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Minnesota State Department of Education  
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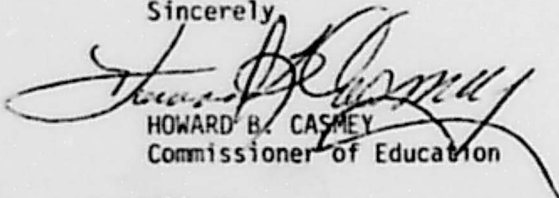
Chairman, House Appropriations Committee  
and  
Chairman, Senate Finance Committee

Dear Sirs:

Pursuant to Minnesota Laws 1979, Chapter 335, Section 2, Subdivision 6 (4) (5), I am herewith transmitting to you the progress report of the development of the Elementary, Secondary, and Vocational Information Systems and the State Department of Education Information System.

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

Sincerely,



HOWARD B. CASNEY  
Commissioner of Education

HBC:mtm

cc: Legislative Reference Library (10)  
Ronald J. Laliberte  
Charles Coskran  
John Maas

DEPARTMENT OF EDUCATION REPORT TO THE LEGISLATURE  
ON MANAGEMENT INFORMATION SYSTEM DEVELOPMENT  
July 1, 1980 to December 31, 1980

I. INTRODUCTION

This report is submitted to the Chairman of the House Appropriations and the Chairman of the Senate Finance Committees pursuant to the Laws of 1980, Chapter 609, Article VII, Section 2, Subdivision 6 (b) (5).

This report covers the period from July 1, 1980 to December 31, 1980.

II. DEVELOPMENT OF THE SDE-IS

During this reporting period the State Department of Education Information System (SDE-IS) has been expanded to 600 million characters from the previous 500 million characters. Most of the expansion has been caused by the inclusion of FY1980 financial data from the annual financial reports submitted by school districts. In addition, the annual fall report data has been collected via the MINCRIS system resulting in student data being available earlier than previously.

The MINCRIS system was developed under a federal grant for the collection and processing of data required by the federal civil rights agency, thus the name: Minnesota Civil Rights Information System (MINCRIS). Incorporated into this system is data previously collected by the Annual Fall Report, certain vocational student reports and certain special education student reports. Instead of being a single purpose system, MINCRIS supports several data collection functions thereby reducing the reporting burden on the districts.

When the funds to state agencies and aids to school districts were rescinded in order to balance the state budget, the Department was required to maintain a monthly report to the districts of all money due them, but not paid because of the rescission. This reporting system has been incorporated into the foundation aids payment system and a certificate of indebtedness is now being issued each month along with the aids payments.

During this reporting period, the Transportation Aids Payment System has been completed and is fully operational as was the Indian Scholarship System, which maintains data on Native American students in post-secondary educational programs. The Organization System, which maintains data on school districts and their associated geo-political descriptors has been transferred from the Information Systems Bureau (ISB) to the SDE-IS and the Levy System has been reprogrammed to incorporate the changes required by the 1980 legislation. Because of the extensive changes required in its computer programs, the levy reports were distributed in mid-November rather than early October.

While the SDE-IS database is not completed, its size and content is sufficiently large so as to require more sophisticated reporting capabilities to make better use of the data. A trend reporting capability has been added, allowing the user to request data and have the computer display the data over a several year period so that the direction of change can be extrapolated. In addition, a linkage to the Minnesota Land Management Information System (MLMIS) has been added, thereby allowing the user to have the data displayed in graphic form on a school district map. This feature also permits combining data from the SDE-IS with data in the MLMIS and

displaying it on a map. Other reporting capabilities which are now available include the location of a Univac 1004 terminal in the Capitol Square Building for use by all educational agencies to link with the University Computer Center and its capabilities for analysis and reporting.

The Department and MECC continue to use the computer located at ESV Region VI (METRO II) for systems development. Because of the size of the database and the requirements to access the data in multiple ways, additional disk memory and disk drive equipment has been added to the computer. A preliminary capacity analysis was completed, and projected usage indicated that additional disk equipment will still be needed in the next fiscal year. Efficient utilization of this computer resource is considered so important to the Department that a resource Utilization System has been developed to show each user the cost of entering, maintaining, and reporting data. This system is scheduled for implementation in January, 1981.

### III. DATA ACQUISITION CALENDAR AND DATA ELEMENT DICTIONARY

The Annual Data Acquisition Calendar, showing the reports required from each school and by each division within the Department, was developed and distributed on September 1, 1980.

The Data Element Dictionary now shows almost 3,250 data elements. This computer based system now includes all data elements in the Annual Financial Reporting System, Levy System, Fall Reporting System, Migrant System, and the School District Information Report. The MINCRIS system, SDE-FIN, and vocational education reports are nearly complete. In process of identification, description, and justification are the special education reports, personnel reports, and child nutrition reports.

Previously, the major emphasis has been to incorporate existing systems into the dictionary. With most of the financial and student data in the system, the emphasis is now on correctly maintaining the accuracy of the existing data elements. Priority is being given to incorporate data elements which are modifications of existing reports rather than entering data elements from new systems.

The 1980 Legislature established a task force on student data and a task force on personnel/payroll data similar to the UFARS Council. Establishing these task forces was delayed pending resolutions of the state's financial situation and the establishment of the ESV Computer Council to which it has a reporting responsibility. It is expected that the task forces will begin operation in January, 1981.

### IV. DEVELOPMENT OF ESV-IS

Within the ESV-IS are three major systems, each of which stands alone as a system in its own right and which can interface to the other systems if necessary.

The Finance System (ESV-FIN) was the first system to be developed and implemented. All districts now use this system as required by statute. The major emphasis during this past reporting period has been to make enhancements and modifications as required by changes in the law, or to conform to changes in standards adopted by the UFARS Council, or to make the system operate more efficiently.

The Personnel and Payroll System (ESV-PPS), which was released in January, 1979,

had another major release which incorporated all of the changes and corrections previously made to date. This system still is criticized for being too big, although the criticism is not as loud when districts become more accustomed to using it. An initial review of the system by ESV Region VII (TIES), indicated that although the system contains features the TIES districts would like, the ESV-PPS system would need a major modification to operate in the TIES environment. The Department established a Request for Proposal (RFP) to review the ESV-PPS but was detained from issuing a contract pending the establishment of the ESV Computer Council. The Council, having been established, the Department is proceeding to have the review completed.

The Student System (ESV-SSS), a collection of several independent modules tied to a single database, is being released January 1, 1981. ESV Region III (St. Cloud) has piloted the system in the rural area while ESV Region VI (METRO II) assisted in completion of the system and is the pilot region in the metropolitan area. With these two regions having the student system available in pre-release form, other regions have made arrangements with these regions for any of their districts desiring to use the system.

The ESV Computer Council was established and held its first meeting on December 18, 1980. They immediately established an organizational structure and set about to develop their role and function in accordance with the law.

The delay in the establishment of the Council has also delayed the development of the rules which the Department, in concert with the ESV Computer Council, is supposed to establish. Part of the problem is that the rules establish standards based on the systems architecture plan and the administrative data processing long range plan which have to be approved by the State Board after consultation with the ESV Computer Council. All of this is further complicated by the rescission of funds which resulted in less money to staff the Council.

While the Council was in the process of being established, a contract was let to Peat, Marwick, Mitchell, and Company for the development of the systems architecture plan, the long range plan, and the implementation of the consultants' recommendations as provided in the appropriation. The amount of the contract was reduced because of rescissions and the due date of the report was delayed until April, 1981.

Not a part of the contract, but based on previous discussions and the earlier report of the consultants, the Department is developing an alternative formula for the distribution of regional reporting subsidies. This formula takes into consideration such variables as the geographic size of the region, the number of school districts affiliated with the region, the student population, and the number of data elements which are required to be reported to the Department.

Each region has received the same amount of reporting subsidy for FY1981 as it received in FY1980. After the rescinded funds were taken from the additional money appropriated by the legislature, the remaining money has been distributed according to plans submitted by each region for the conversion of districts to the ESV-IS, or in accord with the new formula.

In July, 1980, ESV Regions I, IV, and V were discussing the feasibility



of establishing a multi-regional computing center. ESV Region V (Mankato) decided to stay where it is and is negotiating a new contract with the Mankato AVTI. ESV Region I (Moorhead) and ESV Region IV (Marshall) have joined together to jointly operate a computer center to meet the needs of the districts in Western Minnesota. The center will be in Moorhead and will replace the computer located at MECC. The Center is scheduled to be fully operational in June, 1981.

A major issue arising during this past reporting period relates to the role and function which should be ascribed to the micro computer. MECC reviewed the finance system developed by Ortonville and found that, while it did not meet UFARS standards, it could. Specifications to meet UFARS standards have been identified and are being programmed so that this micro based system can be used by other districts. In addition, the Adrian school district participated in developing its capability to enter daily transactions onto the Apple micro computer system and later, when it was convenient, to transmit the data to the large regional computer for processing. This is a more limited and simpler system than at Ortonville and seems to meet some of the needs of many small districts who want the capability of the large statewide system without the necessity of delivering their input form to the regional center or having a computer terminal online to the center. The Adrian system is currently available to other districts and the Ortonville system will be available in late spring, 1981.

#### V. WORK PROGRAM FOR JANUARY - JUNE, 1981

It is anticipated that a considerable increase in the number of requests for educational information will occur during this legislative period. The Department has developed additional staff competencies in preparation for meeting this need.

Systems on the SDE-IS will be tested and implemented as indicated previously. The Special Education System will be re-written to incorporate the additional specifications which are now being identified.

The final stage, prior to the consultant turning over the design and development of the SDE-IS to department staff is completion of the documentation and inservice training of department personnel to operate the system. Priority in these areas will be given for both the SDE-IS and the MINCRIS systems.

Along with the current priority given to changes in the data elements in the Data Element Dictionary, additional resources are being developed to allow incorporating an additional three thousand data elements into the dictionary. If time permits, work will begin to incorporate the ESV-IS data elements into the dictionary.

Concurrently, the task forces on student data and personnel data will become fully operational. One of their first priorities is to establish the standards for the data elements and to report their recommendations for standards for collecting school district data to the legislature.

The ESV-IS will continue to be modified and enhanced to meet changing legal requirements and needs of the districts. Any changes which are proposed, will be reviewed by the appropriate task forces and review committees. Plans are under way to install the student system in the ESV Region II (Duluth) area by spring. Changes to the personnel/payroll system will await recommendations of the consultant.

In ESV Region I (Moorhead) the multi-regional computer center will be established and should be fully operational by June, 1981. The Department is working very closely with the regional management to ensure that the center is established on schedule.

The Department is also working very closely with the consultants to ensure that the systems architecture plan and the long range plan are completed in time for a presentation to the legislature.

In the development of the Ortonville and Adrian micro computer based systems, several issues have arisen. It does not appear that the micro computer will totally eliminate the need for a data communications network although it may well change the structure of the network. It may also require additional staff at the regional level to support the systems which run on the micro computer. These issues will be explored during the next several months.

## VI. SUMMARY

During this past reporting period, progress toward completion of the development of the SDE-IS has been substantial and is expected to be completed during the next period. From that point, maintenance and modifications will be our primary concern.

Along with this, the SDE-IS portion of the Data Element Dictionary is half completed and with additional resources, will be almost completed by the end of the fiscal year.

These two events, plus the added capability of the trend reports and mapping capacity, should provide more interesting and appropriate reports to the legislature. Two events outside of the control of the Department had a major impact on the progress of the Department. The rescinding of funds in order to balance the state budget required that an ancillary reporting system be developed and just generally retarded the progress of all efforts until the impact of the cutback could be identified for each program. As a result, the systems architecture plan, the long range plan and the development of rules were delayed.

The establishment of the ESV Computer Council was a prerequisite to the establishment of the student data and personnel/payroll data task forces. Since the Council first met in December, 1980, other related events have also been delayed.

The Department was heavily involved in the establishment of the multi-regional computer center at Moorhead to serve both the ESV Regions I and IV of western Minnesota.

At MECC the commitment to release the student system in January, 1981 is on schedule. ESV Region III (St. Cloud) and VI (METRO II) piloted the system. Current plans indicate it will be installed in ESV Region II (Duluth) in the spring of 1981.

MECC has also evaluated the Ortonville micro computer based finance system and has developed the Adrian model as a micro computer based batch transmission system. Two issues have been identified which point to the need for maintaining some kind of data communications network for MIS for additional staff at the regional level to service the micro computer systems which are developed in the future.