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This brief summarizes research-based implementation factors to improve the selection and use of career information systems in schools, community agencies, and other employment and training settings. Thirteen factors to consider when selecting career information systems are identified: theoretical assumptions upon which the system is based, strengths and weaknesses, instructional elements the system attempts to explain, effectiveness of these elements, specific topics of occupational/educational elements, relevance of elements, type and appropriateness of information covered, coverage of information, internal system structure, degree to which supportive materials explain system structure, degree to which the system provides technical support, recommended hardware, and system dependability. Thirteen factors to consider in using such systems are listed: consistency of system goals with the institution's career development theory, fit of processes and content with career development plans, wide variety of implementation activities, user orientation and follow-up, consideration of career planning needs of target populations, client opportunity to use the system, long-term commitment to providing the system's services, system evaluation, staff user updating and training, facilities with ample and accessible space, equipment availability, equipment in high-traffic areas, and inhouse training for potential users.

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This Brief summarizes research-based implementation factors that can be used to improve practice in the selection and use of career information systems in schools, community agencies, and other employment and training settings.

Career Information Systems are multidimensional resources—either computer-based or not—that provide information about educational opportunities and occupations, "store" personal data about users, and "feed back" this information to help them make career-related decisions. In addition to providing comprehensive, up-to-date information about career options, most systems attempt to relate to the user's individual needs. The typical content components of a system are (1) Appraisal of the student or client through testing and assessment; (2) Information about career, occupational, educational, and other life options; (3) Assessment of options for developing decision-making skills; and (4) Planning for ways in which to implement the informed decisions that have been made.

Although the factors identified in this Brief focus primarily on computer-based systems, many of the points are pertinent to both types of systems.

### 13 Factors in Selecting Career Information Systems

A number of factors should be considered when selecting career information systems, including the following:

1. Theoretical assumptions upon which the system is based. This includes the degree to which the objectives are similar to your objectives.

2. Strengths and weaknesses of the system. It is important to know whether your institution can provide any services that are missing.

3. Instructional elements which the system attempts to explain. Examples include the career planning and decision-making processes.

4. Effectiveness of these elements in teaching the concepts you wish to emphasize. For example, the reading level of the material should be judged.

5. Specific topics included in the occupational and/or educational elements. Topics include aptitudes, abilities, skills, and interests.

6. Degree to which certain occupational and/or educational elements are relevant. Examples include the degree to which the access strategy enhances your career planning program and components are understandable and realistic.

7. Type and appropriateness of information covered. For example, a system might include occupational descriptions, educational programs, and bibliographic resources.

8. Coverage of these types of information. For example, the level of detail and the accuracy of the information should be judged.

9. Internal structure of the system. Examples include the ease of use, the degree to which parts of the system are cross-referenced, and the record storage capacity.

10. Degree to which supportive materials explain the structure of the system. For example, the availability of a counselor's manual and a manual sorting process for use when the computer is unavailable are issues to consider.

11. Degree to which the system provides technical support and is responsive and prompt in fulfilling its commitments. Some factors are the availability of in-service training and the regular backing up of the files.

12. Types of hardware that are recommended for usage. Types include computers, terminals, telecommunication modes, and other optional or recommended equipment.

13. System's dependability. For example, the average "down time" per year, the reliability of its use in other sites, and the projected cost per user in your particular setting are issues to consider.

### 13 Factors in Using Career Information Systems

The consensus of the research is that any system is most effectively used when it is fully integrated with the counseling and career development program that it serves. The following are some of the major factors to consider in using such systems:

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1. The system's broad goals are consistent with your school's or agency's career development theory and practice. That is, the career-choice process fits into the student's or client's life.

2. The specific processes and content fit into the career development plans of your school or agency.

3. A wide variety of activities can be used to implement the objectives and the activities can be implemented throughout the entire school.

4. The users are oriented thoroughly prior to usage and are provided with necessary follow-up assistance.

5. The specific career-planning needs of each target population are considered. That is, each group's personal resources as well as its barriers are considered.

6. All students and clients are provided with the opportunity to use the system. Also, the system is regularly and readily accessible.

7. A long-term commitment is made for providing the system's services. For example, there is an adequate budget, hardware, and necessary supplies.

8. The system is evaluated. Using such criteria as number and types of users, accessibility, and usefulness of information, an evaluation is performed.

9. Primary staff users receive periodic updating and training from the system vendor and have thorough knowledge of the system's operation, the underlying theoretical process, and practical interpretations. Also, at least one site coordinator maintains an ongoing liaison with the system vendor.

10. The facilities have ample and accessible space. Needs include minimal noise and distractions, privacy, and unobtrusive printing capability.

11. All of the necessary equipment is available and in proper working order.

12. The equipment is placed in "high-traffic" areas. One such area is a counseling center where students or clients are directly served.

13. In-house training is provided for potential users. For example, access and data retrieval from at least one file are demonstrated.

The preceding factors are not comprehensive; for further information, contact either your state occupational information coordinating committee (SOICC) or state career information delivery systems (CIDS). Two other valuable national contacts are

National Occupation Information Coordinating Committee
2100 M Street, NW
Washington, DC 20037

and the

Association of Computer-Based Systems for Career Information (ACSCI) Clearinghouse
1787 Agate Street
Eugene, OR 97403

Resources


Suggestions for Further Reading


