A Differential Feature-Cost Analysis of Seventeen Computer-Assisted Career Guidance Systems: Technical Report Number 10
(Eighth Edition)

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Abstract

The primary purpose of this study is to highlight similarities and differences among seventeen computer-assisted career guidance (CACG) systems so that practitioners, CACG system developers, policy makers, and researchers may make informed decisions concerning such systems. The specific CACG systems included in this analysis are: 1) Career & College Quest (Peterson's, 1997), 2) Career Futures (Careerware: ISM Systems Corporation, 1997), 3) the Career Information System (University of Oregon, 1997), 4) Career Perspectives (Chronicle Guidance Publications, Inc., 1997), 5) CareerView (Hobsons Digital Media, Inc., 1997), 6) Career Visions (Career Development Systems, LLC - Licensed from the University of Wisconsin-Madison, 1997), 7) Choices (Careerware: ISM Systems Corporation, 1997), 8) Choices CT [for Adults in Career Transitions (Careerware: ISM Systems Corporation, 1997)], 9) C-LECT (Chronicle Guidance Publications, Inc., 1997), 10) COIN Career Guidance System (COIN Educational Products, 1997), 11) DISCOVER (Windows) (ACT, Inc, 1997), 12) DISCOVER (DOS) (ACT, Inc, 1997), 13) DISCOVER (CD-i) (ACT, Inc, 1997), 14) FOCUS II (Career Dimensions, Inc., 1997), 15) GIS 3.0 (Guidance Information System) (Riverside Publishing Company, 1994), 16) SIGI PLUS (Educational Testing Service, 1997), 17) VISIONS PLUS (ACT, Inc, 1997). For the purposes of this analysis, features include: 1) system content, 2) user friendliness, and 3) support materials and services available from the developer, while costs include: 1) license fees, and 2) support materials. The data presented in this analysis were gathered from CACG software use, support materials provided by the developers, and telephone interviews with the developers. The integration of differential feature-cost analyses into the process of software selection is also discussed. A secondary purpose of this study is to provide a comprehensive description of the seventeen CACG systems included in this analysis by: 1) identifying state, territory, and city-specific availability of occupational information in the CACG systems, 2) identifying the country location, geographic data base origin, and language for each system, 3) identifying the developers of each system, and 4) identifying further sources of information on the design and use of each CACG system (as well as CACG systems in general).

Background

Computer-assisted career guidance (CACG) systems have become one of the most common comprehensive counseling and guidance resources.[1] Gati (1994) described CACG systems as "an implementation of accumulated knowledge about career information and guidance that facilitates better career decision making" (p. 51). For the purposes of this paper, a computer-assisted career guidance (CACG) system is defined as

> a system of interrelated computer-based components designed to facilitate self-assessment, the generation of occupational and educational alternatives, and the use of occupational, educational, and employment information. Such systems are often coupled with counseling interventions and various print and media-based support resources, and are used within an organization to assist individuals in making current career decisions as well as improving their capacity to make effective career decisions in the future (Sampson, 1994a).

An essential element in evaluating the appropriateness of potential systems involves an analysis of data on the effectiveness of CACG systems with different populations using various counselor intervention strategies. The process of completing research and evaluation studies is, however, a time-consuming process. It is not at all unusual to have research appear in the literature on CACG system versions that are no longer available. CACG systems are also dynamic, in that revised or entirely new versions of software appear regularly in response to user feedback and theoretical advances, as well as innovations in computer software and hardware. [See Reardon, Sampson, Ryan-Jones, Peterson, and Shahnasarian (1988), for a discussion of the comparability of different versions of a single CACG system]. These two problems, the time lag in publishing research and evaluation studies and the rapid evolution of CACG systems, necessitate a multidimensional approach to the software evaluation process.

The use of a differential feature-cost analysis offers a potential solution to the above problems. A differential feature-cost analysis allows the comparison of two or more CACG systems in terms of the features available with respect to the costs involved. Gati (1990) stated, "a feature analysis of the systems may be used to eliminate a particular system because of the presence (or absence) of a critical undesirable (or necessary) feature" (p. 122). For the purposes of this analysis, features include 1) system content, 2) user friendliness, and 3) support materials and services available from the developer, while costs include: 1) license fees, and 2) support materials. Because this type of analysis is limited to features and costs, both of which are known at the time software is released, the findings can be made available in a very timely fashion.

A differential feature-cost analysis is best integrated into the planning phase of the implementation process within an organization (Sampson, 1996) as follows:

1) Assess current client and organizational needs;

2) Briefly review a differential feature-cost analysis to become familiar with available features;

3) Weigh the importance of various features (Gati, 1990; Krumboltz, 1990; Oliver, 1990) and cross out features that are not relevant in light of client and organizational needs (Oliver, 1990) and cross out features that are constant across systems (all receiving a "yes") (Jepsen, 1990);

[1]See Sampson and Reardon (1991) for a general examination of trends and problems associated with CACG design and use, and Sampson (1994) for an exploration of factors that facilitate and inhibit the design and use of CACG systems. Comprehensive recommendations for improving the design and use of CACG systems have been proposed for North America (Sampson, Reardon & Lenz, 1991) and for Europe (Banks & Watts, 1990; Weimer, 1992; Watts, 1997). Bibliographies are available that address CACG general issues (Sampson & Reardon, 1998), ethical issues (Sampson, 1998), multicultural issues (Sampson, Sankofa-Amammere, & Reardon, 1996), disability issues (Sampson, Wilde, Slatten, & Reardon, 1996), and research and evaluation (Sampson, Rudd, & Reardon, 1998).

4) Review a differential feature-cost analysis to <u>identify</u> CACG systems that have the potential to meet client needs within the context of the goals, theoretical orientation, staff, and financial resources of the organization;

5) Evaluate the software identified in the previous step in terms of potential effectiveness in meeting current client and organizational needs by having staff actually use the software, reviewing support materials from the developer, reviewing documents that describe system use and evaluate system effectiveness, discussing system use with staff and clients from other organizations, and temporarily using the system with actual clients;[2] and

6) Evaluate the remaining software in terms of costs (Maze, 1985) and available financial resources (Krumboltz, 1990).

"The interaction of CACG system features and costs with varied client populations and organizational variables, is too complex to allow one "best" system to exist for all situations (Sampson & Reardon, 1990, p. 146). As a result, the task of the practitioner is to ask the question: "Given our client population, organizational structure, financial resources, staff (time and skills), and historical/theoretical approach to service delivery, which CACG system provides the features that we need at an acceptable cost, and has been shown to be effective for clients under these operating conditions?" (Sampson & Reardon, 1990, p. 146).

Purposes of the Study

The primary purpose of this study is to highlight similarities and differences among seventeen computer-assisted career guidance systems, so that <u>practitioners</u> may make more informed decisions concerning the adoption of such systems, <u>CACG system developers</u> may more systematically present information about their software, <u>policy makers</u> may monitor the developing scope of system features and costs, and <u>researchers</u> may more fully describe CACG treatment interventions in their studies. The specific CACG systems included in this analysis are: 1) <u>Career & College Quest</u> (Peterson's, 1997), 2) <u>Career Futures</u> (Careerware: ISM Systems Corporation, 1997), 3) the <u>Career Information System</u> (University of Oregon, 1997), 4) <u>Career Perspectives</u>

(Chronicle Guidance Publications, Inc., 1997), 5) CareerView (Hobsons Digital Media, Inc., 1997), 6) Career Visions (Career Development Systems, LLC - Licensed from the University of Wisconsin-Madison, 1997), 7) Choices (Careerware: ISM Systems Corporation, 1997), 8) Choices CT [for Adults in Career Transitions (Careerware: ISM Systems Corporation, 1997)], 9) C-LECT (Chronicle Guidance Publications, Inc., 1997), 10) COIN Career Guidance System (COIN Educational Products, 1997), 11) DISCOVER (Windows) (ACT, Inc, 1997), 12) DISCOVER (DOS) (ACT, Inc, 1997), 13) DISCOVER (CD-i) (ACT, Inc, 1997), 14) FOCUS II (Career Dimensions, Inc., 1997), 15) GIS 3.0 (Guidance Information System) (Riverside Publishing Company, 1994), 16) SIGI PLUS (Educational Testing Service, 1997), 17) VISIONS PLUS (ACT, Inc, 1997). A secondary purpose of this study is to provide a comprehensive description of the seventeen CACG systems included in this analysis by: 1) identifying state, territory, and city-specific availability of occupational information in the CACG systems, 2) identifying the country location, geographic data base origin, and language for each system, 3) identifying the developers of each system, and 4) identifying further sources of information on the design and use of each CACG system (as well as CACG systems in general).

[2]See Bridges (1987), Forrer (1987), Maze (1984), Maze (1989), Maze and Cummings (1982), National Career Development Association (1991), and Riesenberg (1984) for detailed descriptions of the software evaluation process. Also see the Association of Computer-Based Systems of Career Information (1992), Caulum and Lambert (1985), American Counseling Association (1995), the National Career Development Association (1991; 1997), the National Board for Certified Counselors (1997a; 1997b), and the American Psychological Association (1986) for national standards on the development and use of CACG systems.

[1] The results from previous feature-cost analyses may be found in Sampson, Peterson, Domkowski and Reardon (1986); Sampson, Peterson, Reardon, Evans, and Domkowski (1989), Sampson et al., (1989; 1990; 1993; 1994; 1995; 1996).

Methodology

CACG System Selection Criteria

The following criteria were used in selecting CACG systems for inclusion in this analysis: 1) Provision of system components that address self-assessment, the generation of occupational alternatives, and the delivery of occupational information; and 2) Use as a computer-based career information delivery system in more than one state, territory, or city; or 3) Use in more than 500 sites in the United States.

Establishment of Features and Costs

Bloch and Kinnison (1989), Harris-Bowlsbey (1983a; 1983b; 1984; 1985), Heppner and Johnston (1985), Gati and Fassa (1997), Katz and Shatkin (1983), and McKinlay (1984) suggested features which were used to develop system content criteria. The criteria for user friendliness were taken from the evaluation standard developed by Sampson and James (1984) as well as features described by Heppner and Johnston (1985) and Bloch and Kinnison (1989). The criteria for support materials and services available from developers were derived by the authors via discussions with system developers. Cost criteria were taken from Maze (1985) and discussions with system developers.

This is the eighth edition of CACG system feature-cost analyses completed at Florida State University. With each subsequent edition, additional CACG systems and features have been added. By adding additional CACG systems, as suggested by Garcia and Plansker (1990), the analysis more accurately reflects the current range of career guidance practice. In the process of analyzing each CACG system for this study, the authors chose to add new features to the analysis, and to subdivide earlier feature categories to better reflect the contents of the seventeen systems.

Procedures

An eleven member research team was assembled to conduct this analysis. The research team met to review the previous feature-cost analysis and the purposes of the present research. Each member of the research team agreed to be the lead researcher for one or more systems. Each lead researcher used the features associated with their respective system(s) and reviewed support materials available from the CACG system developer(s). Telephone contacts were used to clarify specific questions related to features. The research team then met as a group several times to discuss common criteria for features and to suggest the addition of new features or the deletion of previous features. In situations where different terminology was used by developers to represent similar features, a "/" mark was used to combine terms, e.g., work tasks/activities. After data collection was completed, a second researcher independently verified the accuracy of the data recorded by the lead researcher. After all feature tables were complete, one researcher compiled cost data from telephone contacts with developers or their representatives. A draft of the report was then sent to the developers of each system to identify factual errors and discuss the criteria for receiving a "yes" or "no" for specific features in question. Factual errors were then corrected and developer comments were taken into consideration by the authors in completing the analysis. The authors assume responsibility for the quality of the analysis and related interpretations that are included in this study.

Limitations

While every attempt has been made to be accurate, the reader should be aware of the inherent limitations of any methodology. First, the following analysis does <u>not</u> examine the <u>effectiveness</u> or <u>desirability</u> of the features identified for the seventeen systems. In considering <u>effectiveness</u>, Jepsen (1990) stated:

> The vast amount of information included in the findings [3rd Edition of this feature-cost-analysis] required some simplification. But the mere presence of a feature as part of any complex system does not assure its effectiveness. By analogy one would not always buy the auto with the most "whistles and bells" rather than the one where the whistles actually made a difference, as the warning devices telling the operator that the door is ajar or the signal that your turning light is flashing. Many competing sounds are a nuisance rather than a help. Likewise, too many CACG features are not necessarily a sign of system strength (p. 130).

Krumboltz (1990) noted a similar caution when he stated:

For example, it is reported that there are videotapes for counselor training available in five out the nine systems under review [3rd Edition of this feature-cost-analysis]. A mechanical use of these guidelines would give an equal weight to each of the five programs for having such a videotape. However, some of these videotapes must be superior to others in their creative artistry, their ability to communicate effectively and their ability to maintain viewer interest. The existence of a videotape could be an advantage or a disadvantage depending on the quality of the tape itself. Similarly, each of the other features might be executed to different standards of excellence (p. 134).

With respect to desirability, Gati (1990; 1994; 1996) cautions that CACG features initially perceived as desirable may actually, upon more critical reflection, be judged as unnecessary or detrimental in relation to good career guidance practice. In view of the variability in both the effectiveness and desirability of various features, the reader is strongly encouraged to examine the CACG research and evaluation literature to ascertain the relative merit of these features. In order to help individuals locate appropriate literature on system design and performance, system developers often provide system-specific bibliographies upon request. Additional system-specific bibliographies are available in the Appendix of this report as follows: Career & College Quest (Sampson & Reardon, 1998), the Career Information System (Sampson, Norris, Rush, & Reardon, 1998), CareerView (Sampson & Reardon, 1998), Career Visions (Sampson, Norris, Barrett, & Reardon, 1998), Choices (Sampson & Reardon, 1998), C-LECT (Sampson, Norris, Diaz, & Reardon, 1998), COIN Career Guidance System (Sampson, Norris, Greeno, & Reardon, 1998), DISCOVER (Sampson & Reardon, 1998), FOCUS II (Sampson & Reardon, 1998), the Guidance Information System (Sampson, Norris, Kinsley, & Reardon, 1998), and SIGI PLUS (Sampson & Reardon, 1998).

A second limitation involves the use of a "checklist" approach in presenting the data. In an effort to present feature data in a succinct manner, a dichotomous yes - no "checklist" comparison of systems was used, i.e. "Feature X: Does System A have it? Does System B?" This approach effectively simplified a massive amount of data. However, potential problems occur when this methodology oversimplifies and obscures reality. Certain features cannot be adequately explained by this "yes" - "no" analysis. For example, the checklist indicates that System A handles "understanding life-career roles" and System B does not, while System B handles "issues related to child care" but System A does not. These statements may be true, but not fully informative. The real point in these examples is that where System A concentrates more on general concepts, System B offers more specific information on coping with new life-career roles. The decision as to which approach is "best" depends on typical client needs in a particular setting as well as the theoretical orientation and assumptions of staff members.

Also related to the limitation of using a "checklist" approach, the awarding of a "no" for any given system feature is not necessarily "bad" and the awarding of a "yes" for any given system feature is not necessarily "good." In some cases a "no" may not indicate the lack of a relevant system feature. For example, if a system is not designed to use function keys, then a "yes" for having an introductory orientation to function keys is irrelevant. Conversely, a "yes" may not indicate the presence of a relevant system feature. For example, if the system uses a

conceptual schema for organizing the world-of-work that a professional views as inappropriate, then a "yes" for this system feature is irrelevant.

Oliver (1990) noted that the checklist approach taken in this feature-cost analysis, "is a tool to be used in evaluating a CACG system for a specific population. Totaling the "yes" and "no" items does not constitute an evaluation in and of itself" (p. 139). Therefore, this comparative analysis is not a "score sheet," but a preliminary guide for further detailed consideration about whether a particular feature is important for a given clientele. It is hoped that although this method may blur a few trees, it can provide a useful map of the forest.[3]

[3]For further discussion of methodological issues, see Garcia and Plansker (1990), Gati (1990), Jepsen (1990), Krumboltz (1990), and Oliver (1990) for critical reviews of the third edition of this feature-cost analysis (Sampson, Reardon, Humphreys, Peterson, Evans, & Domkowski, 1990) and Sampson and Reardon (1990b) for a rejoinder and a discussion of implications for practitioners, researchers, CACG system developers, and public policy makers.

Results[4]

The results of the analysis are provided in a series of Tables. Tables 1 through 4 provide data on fifteen CACG systems used in high school, college, employment service, vocational-technical school, library, rehabilitation, correctional, and military settings: Table 1 includes system content; Table 2 includes user friendliness; Table 3 includes support materials and services available from the developer; and Table 4 includes costs. Table 5 identifies state, territory, and city-specific availability of occupational information in the CACG systems, including official governmental designation as a computer-based career information delivery system (CIDS).[5] Table 6 identifies the country location, geographic data base origin, and language for the CACG systems included in this report. Table 7 provides the contact information for CACG system developers to assist the reader in continuing the evaluation process. The Appendix contains two bibliographic collections on computer-assisted career guidance. The first collection of bibliographies identifies sources of information on the theoretical and research foundations, evaluation and research reports, program descriptions, and support materials associated with the CACG systems included in this differential feature-cost analysis. The second collection of bibliographies identifies sources of information on general, ethical, multicultural, and disability issues, and research data, associated with the design and use of CACG systems.

While acknowledging the value of adding more qualitative, outcome-oriented judgments to increase the utility of this analysis for software selection, such an effort is beyond the practical scope and resources available for this study. The present analysis is intended to provide a foundation for subsequent, more comprehensive evaluations of CACG systems.

[4]The results from previous feature-cost analyses may be found in Sampson, Peterson, Domkowski and Reardon (1986); Sampson, Peterson, Reardon, Evans, and Domkowski (1989), Sampson et al., (1989; 1990; 1993; 1994; 1995; 1996).

[5]Lester and Ollis (1988) defined CIDS as, "computer-based resources that provide information on occupations and related education and training opportunities" (p. 205). Hopkins, Kinnison, Morgenthau, and Ollis (1992) stated that CIDS, "provide useful information for people who are

exploring, planning, or making decisions about careers. CIDS contain national, state, and local information about occupations, educational and training institutions and programs, and related subjects. . . . Most of these systems are computer-based, but other media are also used to provide information. Tabloid newspapers and telephone hotlines, for example, can reach people in areas without access to computerized systems" (p. 1).

Discussion

In drawing conclusions from Tables 1 through 4, it is important to consider the following caveats. First, CACG system features vary considerably in perceived importance among practitioners, CACG system developers, policy makers, and researchers. The capacity to identify occupational alternatives by different key variables, the inclusion of different categories of occupational and educational information, or the inclusion of an integrated decision-making process that guides an individual's use of the system, could each be valued very differently among professionals. Second, CACG system costs vary considerably according to base price and pricing structure. Variations in discounts for leasing more than one copy of the software, discounts for multi-year leases, the option for using software on multiple computers at one institution at no additional cost, multiple institution software discounts, state-wide software discounts, and unit costs of nonconsumable and consumable support materials may have considerable impact on the ultimate costs over time. Decisions regarding CACG system adoption should be based on a careful analysis of the interaction of features, costs, and the context for implementation of the system. The context for implementation could include the mission of the organization, theoretical assumptions of counseling and guidance, staff competencies, and the size of the organization. The findings of this report can be a starting point for making decisions about CACG adoption.

As shown in Table 5, seven of the seventeen CACG systems examined in this study provide state-specific occupational information. In many cases, State Occupational Information Coordinating Committees (SOICCs) have recognized the efforts of a CACG system developer to provide state-specific information by designating a CACG system as the official CIDS for that state (or territory/city). Even when a SOICC has recognized one system, other CACG system developers have still often made the effort to provide state-specific information. It appears that many CACG system developers have made a strong commitment to providing state-specific information in a variety of states.

Table 6 indicates that the use of the seventeen CACG systems included in this analysis is beginning to spread beyond the original countries of origin. It would appear that CACG systems are steadily becoming an international resource for the delivery of career guidance services. The international availability of CACG systems and CACG system data bases has the potential to further encourage the development of a global economy by facilitating the education, training, and employment of individuals across national borders.

The Appendix contains a substantial amount of literature on the CACG systems included in this differential feature-cost analysis and on systems in general. An obvious relationship can be observed between the length of time that a system has been in operation and the amount of

system-specific literature that is available. A well developed literature base for a specific system shows consistent evidence of: 1) system developer involvement in documenting the evolving theoretical and research foundations of a system and in creating appropriate support materials, and 2) an effort by system developers, followed by subsequent independent efforts of researchers and practitioners, to establish the efficacy of system use with various populations in different settings. Given the major design changes that occur among CACG systems every five to ten years, the literature for a system needs to keep pace with system evolution. A review of bibliographies on CACG general, ethical, multicultural, and disability issues, and research data, shows that substantial work has been accomplished in anticipating and reacting to aspects of CACG design and use that can impact system effectiveness. The regular pace of system evolution requires that these issues be reevaluated on an ongoing basis. For example, the emerging use of multimedia and artificial intelligence components within CACG systems will require a reevaluation of human and computer roles, implementation processes, and research and evaluation approaches, as well as ethical, multicultural, and disability issues. Finally, care needs to be taken in the effective dissemination of the literature contained in all of the above bibliographies. Busy practitioners, system developers, and researchers need quick and easy access to appropriate information. By better understanding previous efforts, best practices in CACG design and use may be emulated and costly mistakes may be avoided. Identifying the existing CACG literature on an ongoing basis is a necessary first step in this process.

Conclusion

Hopefully, by making it easier to examine the features and costs of CACG systems, professionals will be both better <u>motivated</u> and more <u>capable</u> of dealing with the complex evaluative considerations that undergird the selection of CACG systems for specific purposes and settings. The ultimate effectiveness of this feature-cost analysis, therefore, can be measured by the willingness of professionals to commit the time and energy to move beyond basic surface-level evaluations to more theory-based, context-specific, comprehensive evaluations of CACG system performance. The ultimate beneficiaries of such an effort would be the millions of adolescents and adults who seek assistance each year in making career choices (Sampson & Reardon, 1990).

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Table 1
Comparison of System Content

Table available for download.

Table 2
<u>Comparison of User Friendly Features</u>

Table available for <u>download.</u>

Table 3
<u>Comparison of Support Materials and Services Available from Developers</u>

Table available for <u>download</u>.

Table 4
<u>**Comparison of Costs**</u>

Table available for [download](#).

Table 5
Availability of State-Specific Occupational Information in CACG Systems[1]

Software	State/Territory/City[2]
Choices and Choices CT	Arizona
	California
	Colorado
	Guam *[3]
	Florida *
	Illinois
	Indiana *
	Iowa *
	Kansas
	Kentucky
	Louisiana *
	Maine *
	Minnesota
	Mississippi *
	Missouri *
	Nevada
	New Hampshire
	New Mexico *
	New York
	North Carolina
	North Dakota *
	Northern Mariana Islands *
	Pennsylvania *
	South Dakota
	Tennessee
	Texas
	Utah *
	Vermont *
	Virginia
	Washington
	Wyoming
Career Information System (CIS)	Alaska *
	California
	Colorado *
	Georgia *
	Hawaii *
	Idaho *
	Illinois *
	Minnesota *
	Montana *
	Nebraska *
	Nevada *
	New York (City)
	Ohio *
	Oregon

[1]Current as of July 1998

[2]California, Connecticut, New Hampshire, Massachusetts, New York, Texas, West Virginia, and the Virgin Islands have one or more computer-assisted career guidance systems in operation, but the State Occupational Information Coordinating Committee (SOICC) has not designated any as the official state-wide computer-based career information delivery systems (CIDS).

[3]An asterisk (*) indicates official SOICC designation as a computer-based CIDS.

Software	State/Territory/City[4]
COIN	California
	Colorado
	Indiana
	New England States
	Ohio
	Oklahoma *
	Pennsylvania
	South Carolina *
	South Dakota
	Texas
DISCOVER (DOS)	Arkansas
DISCOVER (Windows)	California
	Indiana
	Maryland
	North Carolina
	Oklahoma
	Pennsylvania
	Massachusetts
	South Dakota
	Texas
	Washington
	West Virginia
	Wisconsin
GIS 3.0 (Guidance Information System)[5]	Rhode Island *
VISIONS Plus	Maryland *
State-specific systems[6]	Arizona *
	Arkansas *
	Kentucky *
	Michigan *
	New Jersey *
	North Carolina *
	Puerto Rico *
	South Dakota *
	Tennessee *
	Virginia *
	Washington *
	Wyoming *

[4]California, Connecticut, New Hampshire, Massachusetts, New York, Texas, West Virginia, and the Virgin Islands have one or more computer-assisted career guidance systems in operation, but the State Occupational Information Coordinating Committee (SOICC) has not designated any as the official state-wide computer-based career information delivery systems (CIDS).

[5]Data on "Employment Potential" (emerging, established and growing, large and stable, small and stable, declining, and individual talent) is automatically available for each state nationwide.

[6]Includes computer-based CIDS with software and data that are unique to a particular state/territory, or use computer-based CIDS with software that has been substantially modified from an original system.

Table 6
CACG System Location, Data Base Origin, and Language[1]

CACG System	Location[2]	Data Base Origin	Language
Career & College Quest	USA	USA	English
Career Futures	Canada	Canada	English
		Canada	French
	USA	USA	English
Career Information System (CIS)	USA (CIDS)	USA State	English
Career Perspectives	USA	USA	English
CareerView	USA	USA	English
Career Visions	USA (CIDS)	USA State	English
Choices	Belgium	Belgium	Flemish
			French
	Canada	Canada	English
		Canada	French
	France	France	French
	Hungary	Hungary	Hungarian
	Luxembourg	Belgium	French
	Netherlands	Netherlands	Dutch
	USA	USA	English
	USA (CIDS)	USA	English
Choices CT	Canada	Canada	English
		Canada	French
	USA	USA	English
C-LECT	USA	USA	English
COIN	USA	USA	English
	USA (CIDS)	USA State	English
DISCOVER (CD-I)	USA	USA	English
DISCOVER (DOS)	Canada	Canada	English
	Canada USA	Canada	French
		USA	English
DISCOVER (Windows)	USA	USA	English
FOCUS II	USA	USA	English
GIS 3.0	English	USA State	English
(GUIDANCE INFORMATION	USA (CIDS)	USA	English
SYSTEM)	USA (Military)		
SIGI PLUS	USA	USA	English
	Australia	Australia	English
VISIONS Plus	USA (CIDS)	USA State	English

[1] Current as of July 1998

[2] Where appropriate, USA locations are designated as a Career Information Delivery System (see also Table 5) or as a United States military installation. Unless otherwise noted, the system is available on a nation-wide basis. Systems available in multiple countries that use the country-of-origin database and language are omitted from this table.

Table 7
Addresses and Phone Numbers of Computer-Assisted Career Guidance System Developers

CACG System	Address and Phone Numbers
Career Information System (CIS)	National Career Information System University of Oregon 1177 Pearl Street Eugene, OR 97401-3527 **(541) 346-3875** / (541) 346-2346 FAX E-mail: erdman@oregon.uoregon.edu Web Site: http://www.intocareers.com
Career & College Quest	Peterson's, Inc. 202 Carnegie Center P. O. Box 2123 Princeton, NJ 08543-2123 **(800) 338-3282** / (609)243-9150 FAX E-mail: dougk@petersons.com Web Site: http://www.petersons.com
Career Visions	Wisconsin Career Information System Center on Education and Work University of Wisconsin-Madison 1025 West Johnson Street Madison, WI 53706 **(800) 442-4612** / (608) 262-9197 FAX E-mail: rlambert@soemadison.wisc.edu Web Site: http://www.cew.wisc.edu
Career Futures Choices Choices CT	Careerware: ISM Systems Corp. 2220 Walkley Road Ottawa, Ontario K1G 5L2 CANADA **(800) 267-1544** / (613) 739-4933 FAX E-mail: bmaccall@fed.ism.ca Web Site: http://www.careerware.com
Career Perspectives C-LECT	Chronicle Guidance Publications, Inc. 66 Aurora Street P.O. Box 1190 Moravia, NY 13118-1190 **(800) 622-7284** / (315) 497-3359 FAX E-mail: 101565.1244@compuserv.com
COIN	COIN Educational Products 3361 Executive Parkway, Suite 302 Toledo, OH 43606 **(800) 274-8515** / (419) 536-7056 FAX E-mail: coin@coinep.com Web Site: http://www.coinep.com
CareerView	Hobsons Digital Media, Inc. 10200 Alliance Road Cincinnati, OH 45242 **(800) 927-8439** / (513) 891-6222 FAX E-mail: preiner@collegeview.com Web Site: http://www.collegeview.com

CACG System	**Address and Phone Numbers**
DISCOVER (CD-I)	ACT, Inc.
DISCOVER (DOS)	ACT Educational Technology Center
DISCOVER (Windows)	Executive Plaza 1
VISIONS Plus	11350 McCormick Road, Suite 200
	Hunt Valley, MD 21031-1107
	(800) 645-1992 / (410) 785-1714 FAX
	E-mail: wall@act.org
	Web Site: http://www.act.org
FOCUS II	FOCUS II, Career Dimensions, Inc.
	P.O. Box 998
	Center Harbor, NH 03226
	(603) 253-8536 / (603) 253-3350 (FAX)
	E-mail: cdifocus@aol.com
	Web Site: http://www.focuscareer.com/
GIS 3.0	Riverside Publishing Company
(Guidance Information System)	Attention: GIS
	425 Spring Lake Drive
	Itasca, IL 60143
	(800) 767-8420 / (630) 467-6069 FAX
	E-mail: tina_tripoli@hmco.com
	Web Site: http://www.riverpub.com
SIGI PLUS	Educational Testing Service,
	Director, Career Guidance - SIGI PLUS,
	Room W-153, MS 09-W,
	Rosedale Road,
	Princeton, NJ 08541-6403
	(800) 257-7444 / (609) 951-6800 FAX
	E-mail: cuhrich@ets.org or sigiplus@ets.org
	Web Site: http://www.ets.org/sigi/