance,
- Budget development and analysis,
- Budget expenditure projection,
- Record keeping for telephone records and expenditures,
- Word processing of state and federal reports,
- Site review report development,
- Library building records,
- Electronic mail,
- School district entitlement reports,
- Development of 35mm slides and transparencies,
- Text book reading level analysis,
- Inventory records, and
- Development of maps.

This list is not all inclusive, and development in the last six months has included new applications for migrant special programs, veteran's education programs, monitoring, and systems software manual inventory.

Staff are still encouraged to use commercial vendor and staff supported software on the microcomputer and are encouraged to use VISION or other report generating systems when they require data from the large mainframe computer. This reduces the chances of inappropriately mixing data or reinventing reports that already exist, and also encourages the use of the microcomputer for applications with unique data only.

MECC continues to play a role in developing software for microcomputers. MECC has developed software that allows school districts to enter their financial and payroll transactions into a microcomputer which in turn transmits the transactions to the ESV Regional Centers where the actual processing occurs.

In the last year, MECC has maintained the FIN APP and PPS APP systems and trained their staff for development and support of these systems. With continued improvement in technology and awareness of the capabilities available to microcomputer users, increased microcomputer software development is a necessary service to Minnesota's school districts. Currently, there are approximately 152 districts using the FIN APP and PPS APP portion of the MECC system; this is an increase of 62 over last year.

In February 1984, the ESV Computer Council made a report to the Legislature on the findings of the MICRO-FIN pilot test. Seven districts were chosen to participate in this test, with five districts using a MECC developed floppy disk system and two districts using a MECC developed hard disk system. Two of the districts were to submit data directly to the Department on a diskette and the remaining districts transmitted the data to their region of affiliation. Due to various delays in the development process and programming "bugs" the pilot did not start on schedule and this caused serious evaluation problems; however, evaluation of the pilot test results showed the system to be appropriately designed and well documented. The pilot test also indicated that a significant degree of district expertise in finance accounting/data processing or a high level of support from an organization providing that expertise would be required for successful conversion of districts moving from the mainframe system to the MICRO-FIN system in the future, and that it would not be practical to provide the necessary accounting and data processing support by adding responsibilities to the existing Department of Education employees because of the amount of travel and in-district assistance time that was required during the test. Concerns regarding data loss operating error and/or diskette failure were also found to be valid, as the system suggests and prompts making a "back up" diskette of the data, but does not require it.

Based on the above findings, the ESV Computer Council made the following recommendations to the 1984 Legislature:

1. Testing of the MECC developed system should continue until December 1, 1984, and pending completion of the pilot test, by July 1, 1984 additional districts should be allowed to participate in an expanded pilot test.
2. On or before July 1, 1984, ESV Regions desiring to participate in the pilot test should notify the Department of their intention to assume responsibility for training, conversion, and operational support of test districts. An ESV Region may, at its discretion, provide support to a non-member district if that district's region of affiliation did not notify the Department of its intention to participate in the test.
3. The Department shall provide training and assistance to the participating ESV Regions.
4. Districts participating in the pilot test shall be responsible for their proportionate share of regional liabilities existing on July 1, 1984, after that date, they shall be required to pay for services received, resources consumed, and their share of regional liability existing on July 1, 1984. This amount may not exceed the amount the district would have paid as fees if they had continued receiving mainframe services.
5. The pilot test shall be evaluated by December 1, 1984 by the Department, participating ESV Regions, and participating districts. These findings shall be presented to the Legislature by January 15, 1985.

The 1984 Legislature instructed the Department of Education to add up to five additional pilot districts to the pilot test. As of this date, the Milan and Silver Lake school districts (ESV Region IV) have been added to the test of the MECC-MIS developed MICRO-FIN system. Crosby-Ironton (ESV Region III) and Trimont (ESV Region V) have been approved for testing an alternative or second micro financial system not developed at MECC. While a number of vendors have expressed interest in providing their product for this second micro finance system, none as yet have received approval by both the UFARS Council and ESV Computer Council. We hope to complete the



evaluation and selection process for this second micro finance system by October of this year.

It should be noted that the Department of Education will not provide on-site assistance for pilot districts in FY85. Districts were encouraged to negotiate the necessary support and back up with their HSV Region.

August 1, 1984

MTM