COMPUTERIZED VOCATIONAL INFORMATION SYSTEM

A FUTURISTIC CONCEPT OF VOCATIONAL AND EDUCATIONAL DECISION-MAKING
This brochure describes both the original Project CVIS and an outgrowth of it, the implementation of CVIS in Iowa using a mobile unit by the Joint County School System of Cedar, Linn, Johnson, and Washington Counties.

Project CVIS serves as an illustration of the kind of innovation which can be developed and implemented when local enthusiasm and resources converge with government funds.

**Illinois Project**
*Funded by*
State of Illinois Board of Vocational Education and Rehabilitation, Division of Vocational and Technical Education

**Iowa Project**
*Funded By*
State of Iowa Department of Public Instruction, Kirkwood Community College, The Joint County School System
THE IOWA IMPLEMENTATION OF CVIS

The Joint County School System of Cedar, Linn, Johnson and Washington Counties, in cooperation with Kirkwood Community College and under funding by the Division of Career Education, Iowa State Department of Public Instruction, has adapted the vocational exploration portion of the CVIS program (as described on the following pages) for use in the state of Iowa. Funding for this project began in March of 1971.

Because of the large geographical area that the Joint County serves, a mobile unit has been developed to enable all students in the area to use the program at their school. Consisting of eight cathode ray tube video terminals and an electronic printer housed in a specially constructed trailer, and operating over ordinary telephone lines, this unit is expected to serve 12,000 of a possible 21,000 high school students during the three-year length of the project.

For more information on the adaptation and localizing of CVIS to Iowa, contact:

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319-366-7601
MOBILE UNIT VISITS

1971 - 1972

Iowa City - City High
Iowa City - West High
Williamsburg
Cedar Rapids - Kennedy
Linn - Mar
North Linn
Tipton

1972 - 1973

Washington
Lone Tree
Highland
Iowa Valley
Vinton

Marion
Alburnett
Monticello
Clarence
West Branch
Cedar Rapids - Washington
INTRODUCTION

The computer has made a powerful impact upon business, industry, and applied science. It has made a less spectacular debut into the field of education, specifically for administrative purposes. However, use of the computer by students themselves for computer-aided instruction, including guidance information, is still in its first decade of development and experimentation.

The computer is being viewed by many guidance professionals as a unique tool for their field because of its inherent capabilities. Those which have particular usefulness in guidance are:

1. the capability to store and instantaneously retrieve vast quantities of data,
2. the capability to bring together and relate numerous and distinct bits of information,
3. the capability to repeat the same process in the same way, with patience and accuracy, innumerable times,
4. the capability to simulate a conversation,
5. the capability to perform an infinite number of alternate tasks or "conversations," dependent upon a predetermined design stipulated in the instructions (program), with one student or simultaneously with many, and
6. the capability to sort quickly through masses of data to find those which have certain characteristics prescribed by the user.

A second reason for the current acceptance of the computer in the field of guidance is the conflict of priorities for the counselor's time and attention. He is expected to be an organizer and disseminator of vast amounts of information, a scheduling assistant _par excellence_, and a sensitive facilitator in individual and group counseling. Most of those who are creating computer systems hope to provide substantial assistance with the first two functions in order to allow more time for the third. Administrators and school boards should not view computer-based guidance systems as a replacement for counselors. To do so is to confuse the role of the book and the librarian.

Pioneering efforts in the development of computer-based guidance systems have been made by a number of project teams simultaneously. Any review of the field must include Joseph Impelleteri's Computerized Occupational Information System (COIS), System Development Corporation's Autocoun, David Tiedeman's Information System for Vocational Decisions (ISVD), IBM's Educational and Career Exploration System (ECES), the Bartlesville Total Guidance Information Support System (TGISS), Educational Testing Service's System of Interactive Guidance and Information (SIGI) as well as Willowbrook's Computerized Vocational Information System (CVIS). The reader may review these systems in _Computer-Based Vocational Guidance Systems_ (U.S. Office of Education, 1969) or _Computer-Assisted Counseling_ (Super, et. al., 1970). Some of these systems have been developed and are now abandoned (COIS, Autocoun, ISVD); others are in process of development (SIGI and TGISS); still others are operational in schools with daily users (ECES and CVIS). At this point in time, Project CVIS had the largest number of student users (11,000 in 1970-71 alone), the longest span of everyday operation (since November, 1968), and the largest number of installations (31 terminals spread among five schools in DuPage County, Illinois).
Project CVIS has been under constant development and expansion at Willowbrook High School in Villa Park, Illinois (15 miles west of Chicago), since January, 1967. The original development team includes Lorraine Foster and Willis Farnham, counselors; James Boyd, systems analyst; and JoAnn Harris, Director of Guidance and Project Director. Computer capability and community college applications have been provided by College of DuPage, Glen Ellyn, Illinois. The development and operation of Project CVIS has been substantially supported by the Illinois State Board of Vocational Education, supplemented by High School District 88 and Community College District 502.

Project CVIS is in public domain and now available to educational, non-profit institutions. Details may be found in the closing section of this brochure.

FUNCTIONS AND CAPABILITIES OF THE CVIS SYSTEM

As A Guidance Tool

The basic purpose of the CVIS Project has been and is to provide students with a sophisticated tool with which to explore information about self, occupations, and educational opportunities. The intent is to provide accurate data in an interactive, interesting way. The hypothesis is that students will synthesize knowledge about self and career opportunities into informed decisions with maturity and time.

Students interact with an IBM 360 computer by means of devices called cathode ray tubes. These devices display messages on a TV-like screen to which the student responds by typing on a typewriter-like keyboard. The "conversation" is carried on by the transmission of data from the cathode ray tube over a phone line to the central processing unit of the computer and back to the cathode ray tube . . . instantaneously. The student may have a copy of any message which appears on the screen or of data sent directly from the computer by use of a complementary printer. He may also use audio-visual materials in conjunction with the computerized material, as in the case of the junior high vocational exploration program.

The exploration experience is made personal to the student by the storage of his own school record and the "monitoring" design of the computer's program. The former allows the use of personal data such as name, grades, rank, courses taken, test information, etc. The latter makes it possible to allow the student to review past exploration, to note discrepancies between objective data and tentative plans, and to narrow alternatives.

The CVIS Project has developed guidance applications at three levels: junior high, secondary, and community college. A detailed explanation of each follows.
At the Junior High School Level

One of the major tasks of Phase V was the design and writing of scripts for a junior high vocational exploration program. Glen Crest Junior High School, in Glen Ellyn, Illinois, was chosen as the experimental site for testing this program, and one IBM 2265 stand-alone terminal, one 1053 printer, and one LaBelle Sentinel filmstrip-tape unit were installed at Glen Crest in early October, 1970. Students use the system on a voluntary basis or as a part of a planned classroom unit.

The guidance framework of the junior high program is largely based on the vocational theory of Dr. John Holland, currently at Johns Hopkins University. Dr. Holland, through a series of research studies, has identified six major personality types. Holland views vocational choice as a search on the part of an individual for a work environment which will allow him expression of his personality. Occupations, therefore, can be classified by the same six divisions or combinations thereof. Simply stated, the six personality types are as follows:

1. Realistic:
   Personality Characteristics:
   Has structured and usually inflexible patterns of thought. Avoids goals, values, and tasks which require subjectivity, intellectualism or social skills. Possesses conventional manners, speech, and attitudes. Has materialistic, concrete, present-oriented outlook. Possesses qualities of persistence, maturity, and simplicity.
   Work Activities and Environment:
   Application of science for practical, usable purpose. Activities which produce a tangible, visible, measurable product. Structured, routine tasks without creativity. Manipulation of things, tools, animals, and machines.

2. Conventional:
   Personality Characteristics:
   Is well controlled, neat, organized, practical, structured. Approaches problems in a conservative, stereotyped way. Lacks creativity, spontaneity, and aggressiveness. Holds values which are sanctioned by custom and society. Enhances himself by being a good subordinate and identifying with people who are strong leaders.
   Work Activities and Environment:
   Routine work which is repetitive and certain in nature. Work which demands neatness, consistency, structure, and high degree of accuracy. Work which has practical value and application. Work which is usually done under the control of someone else and by set procedures. Work which often involves clerical functions and some degree of math ability.
3. Intellectual:

*Personality Characteristics:*
Copes with life and its problems by use of intelligence. Is independent, analytical, rational, abstract, perceptive, inner-directed, intellectually curious. Often possesses unconventional values and attitudes. Avoids interpersonal relationships with groups or new individuals or situations which require aggressive social interaction. Achieves primarily in academic and scientific areas. Possesses high degree of originality, verbal skill, and math skill.

*Work Activities and Environment:*
Has strong preference for science occupations. Usually works alone, under his own direction. Often deals with the solution of theoretical problems and the manipulation of word symbols and abstractions. Often works with creative and original projects and tasks. Work varies greatly in approach, is not routine.

4. Social:

*Personality Characteristics:*
Has high interest in people for their own sakes and a desire to be helpful to them. Holds high religious values. Is scholarly and highly verbally-oriented. Is usually cheerful and impulsive. Is often dominant. Values good inter-personal relations.

*Work Activities and Environment:*
Works with people in teaching, helping, leading roles. Attempts to help people because of their innate worth. Avoids manual tasks, those involving math, and abstract tasks.

5. Enterprising:

*Personality Characteristics:*
High value on political and economic matters; places low value on theoretical and aesthetic matters. Likes powerful, leadership roles. Prefers social roles and activities (athletics, interviewing). Engages in more activities than any other type. Dislikes confining manual, nonsocial activities. Sees himself as dominant, sociable, cheerful, adventurous. Achieves in athletics and persuasive areas. Needs recognition, love, and material rewards. Asserts and enhances himself by struggling for power and control by developing athletic abilities, acquiring possessions and exploiting others.

*Work Activities and Environment:*
Work involves dominating, selling, or leading others. Work depends on use of verbal communication skills. Work is done in a social setting.

6. Artistic:

*Personality Characteristics:*
Values aesthetics highly; places little value on political and economic matters. Prefers creative activities (writing, painting). Dislikes "masculine" activities. Sees himself high on writing skills, originality, neatness, independence, low on popularity. Achieves in artistic areas. Has complex, flexible, unconventional outlook. Verbal aptitudes usually greatly exceed mathematical. Avoids direct relationships with others. Learns to relate by indirect means through his medium.

*Work Activities and Environment:*
Produces art, music, literature, etc. Work done with a great deal of independence and without supervision. Work often done alone in a non-social environment.
The junior high script is divided into three distinct sections, which the student may use on different occasions. The first section contains thirty multiple choice items which assist a student in thinking about his personality characteristics, values, activities, interests, ability, and school achievement. As the student responds to the 30 items, the computer stores the responses by the way in which they relate to Holland categories. The system also gives appropriate feedback messages on items which can be compared to the computer-stored student record which contains subject matter grades and test information. After completion of the self-exploration items, the student receives the message: From what you have told me about yourself, it looks as if you might be interested in the following in the order listed:

**ORGANIZATIONAL WORK**  
**TECHNICAL & APPLIED SCIENCE WORK**

**SCIENTIFIC WORK**  
**SOCIAL SERVICE WORK**  
**PROMOTIONAL WORK**  
**ARTISTIC WORK**

At this point, the student is signed off the computer terminal and is invited to use the LaBelle Sentinel cartridge-load unit to look at sets of visuals, co-ordinated with taped scripts which explain the kinds of people— their activities, interests, abilities, etc.— who enjoy each category of work. The student may look at all six sets but is encouraged to view those which were in the range of significance for him.

When the student returns to the computer terminal for the second use of the system, he is asked which sets of visuals he has looked at and is reminded that the ones indicated by him do or do not seem to be areas of significant interest based on his responses to the previous items. Then he is given the opportunity to compare his own responses to those of the “ideal” in any of the six categories. Following is an example from Scientific:

*Activities:* Ideal likes activities requiring analytical and original thinking. Dislikes activities requiring him to socialize with and be outgoing in personality to others.

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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td>Ideal</td>
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<td>xxx</td>
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<td>You</td>
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<td>xxx</td>
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</tbody>
</table>

(exact number of responses by the student which indicates preference for “scientific” activities)

The student may compare himself to any given work area in five successive displays— personality characteristics, activities, values, roles preferred, and abilities.

Following this comparison phase, the student is signed off the computer terminal again and invited to use the LaBelle unit to look at one or more sets of visuals, with co-ordinated tape, which describe 10 - 15 specific occupations within each of the six work areas.

When the student returns to the computer terminal for the third time, he is asked which specific occupations he liked best of those which he viewed. He then receives information about the kind of high school program he would need in order to begin to plan toward that occupation, that is, college preparatory, vocational-technical, or general. Finally, he receives some feedback about his probability for success in these respective programs in high school, based on present school success and ability and achievement as measured by recent testing.

The junior high program is at this time untested and highly experimental. The guidance design and script writing were done by Lorraine Foster, Ruth Miller (counselor at Glen Crest), and JoAnn Harris. The visuals and related tapes were produced by Don Johnson, of the Willowbrook Guidance staff, and Lorraine Foster. Programming was accomplished by Jim Boyd.
At the Secondary Level

The high school student who uses CVIS may select any or all of seven alternative programs. This diagram gives an overview of the organization and sequence of options.

The VOCATIONAL EXPLORATION package is used to unify the information about educational opportunities, course selection, and entry jobs. The program is designed to allow students to explore and receive specific information about 450 occupations. These occupations are catalogued by the Roe classification system (Roe, Anne. *Psychology of Occupations*. New York: Wiley & Sons, 1957). Simply put, this system divides occupations into six levels by training and/or responsibility required and eight categories of interest as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>Service</th>
<th>Business Contact</th>
<th>Organization</th>
<th>Technology</th>
<th>Outdoor</th>
<th>Science</th>
<th>General Cultural</th>
<th>Arts &amp; Entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Psychia-</td>
<td>Economist</td>
<td>Aerospace</td>
<td>Geologist</td>
<td></td>
<td></td>
<td>College Professor</td>
<td>Architect</td>
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<td>Engineer</td>
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<td>II</td>
<td>Social</td>
<td>Public Relations</td>
<td>Hospital</td>
<td>Airplane</td>
<td>Soil</td>
<td>Dental</td>
<td>Teacher</td>
<td>Actor</td>
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<tr>
<td></td>
<td>Worker</td>
<td>Worker</td>
<td>Administrator</td>
<td>Pilot</td>
<td>Conserv-</td>
<td>Hygienist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Police</td>
<td>Sales, Real Estate</td>
<td>Stenographer</td>
<td>Draftsman</td>
<td>Forest</td>
<td>Radio</td>
<td>Photograph</td>
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<tr>
<td></td>
<td>Chief</td>
<td></td>
<td></td>
<td></td>
<td>Ranger</td>
<td>Announcer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Practical</td>
<td>Sales, Auto</td>
<td>Bookkeeper</td>
<td>Jeweler</td>
<td>Surveyor</td>
<td>Optician</td>
<td>Model</td>
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<td></td>
<td>Nurse</td>
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<tr>
<td>V</td>
<td>Waiter</td>
<td>Routeman</td>
<td>Typist</td>
<td>Plate-</td>
<td></td>
<td></td>
<td>Construction Laborer</td>
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<td></td>
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<td></td>
<td></td>
<td>maker</td>
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</tr>
<tr>
<td>VI</td>
<td>Orderly</td>
<td>Retail Sales Clerk</td>
<td>Mail</td>
<td>Meter</td>
<td>Track</td>
<td>Track</td>
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<td></td>
<td></td>
<td></td>
<td>Machine</td>
<td>Reader</td>
<td>worker,</td>
<td>worker,</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Operator</td>
<td></td>
<td>Railroad</td>
<td>Railroad</td>
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</tbody>
</table>
The first time the student uses the vocational exploration program, he reviews his cumulative grades, ability as measured by tests, and interests. He is then asked to choose one of the six levels of training/responsibility and one of the eight categories of interest. At each choice point, he receives computer feedback in regard to the consistency of present choice with stored information. The student's tentative choices of level and field allow the computer to produce a list of occupational titles which are appropriate to the user's choices. The student may explore the occupations on the list by requesting 50-word definitions of any or all of them and printed occupational briefs which detail job duties, training requirements, working conditions, employment outlook, earnings, and sources of further information.

The design of the computer program allows multiple opportunities for re-making of choices, changing of tentative plans, exploration of alternative lists, and seeking of assistance from counselors. The program also records the path of exploration followed by a student so that his last use of the system can be re-capped for him when he returns at a later time. This program is designed to have universal applicability.

The COLLEGE PLANNING branch of the program has three sub-systems. The first allows a student to review any or all of the following topics:

1. What are college entrance requirements?
2. How and when do I apply for admission?
3. How do I visit colleges?
4. How do I figure total college cost?
5. How much money do I have for college?
6. How can I get financial aid?
7. What are college degrees?
8. What is a typical college schedule like?
9. What are work-study programs?
10. What do the words in the college catalogue mean?

The second sub-system allows a student to select a list of colleges for further consideration. 1300 four-year colleges are filed by these characteristics:

- Majors offered
- Size range
- Geographical location
- Type of community (rural, suburban, metropolitan)
- Cost range
- Type of control
- Admission selectivity

The student may choose the characteristics which are important to him in the order he prefers. As he does so, the computer reports how many colleges still exist in the data file with the desired combination of characteristics. The student may ask for the list of the names of appropriate colleges by typing the word LIST whenever he feels that he has narrowed his alternatives to a manageable number. The computer then prints the code numbers and names of colleges which have the combination of characteristics desired.

The third phase of the college planning program allows the students to enter the code number of a specific college and to receive three displays of information—majors offered, admission requirements, and general information (cost, size, location). This data file is updated yearly by a direct mailing to college admission officers. This program is designed to have universal usability.

The COMMUNITY COLLEGE BRANCH allows the student to learn about admission requirements, costs, and curriculum at the local community college. This script would have to be re-written for use in another location.

The TECHNICAL AND SPECIALIZED SCHOOL BRANCH parallels the four-year college program with three separate sub-systems. These are general information about the selection of a technical or specialized school, selection of schools within a 50-mile radius, and specific information about specific schools. This program has a data file of 150 local technical and specialized schools which is updated yearly by direct mailing. The program is usable by other schools, but data must be collected locally and stored in a specific format.
The **APPRENTICESHIP BRANCH** is a teaching script about apprenticeships and how a student might enter one locally. The system also provides the student with a list of local companies which offer apprenticeship opportunities. This program has universal applicability, but requires data collection for the local area.

The **LOCAL JOBS BRANCH** of the system has computer-assisted-instruction about how to find and interview for a job; a job selection game based on fifteen variables that should be considered by an applicant; and finally a catalogue of local companies divided by the types of entry jobs they offer. The student chooses a Roe category and then receives a list of companies in DuPage County which have entry positions in that category.

The **MILITARY INFORMATION SCRIPT** provides boys or girls with information about draft obligations, deferments, ROTC units, military academies, enlistment, and so forth. This information has universal applicability.

**SELECT-A-COURSE** allows a student to register himself for a program of courses for the following school year. The program reviews the student's grades, rank in class, and progress toward completion of graduation requirements with him. It proceeds to explain required courses and register him automatically for them. It allows the student to explore elective courses and ultimately assists him to decide upon a full schedule of courses in keeping with pre-requisites and career plans. This program is usable by other schools but would require considerable local adaptation.

**At the Community College Level**

With minor modifications the vocational exploration and four-year college selection programs have been used by community college students. Additional programs have been developed which allow a student to recall and review his own student record.
As An Administrative Tool

The CVIS Project holds as a conscious goal the development of a total, integrated educational data-processing system. It is our belief that schools will and can afford systems which are designed to serve several masters. To this end, several administrative packages have been developed and are now in continuous operation:

1. **Student record storage and retrieval**
   High school and community college student record formats have been designed. The data in these records are used a) for feedback to students in the guidance framework, b) for retrieval by counselors and advisors on cathode ray tubes in their offices, c) for the printing of transcripts, and d) for the preparation of state reports.

2. **Student scheduling and registration (secondary level)**
   This process is now an integrated system with the following sub-processes:
   a. Student course requests for the succeeding year are entered at the cathode ray tube by the student himself (Select-a-Course), by the counselor, or by a secretary.
   b. These requests may be recalled on the terminal and changed by the counselor at any time throughout the registration process.
   c. Student requests are fed directly into the IBM scheduling package (without intermediate punched card or paper), and student schedules are generated.
   d. The student schedules (with specific period and teacher assignment) are built into the student record as a side-product of generating the student schedules.
   e. Counselors can recall current schedules and change them instantaneously on-line with resultant tallying and de-tallying of available spaces in each class.

3. **Student registration (community college level)**
   This program, entirely separate from the high school counterpart, allows a secretary to produce a class schedule for a student by entering course requests at the terminal. The computer checks available space and produces a workable schedule on-line, produces class add-drop slips, a printed student copy of the schedule and a bill for tuition and fees.

4. **Attendance reporting (secondary level)**
   This system provides a daily absence list and a daily updating of the attendance fields of the computer-stored student records. Teachers are provided with a set of data processing cards, one for each student assigned to their courses. Teachers report a student’s absence by moving his data processing card to a separate wallet. At the close of the school day a secretary collects the cards of absentees from teachers and takes them to the computer center. These are run through a background program which generates an alphabetical, by-class, by-period absence list on ditto stencils while updating the student records.

5. **Updating capabilities**
   Programs have been written which allow on-line (from the terminal) updating of all fields of the student records, the school's master schedule, the guidance scripts, and the data files (college, occupations, technical and specialized schools, etc.).
As An Instructional Tool

A basic computer-assisted instruction monitoring program has been developed which allows teachers to design and write instructional units within certain specific parameters. Once instructional material has been developed, it can be added to the system by punched card or on-line from the terminal. It will then operate without additional programming effort. The CVIS package includes this basic monitoring program, but it does not include the specific instructional units which have been developed by District 88 and College of DuPage teachers.

TRANSPLANTING CVIS TO OTHER SCHOOLS AND AGENCIES

Due to the fact that the CVIS Project has been substantially supported by public funds, the work of the project is available to educational, non-profit institutions and agencies. We have placed a charge of $150 on the package in order to cover the cost of a computer tape, computer time for reproducing the tape, the duplication of a 170-page documentation, and postage.

Schools and agencies may apply for the CVIS Project by completing the form on pages 13-14, enclosing a purchase order or a $150 check (payable to Project CVIS—High School District 88), and sending these to Project CVIS, 1250 South Ardmore, Villa Park, Illinois, 60181. Upon receipt of these we will mail: 1) an 800-BPI tape which includes all the guidance scripts, the data files, and the operating and maintenance programs, and 2) detailed technical documentation.

However, before you make a decision to implement the CVIS Project in your own environment, we strongly urge you to become thoroughly familiar with our work and to adequately assess the resources needed to transplant our work to your setting.

In order to help you understand our system, we offer the following:

1. Demonstration and explanation
   Call Project CVIS (312-833-8075) to make an appointment.

2. A film—“Saturday's Child”—A 20-minute, 16mm, color-sound explanation of the CVIS project.
   Available from Illinois.

3. Full-day workshops on the following dates: Write Illinois for dates.

These workshops are designed to give counselors, administrators, and data processing personnel detailed information about implementing CVIS in their own schools. Participants will find the day more profitable if they have had a detailed demonstration and explanation of the system prior to the workshop.
In assessing the resources available to you for implementing the CVIS system in your own environment, we suggest careful consideration of the following:

**Program:** Does the CVIS Project complement your present Guidance program? Are members of the Guidance staff involved and interested in accommodating the project into the existing program? Can the total guidance program be designed in such a way that maximum use is made of human and computer capabilities?

**Personnel:** Do you have enthusiastic, high-tolerance, committed personnel to oversee both guidance and technical implementation? Do you have professional and clerical personnel to do the necessary local adaptations, such as collection of local data bases (entry jobs, apprenticeship opportunities, technical and specialized schools, and student records), modification of guidance scripts, and modification of administrative programs? Do you have time, plans, and money for local in-service training?

**Power:** Do you have access to sufficient computer power to implement the project? If you do not have your own computer system, can you get computer capability through a local data-processing cooperative, university, community college, or company?

CVIS operates in a multiprogramming environment using an IBM 360/30 65K or 360/40 central processing unit. The operating system is DOS Version 21. The specific hardware configuration depends on the installation under consideration. The following is a minimum system configuration:

- IBM 360/30 65K CPU
- DOS Version 21
- 2—2314 Disk Drives
- 1—5 2848 Display Control Units
- 1—2 2701 Transmission Control Units
- 1—31 2260 Visual Display Stations
- 1—2540 Card Reader/Punch
- 1—1403 Printer
- 1—2841 Control Unit
- 1—2821 Control Unit
- 1—2415 Tape Control Unit
- BTAM Macros Catalogued in System Library

**NOTE:** While the above configuration calls for 2314 disk drives, the program is easily modified to 2311 drives.

**Support:** Do you have sufficient administrative and Board support to complete implementation? Is there sufficient financial support from local and/or outside sources of funding?

If you find value in our work and if you can answer to the above questions affirmatively, we enthusiastically invite you to join us in the implementation, evaluation, and further development of Project CVIS.
REQUEST FOR PROJECT CVIS PROGRAMS
FOR IMPLEMENTATION

Name of School or Agency Requesting Programs

ADDRESS: ____________________________________________ Phone: ________
Street City State

Name of Person making Request __________________________________ Title: ________

1. In what school(s) or agency would you like to implement CVIS?________

2. How many users would the installation serve? _________________

3. What are the ages of the potential users? _________________

4. Do you have counseling personnel who will oversee and evaluate its use in the Guidance function?_____________________________
   If so, who will assume this role? __________________________________ Name and Title

5. Do you have your own computer system? ________ If so, what configuration of equipment? ________________________________
   If not, how will you have access to a computer system? ________________

6. Do you have qualified systems personnel to implement the CVIS programs in your environment? _______________________________
   If so, who will be responsible for this function? __________________________
7. Why do you want to implement CVIS in your setting? What needs do you expect to meet?
________________________________________________________
________________________________________________________
________________________________________________________

8. Will you receive funds from outside your own school or agency for implementation?__________If so, from what source?
________________________________________________________
________________________________________________________

9. Would you like to send personnel to one of our training workshops?___
   If so, please complete and return the applications for training workshop.
   __________________________________________________________
   __________________________________________________________

I request that the CVIS programs and documentation be released to me for non-profit use in my institution only. I agree not to give the scripts, documentation, data banks, or programs to any other person, agency, or institution.

(Signed)  Title

PLEASE MAIL THIS FORM TO:
Project CVIS
1250 S. Ardmore Avenue
Villa Park, Illinois 60181
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