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IOWA PLAN FOR THE STATEWIDE USE OF THE COMPUTER FOR EDUCATION

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Introduction

The timely information now available in the application of high speed computer techniques to education may benefit students, school administrators, supervisors and other decision makers alike. Science teachers and students may find assistance through the use of instructional and career guidance applications. Education administrators, supervisors, teachers and other community and state planners can benefit by using the available data in projecting alternative solutions for critical planning issues.

Use of the Computer for Education in Iowa

Iowans started using the computer for education applications in the early sixties. As computer centers were established in certain sections of the state, Iowa legislators were concerned with their unscheduled growth. Legislation passed by the General Assembly in 1972 charged the Department of Public Instruction with the responsibility of approving, coordinating and supervising the use of educational data processing in public schools and education agencies (K-14).

The legislation further mandated the appointment of a five-member State Advisory Committee on Educational Data Processing to conduct inventories of current practice and to prepare and recommend a statewide plan for the coordinated use of electronic computers in education for both administrative and instructional application. The Committee was charged further to assist and advise the State Board of Public Instruction in approving, coordinating and supervising the use of computers by Iowa public school districts and education agencies.

The appointed committee developed an *Initial Report* by December, 1972, which was sent to the Iowa General Assembly in February, 1973. The report included an inventory of the computer centers that had been providing service to Iowa public schools (K-14). The *Initial Report* and an unpublished second inventory completed in January, 1974, both indicated that many students, teachers and administrators in Iowa have been denied access or have chosen not to use computer services.

Development of a Plan

In the winter of 1975-76, an ad hoc Task Force appointed by the Superintendent of Public Instruction prepared a statewide plan. The objective

was to coordinate the efforts of all agencies under the jurisdiction of the Board of Public Instruction (K-14) in order to provide equitable and efficient computer education services. The Plan covers both administrative and instructional applications of computer services and includes a listing of possible types of records, reports or instructional uses in each category. Criteria and specifications desirable for the selection and development of computer software are proposed. Concurrently, the *Iowa Administrative Code* was modified to incorporate procedures relating to the planning and delivery of computer services to Iowa public schools and education agencies.

Design of Plan

In the Iowa Statewide Plan, computer services are categorized into two broad areas — Administrative and Instructional. An Administrative System would include subsystems for processing data on finance, personnel, students, educational programs, facilities and community factors. The Instructional System would provide services in the areas of computer literacy, computer assisted instruction, computer instructional services, computer assisted guidance, computer in-service training and computer career preparation.

The design for the provision of computer services statewide is based on a Regional Computer and Area Service/Delivery Center concept. When the network is implemented, one or more Regional Computer Centers will be available to offer large processing and core storage capacity. The Regional Center(s) will also be able to provide uninterrupted backup services to any of the other smaller computers in the system. Area Service/Delivery Centers with lesser computer capabilities will actually deliver the services needed by local schools, education agencies and corporations.

Local school districts will plan annually for their anticipated computer use and needed services. Their Area Education Agency has the responsibility within reasonable financial limitations of arranging for the delivery of the necessary services through an Area Service/Delivery Center. In addition, each Area Education Agency must plan for those services used by its own organization. The Merged Area School Corporations are to arrange for the administrative and instructional services for the programs under their jurisdictions.

The organization to implement, coordinate, operate and maintain the system proposes a hierarchy of financial and administrative responsibility. The Plan suggests that the Iowa General Assembly will be asked to provide the funding necessary to develop the services the State needs for up-to-date planning and decision making on education issues, and to finance its share of the responsibility for making computer services equally available to all public education units (K-14) in Iowa. It is the responsibility of the staff of the State Department of Public Instruction to coordinate the transition from the present to the full implementation of the statewide system.

Implementation of services will start with one or more Regional Computer Centers. These centers will have computer, core and secondary storage capacities beyond the capabilities of the Area Centers. The Regional Center(s) will need to be responsive to user needs and receive direction from a board of advisors that recognizes the collective needs expressed by the Area Education Agencies (intermediate school districts), Merged Area School Corporations (Community Colleges and Vocational-Technical Schools) and the local education units.

At the Area Computer Centers, the Area Education Agencies will pay for the costs 1) involved in delivering administrative services to their own agency, 2) for instructional services used, 3) for remote terminals, 4) for the development of any unique or program capability, 5) for the staff necessary to provide its service/delivery function, and 6) for a part of the telephone line cost from the Regional Center(s).

The local school districts will reasonably be expected to pay for the cost of the remote terminals located in local education units. They will pay an equitable share of telecommunications costs from the Area Service/Delivery Centers, and the administrative and instructional services used exclusively for their own school applications. The Merged Area School Corporations will pay for the computer costs involved in career education and the staff necessary to operate and maintain any service/delivery function for which the Corporation is responsible.

Why a Statewide Plan?

Education administration and education services have become large and complex businesses. Administrators, supervisors, teachers, students and interested community citizens can benefit from the well planned use of the computer in the consideration of possible solutions to complex education situations.

In the school setting, the timely information now possible through the use of the high speed computer can assist administrators in making the most effective use of the time, personnel, finances and facilities under their jurisdiction. When planning for student learning, administrators, supervisors and teachers are recognizing that the flexibility of programming available through the thoughtful application of the computer can offer students new and meaningful learning experiences and guidance information.

In the community environment, citizens responsible for education planning, governance and assessment at local, regional, state and federal levels appreciate all the help available as they, too, are faced with large and perplexing decision-making problems.

Conclusion

In conclusion, the Iowa plan is characterized by: 1) its flexibility, 2) its potential in allowing a high degree of local autonomy, 3) its awareness that needs differ from school unit to school unit, 4) its availability to all units through cooperative local, regional and state efforts, and 5) its potential for efficient, equitable and effective implementation.

Copies of the Plan have been distributed to each state coordinator. Interested individuals may obtain copies by contacting their state coordinator for the Committee on Evaluation and Information Systems (CEIS) or by writing directly to the Director, Regional Computer Centers, Department of Public Instruction, Grimes State Office Building, Des Moines, Iowa 50319.

* * *

Freedom!

Just about the easiest thing we could do these days is to give in to student demands that they be taught according to their own standards, needs, and perceptions, and in ways that will least interfere with their life style. Doing this would make many students happy; the great majority of administrators would sigh in relief, and legislators and trustees would say that faculty members finally have seen the light. W. T. Lippincott, *Journal of Chemical Education*, February 1975, p. 69.

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How Quiet is Your Classroom?

Where there is much desire to learn, there of necessity will be much arguing, much writing, many opinions; for opinion in good men is but knowledge in the making.

Areopagitica, by John Milton

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The most incomprehensible thing about the universe is that it is incomprehensible. *Einstein*