# An Analysis of the Localization Feature of Two Computer-Assisted Career Guidance Systems - DISCOVER and SIGI PLUS: Technical Report No. 14

by

Janet G. Lenz
Stephen J. Leierer
Robert C. Reardon
James P. Sampson, Jr.

June 22, 1992

Center for the Study of Technology in Counseling
and Career Development

Department of Human Services and Studies
215 Stone Building
The Florida State University
Tallahassee, Florida 32306-3001

Janet G. Lenz is Associate Director in the Career Center, Stephen J. Leierer is a Career Advisor in the Career Center, Robert C. Reardon is Professor and Director of the Curricular-Career Information Service, and James P. Sampson, Jr. is an Associate Professor in the Department of Human Services and Studies. The third and fourth authors also co-direct the Center for the Study of Technology in Counseling and Career Development at Florida State University. Support for this work was provided by a grant from the Prudential Foundation.

# Table of Contents

# List of Tables

# An Analysis of the Localization Feature of Two Computer-Assisted Career Guidance Systems - DISCOVER and SIGI PLUS: Technical Report No. 14

## Abstract

This report describes the efforts of the Career Center at Florida State University to implement the localization options in the DISCOVER and SIGI PLUS computer-assisted career guidance (CACG) systems in 1991-1992. A review of the literature and current use of localization suggested that it is a complex, underutilized extension of CACG software. Use of the localization feature raises issues about the nature of the desired client outcomes, the type of information to be included, the processes and costs for installing and using the feature, and who in the organization should be responsible. To determine what types of information to include in localization, career advising staff were surveyed, two staff meetings were held, and user feedback on the two CACG systems were examined. It was decided to emphasize local information that would accomplish the goals of (1) providing instructions to improve client interaction with the CACGS and reduce client confusion, and (2) linking clients with other Career Center resources and activities. Primary localization efforts were directed toward DISCOVER because the software design was more compatible with the two program goals noted above. This report includes a discussion of project findings in relation to localization issues, i.e., clarifying the purposes of localization, the influence of system design on localization functioning, the impact of localization on CACG system effects, and the impact of localization on staffing and training. The report concludes with a review of implications for practitioners and system developers of this study of CACG system localization features.

# Introduction

In November 1990, the Career Center at Florida State University responded to a Request for Proposals (RFP) by the Career Planning and Placement Grants Program of the Prudential Foundation in Newark, New Jersey. Among other things, the RFP indicated an interest in receiving proposals that addressed "office equipment and computer technology." In responding to the RFP, the Career Center proposed to use the localization option available in the DISCOVER (ACT, 1991a) and SIGI PLUS (Educational Testing Service, 1991a) computer-assisted career guidance software to inform students about local programs, resources, activities, and resource persons that could positively impact career development. The decision was made to focus localization efforts on DISCOVER and SIGI PLUS because they were the two most frequently used computer-based career guidance systems (CACGS) in the Career Center. Upon receipt of the grant award in early 1991, a four-member Project Team was formed and worked from April 1, 1991, through April 30, 1992, to enhance the use of the localization option in DISCOVER and SIGI PLUS software in the FSU Career Center. The following is a report of that work.

## Career Services at Florida State University

One of the first issues the Team considered was the unique context in which their Center operated. This section includes a brief description of career service delivery at Florida State University, in order to provide a framework for understanding the activities and outcomes described later in this report. The FSU Career Center is a department in the Division of Student Affairs. It is a centralized, comprehensive, integrated unit composed of three programs, a state-of-the-art career guidance computer laboratory, and a library. The programs are Curricular-Career Information Service (CCIS) (educational and career planning and advising), Career Experience Opportunities (CEO) (occupational exploration and experience), and Placement (employment recruiting and interview scheduling). The CCIS program makes extensive use of instructionally-designed materials and a self-help oriented approach to service delivery. Most career advising is done by carefully trained, part-time staff who are graduate students in counseling or higher education. The Center logs more than 8,000 career advising contacts annually, and the CACG computer lab schedules more than 1,200 appointments annually. Finally, the Career Center also houses staff and offices of the Center for the Study of Technology in Counseling and Career Development.

In 1988, CCIS had undertaken an earlier effort at localization using the DISCOVER system (Weber, Sampson, & Reardon, 1988). This effort at localization was done on a much smaller scale and the activities were carried out by a part-time employee who had been with CCIS for one year. This person worked independently using an earlier version of the DISCOVER Professional Manual (ACT, 1991b) as the only reference. The primary aim of this localization effort was to link aspects of

DISCOVER to other Career Center resources. When this individual left the Center to pursue other employment, no further localization activities were undertaken. Given the enhancements that had been made to DISCOVER and SIGI PLUS since our initial effort, we felt it was important to revisit the localization features in each system prior to beginning our work.

### Localization System Features and Use

One of the first things the Project Team learned was that the design and use of localization in DISCOVER and SIGI PLUS was based on different software and hardware considerations and assumptions. For example, DISCOVER provides for use of localization at the beginning of system modules, and the actual amount of local information added to the software depends on the size of the computer hard drive (ACT, 1991b). SIGI PLUS, on the other hand, allows for localization following each section and following the sign-off screen (Educational Testing Service, 1991b).

The Project Team conducted a literature review of CACGS in an effort to learn about prior use of the localization options, and contacted the developers of DISCOVER and SIGI PLUS to inform them of this project and inquire about related work at other sites. The literature search revealed no reports on CACG localization efforts by schools or other organizations, with the exception of a brief SIGI PLUS News article describing one institution's use of localization (Educational Testing Service, 1988). Moreover, in informal conservations, the developers of DISCOVER and SIGI PLUS agreed that although most sites wanted a localization option in the system prior to purchase and considered it a requirement, in reality, the developers believed this feature was seldomly fully implemented after purchase.

As a result of this review, the Project Team concluded that the localization option represented a complex, underutilized extension of CACGS software, and that career services practitioners and software developers might benefit from an analysis of issues involved in improved use of localization features.

### Description of Localization Features

One of the first tasks associated with any localization effort is to familiarize oneself with the unique features for each system's localization option. A project team member with a particular interest in computers undertook a review of this information. The section that follows includes brief summaries of the localization features available in DISCOVER and SIGI PLUS. It should be noted that the localization features of both systems are evolving in response to user feedback. The following summaries were up-to-date as of August 1992. The reader should contact each respective developer for a current description of localization features.

**DISCOVER**. DISCOVER features permit local sites to add to the program in the following ways: (1) build or update bulletin boards, (2) modify or add topics and information about occupations, (3) add or modify information about majors or programs of study, and (4) modify questions asked of the users (ACT, 1991b). The amount of material which can be placed on DISCOVER for localization depends on the space available on the hard drive. Local sites can create, add to or delete an existing DISCOVER file. The information files about careers and majors can be saved from year to year. However, the screens for announcements or "bulletin boards" before each module cannot be saved when DISCOVER is updated. For this reason, sites are urged to make hard copies of all bulletin boards so they can re-enter this information after updating the system. The process of modifying occupational information through the localization option is a time consuming process. The DISCOVER Manual (ACT, 1991b) provides helpful suggestions for sites to consider prior to utilizing this localization feature. These include such things as: (1) determining exactly how much localization is desirable and 2) determining whether there is sufficient staff time to devote to the tasks involving in modifying occupational information.

**SIGI PLUS**. Many of the above suggestions are also useful in implementing the SIGI PLUS local option. SIGI PLUS features permit sites to add local information screens in several sections (Educational Testing Service, 1991b). The SIGI PLUS localization screens will automatically show up as additional screens in the system. In "INFORMATION," one screen can be added following any or all 27 questions about each occupation. In "COPING" one screen of local information can be added to one or all of the 21 questions already in SIGI PLUS. NEXT STEPS allows for one screen following each of the six short-range goals. Every SIGI PLUS section provides one localization screen at the end of the section. There are two screens available for localization following the sign-off at the end of a client's SIGI PLUS section. According to our calculations, SIGI PLUS has 35,000 lines of approximately 73 characters per line available for localization. All files can be saved from year to year. The local data can be copied and restored by an eight step procedure; the local file can be downloaded to a floppy disk, then restored when SIGI PLUS has been updated.

## Methodology

### Procedures

The localization effort on the Florida State University campus began with brainstorming sessions among several key staff members. The "localization project team" consisted of the unit Director, a faculty member who serves as a consultant to the Career Center on the use of CACGs, a person involved in training and supervising staff to use CACGS, and a graduate assistant with

an interest in research and technology. These brainstorming sessions raised a wide range of issues related to the use of the localization feature. Issues raised included: (1) the goal(s) we were trying to achieve by localizing SIGI PLUS and DISCOVER; (2) the type of information to input--including determining priorities--i.e., what type of information was most important, "persishable" information vs. information that was instructional in nature; (3) processes for entering the information, how much staff time to commit to this process, e.g., entering local information for each occupation in the data base would require significantly greater staff time than simply including brief instructions at the beginning or end of a module/section; (4) who would be responsible for maintenance and upkeep?

In trying to determine what types of localization information would be most helpful, the Project Team decided that it would be useful to gather suggestions from the Center's Career Advisors (CAs) who had daily contact with clients using DISCOVER and SIGI PLUS. First, the Project Team conducted a survey with the CAs concerning their experience with and knowledge of systems (see Appendix A). The results of this survey are summarized in Table 1. The majority of respondents had worked in the Center seven months or longer and had been trained in the use of CACG systems either through self-directed learning, staff development meetings or both methods. In addition to the written survey, two group sessions (one focused on DISCOVER and another on SIGI PLUS) were used to collect additional information from Career Advisors. The items used to stimulate CA thinking for these group sessions are found in Appendix B. The results of these group sessions are summarized in Appendix C. Some localization screens were created in direct response to suggestions made in these group sessions, e.g., prompting users to print copies of materials. Other suggestions or problem areas discussed in these sessions related to things such as software design considerations (e.g., screen colors) or training issues (e.g., CAs lack of knowledge about specific system features), and therefore could not be addressed through the localization option.

To gather additional information on client reactions to DISCOVER and SIGI PLUS, the Project Team reviewed data provided by career planning class students who completed a "Computer Feedback Form" (see Appendix D) on SIGI PLUS or DISCOVER as part of a class assignment. This qualitative information provided some general guidelines for project members to consider in determining the best use of local information, but because of its length and format, a detailed summary of these results is not included in this report.

## FSU Localization Goals

After reviewing the information generated through these activities and after careful consideration of our local situation, what we were trying to accomplish, and the staff time available to enter local data, the Project Team decided to

emphasize local information that would accomplish two primary goals: (1) provide instructions to improve client interaction with the CACGS and reduce client confusion, and (2) link clients with other Career Center resources and activities. Two primary factors led to the selection of these localization goals. First, the sessions conducted with the Career Advisors provided clear support for the goal related to improving clients' interaction with the system. Second, FSU's Career Center is comprehensive in nature and provides a wide variety of resources and information materials that can be useful to clients following their interaction with a CACG system. Our aim was to reinforce the users' follow-up with staff and other center resources to ensure that their needs had been met.

With these goals in mind, the project team member with the technical expertise on localization was asked to begin some initial work by inputting local screens on one system. Copies of these screens were reviewed and edited by team members in a group session. Once the final version of the local screen was agreed upon, the team member responsible for inputting local information was given the go ahead to add it to the other machines that had DISCOVER and SIGI PLUS on them.

## Results

The majority of the localization efforts at FSU's Career Center were focused on DISCOVER for Colleges and Adults (ACT, 1991). The system design feature for localizing DISCOVER that allowed for the input of information prior to each module better accommodated the objectives we were trying to accomplish through localization. A bulletin board (Appendix E) was added at the beginning to provide some additional instructions for the user. The content of this screen was derived from comments generated through the activities described in the Methodology section above. Additional local information (see Appendix F) was also added to the beginning of DISCOVER modules 1-7.

For the most part, the options provided for placement of local data in SIGI PLUS were not compatible with the first localization goal established by team members, which was "to provide instructions to improve client interaction with CACGS and reduce client confusion." One screen (see Appendix G) was added at the sign-off stage to encourage users to follow up with other resources in the Center, including seeking additional assistance from a Career Advisor.

## Discussion

This study of the localization features of DISCOVER and SIGI PLUS and their implementation in a comprehensive university-based career center resulted in outcomes that went well beyond simply typing in information that would appear on a screen. The preparation process that proceeded the entering of information into a particular system raised a wide range of issues for the

Project Team to consider. These issues dealt with our purposes for localization, how the system design features influence localization, the impact of localization on the implementation of CACG systems, and how localization impacts staff functioning and staff training. A more detailed discussion of these issues and their implications for practitioners and systems developers is provided in the section that follows.

## Issues Involved in Using Localization

The decision to use the localization feature of a CACG system causes several issues to surface within the organization. These issues include clarifying the nature of client needs in relation to the purposes of localization, the influence of system design considerations on localization functioning, the impact of localization on CACG system implementation, and the impact of localization on staffing and training functions.

**Clarifying the purpose of localization**. Localization can be used in two distinctive modes depending on the perceived needs of CACG system users in the specific, local service delivery setting. The first mode for localization involves the provision of local data. Examples include: (1) adding local labor market data to existing national or state occupational data and (2) indicating the topic, schedule, and room locations for career guidance workshops offered by the institution. The second mode for localization involves the provision of expert recommendations (process-oriented suggestions for making effective use of the CACG system for various populations of users). Examples include: (1) recommending that the user stop and review their occupational search printouts before viewing occupational information contained in the system in order to check the appropriateness of the occupations obtained and to identify which occupations are worth exploring, and (2) explaining the value of information interviews with locally employed individuals as a supplemental source of occupational information.

**The influence of system design considerations on localization functioning**. Regardless of the philosophy adopted by an organization, the system design for localization places some constraints on where you can put information. Where the information can be placed in the system influences the type of information presented. A distinction must be made between preparing someone to use something (i.e., an "advance organizer" or "front loading") versus helping them to make use of something they've already done. For example, in SIGI PLUS, localization frames occur following sections. In DISCOVER, localization frames occur at the beginning of modules. The placement of localization screens at the beginning of a module supports the expert recommendations mode of localization, preparing the user to make maximum use of the system based on the experience of local counselors. In other words, the design of localization in the software constrains the manner in which localization can be used.

**The impact of localization on CACG system implementation**. The experience that users have with the localization function of a CACG system provides an important source of evaluation data that can eventually affect system implementation. For example, users may respond that the specific local data on academic programs or occupations were one of the most valuable aspects of system use. This would argue for an increase of staff resources allocated to this type of localization effort. Alternatively, users may respond that the local data were limited in scope and duplicated more detailed data available in the career library. This would argue for placing less emphasis on the inputting of detailed local occupational or educational information and instead placing a greater emphasis on a different mode of localization, or in allocating limited staff time to this endeavor. In the expert recommendations mode, users may respond that the suggestions made it easier to use the system, thus supporting staff efforts in this area. Or, users may find these recommendations confusing, thus suggesting the need for a different approach.

**The impact of localization on staffing and training functions**. While there is no additional cost for localization from developers, there are significant local costs in the form of staff time necessary to prepare and input local data or expert recommendations. Time is needed to: (1) make decisions on what type of local data or expert recommendations are needed; (2) develop or edit local data in a form that meets CACG system requirements; (3) input data or recommendations into appropriate computer files; and (4) update or re-input local data as needed. The localization mode selected has cost implications. Local data on occupations or training programs are typically perishable and need to be updated on a regular basis, thus incurring more costs. Local data that includes expert recommendations tend to be less perishable and thus less expensive to maintain.

Florida State University's year long study of the localization features of DISCOVER and SIGI PLUS brought to the surface a lot of issues not previously considered in our use of CACG systems. This effort caused us to raise new questions related to the implementation and use of CACG systems, as well as revisit old policies and procedures that we had established to guide client and staff use of these systems. The results of this experience have implications for practitioners who are considering the use of localization features in their setting and system developers who are evaluating the merits of maintaining or enhancing these features in future versions of systems.

## Implications

Although FSU had previously worked with a CACGS' localization option, this latest localization effort was different in several ways. This localization activity was much more of a team effort throughout the process. There was much

more time devoted to discussion of what could be accomplished through localization and how that might fit with our Center's goals and philosophy. We found that discussions about the localization process raised other more fundamental issues about how we deliver services, how we train personnel, and the role of CACGS in this process. It became clear early in the process that the greatest amount of time would be spent on planning for localization and defining how to best use it in our setting.

Each center that is considering using the local option on their CACGS must weigh carefully each of the issues identified above. Centers that have access to only a small number of terminals for client use must give some consideration to the best times for inputting local information. Localization may not be feasible during normal hours of operation. Gaining access to the system for input of local information may require staff to work after hours or on weekends to insure that service operations are not interrupted. This is especially true in situations where use of the local option may create temporary "bugs" in the system or result in the accidential deletion of system files (as was the case at our site). In centers where CACGs are routinely used in research activities, it is important to remember that using the localization option will alter the treatment intervention.

Although the information provided by system developers in technical manuals is a helpful place to begin when considering CACGS localization, our experience suggests that other site factors must be considered. The primary technical expertise for our localization effort was provided by a graduate student who departed the semester following the completion of the project. For sites considerng localization, it would be important to identify a permanment staff member who possesses the technical expertise to make adjustments to the local information as needed (revising screens, adding additional information, re-inputting information lost when systems are updated). An important outcome of a process like this is the creation of a procedures manual that can be used to guide future localization efforts.

In our year long focus on the localization of two popular CACG systems, we learned a great deal. While in some ways, one might have a tendency to view localization as a fairly simple activity that could be accomplished in a fairly short period of time (i.e., bring up the local screens and start typing in information), our experience was quite different. We felt the need to give careful consideration to the type of information that was to be added. Given that many users already feel overburdended by the amount of reading required by these systems, we didn't want to add information just for the sake of saying we had used localization. We concluded that for our users "less is better." We didn't want to add information unless we felt it would somehow make the experience of using a CACG system more positive for our clients. Second, despite having a project team that was computer literate, we did not find localization to be a simple or routine activity. Our technical person, the one

responsible for  acutally inputting the information, was frustrated on more than one occasion in his attempts to follow the instructions provided by developers for using local options. In offices where counselors are already feeling pressed for time and somewhat overwhelmed by technology, one can understand their reluctance to use the localization option if it is viewed as complicated and requiring technical expertise beyond a level with which they are comfortable.

Developers have created the localization option is response to repeated user requests.  Although localization features have been available for a number of years, it seems safe to conclude that these features have been underutilized or in some instances ignored all together.  This lack of use can be attributed to several factors, some of which relate to system developers and some of which relate to practitioners.  System developers should continue to seek reactions from sites who have used the local option.  The availability of small seed money grants to encourage research on localization could be provided.  Sites need to provide suggestions to developers about what would make the local option more "user friendly."  Training sessions at local user conferences and national meetings need to be continued.  These kinds of activities can hopefully ensure that localization is used to its fullest advantage and does not become another technological "dinosaur."

## Conclusion

While the intent of localization is to provide useful local information to clients, the experience gained in this study indicated that the most positive impact of localization was its role in prompting interaction among staff.  The activity caused staff to examine and clarify the most effective methods of using CACG systems to meet client needs.  Regardless of the acutal impact of local data in improving CACG system use, the advance work done in preparation for using this feature can have an added benefit as well.

## References

American College Testing Program. (1991a). <u>DISCOVER for Colleges and Adults</u> [Computer program]. Hunt Valley, MD: Author.

American College Testing Program. (1991b). <u>DISCOVER for Colleges and Adults professional manual</u>. Hunt Valley, MD: Author.

Educational Testing Service. (Spring 1988). Using the local option. <u>SIGI PLUS news</u>, <u>1</u>(3), 2.

Educational Testing Service. (1991a). <u>SIGI PLUS</u> [Computer program]. Princeton, NJ: Author.

Educational Testing Service. (1991b). <u>SIGI PLUS installation manual</u>. Princeton, NJ: Author.

Sampson, J. P., Jr., Reardon, R. C., Humphreys, J. K., Peterson, G. W., Evans, M. A., & Domkowski, D. (1990). A differential feature-cost analysis of nine computer-assisted career guidance systems (3rd. Ed.). <u>Journal of Career Development</u>, <u>17</u>(2), 81-111.

Sampson, J. P., Jr., Reardon, R. C., & Ryan-Jones, R. E. (1991). <u>DISCOVER bibliography</u>. Tallahassee, FL: Florida State University, Center for the Study of Technology in Counseling and Career Development, Tallahassee. (ERIC Document Reproduction Service No. ED 337 713)

Sampson, J. P., Jr., Reardon, R. C., & Ryan-Jones, R. E. (1991). <u>SIGI PLUS and SIGI bibliography</u>. Tallahassee, FL: Florida State University, Center for the Study of Technology in Counseling and Career Development, Tallahassee. (ERIC Document Reproduction Service No. ED 337 715)

Weber, C., Sampson, J. P., Jr., & Reardon, R. C. (1988). <u>The localization feature of DISCOVER for Colleges and Adults: An analysis</u>. Unpublished manuscript, Florida State University, Center for the Study of Technology in Counseling and Career Development, Tallahassee.

Table 1

Career Advisor CACGS Training Survey Results

1.    How long have you worked as a Career Advisor?

          0  (0%)     1 month or less
          2  (15%)    2 to 6 months
          4  (39%)    7 months to 1 year
          6  (46%)    more than 1 year


2. Please indicate your level of familiarity with each item below.

     CACG Checklist
          1  (8%)     not at all familiar
          4  (31%)    somewhat familiar
          8  (62%)    very familiar

     CACG Scavenger Hunt
          1  (8%)     not at all familiar
          3  (23%)    somewhat familiar
          9  (69%)    very familiar

     CACG Lab Operating Instructions
          1  (8%)     not at all familiar
          3  (23%)    somewhat familiar
          9  (69%)    very familiar

     CHOICES Operations Manual
          1  (8%)     not at all familiar
          9  (69%)    somewhat familiar
          3  (23%)    very familiar

     CHOICES Guidebook
          0  (0%)     not at all familiar
          7  (54%)    somewhat familiar
          6  (46%)    very familiar

     DISCOVER Professional Manual
          4  (31%)    not at all familiar
          7  (54%)    somewhat familiar
          2  (15%)    very familiar

     DISCOVER User's Manual
          0  (0%)     not at all familiar
          7  (54%)    somewhat familiar
          6  (46%)    very familiar

     SIGI PLUS Counselor's Manual
          3  (23%)    not at all familiar
          8  (62%)    somewhat familiar
          2  (15%)    very familiar

Career Advisor Computer-Assisted Career Guidance (CACG) Training Survey (continued)

SIGI PLUS User's Guide
- 0 (0%)    not at all familiar
- 4 (31%)   somewhat familiar
- 9 (69%)   very familiar

After SIGI PLUS Guide
- 4 (31%)   not at all familiar
- 5 (39%)   somewhat familiar
- 4 (31%)   very familiar

3.  I have attended a CCIS Career Advisor staff development meeting on a topic related to the use of computer-assisted career guidance systems.  Check one response below.

- 8 (62%)   yes, at least one
- 3 (23%)   yes, more than one
- 2 (15%)   no, have not attended
- 0 (0%)    not sure, can't remember

4.  For each system listed below, indicate approximately how long it's been since you've personally used the system by placing a checkmark beside one of the responses provided.

CHOICES
- 0 (0%)    w/in  the past week.
- 5 (39%)   w/in  the past month.
- 7 (54%)   w/in  the past semester.
- 1 (8%)    it's  been so long I can't remember.

DISCOVER
- 2 (15%)   w/in  the past week.
- 4 (31%)   w/in  the past month.
- 7 (54%)   w/in  the past semester.
- 0 (0%)    it's  been so long I can't remember.

SIGIPLUS
- 1 (8%)    w/in  the past week.
- 5 (39%)   w/in  the past month.
- 7 (54%)   w/in  the past semester.
- 0 (0%)    it's  been so long I can't remember.

## Career Advisor Computer-Assisted Career Guidance (CACG)
## Training Survey

We would like your responses to the items below.  We want to try and get an accurate reading of your training and experience with several CACG systems, so please be brutally honest.  No harm or harangue will come to you as a result of your answers.  Please respond immediately-- do not "prep" yourself before answering or discuss your answers or what's being asked with other staff members or Career Advisors.  Do not put your name on the survey.

Please return to Steve Leierer's box no later than June 17.  Thank you.

1.  How long have you worked as a Career Advisor?

       _____ 1 month or less
       _____ 2 to 6 months
       _____ 7 months to 1 year
       _____ more than 1 year

2.  Please indicate your level of familiarity with each item below.

CACG Checklist
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

CACG Scavenger Hunt
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

CACG Lab Operating Instructions
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

CHOICES Operations Manual
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

CHOICES Guidebook
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

DISCOVER Professional Manual
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

DISCOVER User's Manual
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

SIGI PLUS Counselor's Manual
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

SIGI PLUS User's Guide
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

After SIGI PLUS Guide
       ____ very familiar     ____ somewhat familiar ___ not at all familiar

**Career Advisor Computer-Assisted Career Guidance (CACG)**
**Training Survey** (continued)

3.  I have attended a CCIS Career Advisor staff development meeting on
    a topic related to the use of computer-assisted career guidance
    systems.   Check one response below.

    ___ yes, at least one
    ___ yes, more than one
    ___ no, have not attended
    ___ not sure, can't remember

4.  For each system listed below, indicate approximately how long it's
    been since you've <u>personally</u> used the system by placing a
    checkmark beside one of the responses provided.

CHOICES
    _____ w/in the past week.
    _____ w/in the past month.
    _____ w/in the past semester.
    _____ it's been so long I can't remember.

DISCOVER
    _____ w/in the past week.
    _____ w/in the past month.
    _____ w/in the past semester.
    _____ it's been so long I can't remember.

SIGIPLUS
    _____ w/in the past week.
    _____ w/in the past month.
    _____ w/in the past semester.
    _____ it's been so long I can't remember.

Appendix B

## Staff Input - DISCOVER

### Curricular-Career Information Service
### Florida State University

1)  Where in DISCOVER do individuals need assistance?

2)  How can you assist individuals when the above situation occurs?

3)  What could be done to maximize the effectiveness of DISCOVER?

## Staff Input - SIGI PLUS

### Curricular-Career Information Service
### Florida State University

1)  Where in SIGI PLUS do individuals need assistance?

2)  How can you assist individuals when the above situation occurs?

3)  What could be done to maximize the effectiveness of SIGI PLUS?

## Staff Input
## DISCOVER for Colleges and Adults

This report summarizes information from a group discussion with
Career Advisors that tried to get at ways to improve the use of
DISCOVER, i.e, suggestions for localizing system instructions and
suggestions on areas where clients need more help.  The Career
Advisors discussed problems encountered by DISCOVER users, as
well as some possible solutions to each.  The content below is
taken directly from Career Advisor comments; no attempt was made
to "clean up" their remarks for this report.


**Where in DISCOVER for Colleges and Adults do individuals need
assistance? (PROBLEM)  How can you assist individuals when the
above situation occurs? (SOLUTION)**


PROBLEM:   In the section regarding "Information and Guidance,"
           the student inputs the number from the manual.  The
           machine then says "inappropriate".  We later realize
           the student was in the wrong category to begin with.
           They pressed the "occupation" on the right, but
           should have pressed the one on the left.

           The occupations number doesn't always work for the
           same thing.

SOLUTION:  Knowing which numbers are appropriate.  Perhaps
           giving instructions to the user regarding the
           number.  However, some clients will go to the
           advisors anyway.

PROBLEM:   Someone got stuck in a module, so the next module
           didn't work correctly.  Clients will use names of
           inventory that they don't realize they have already
           done.

SOLUTION:  By rewording it so clients will know they have
           completed the inventory (Module 5).  Letting the
           student know to get a Career Advisor if they have
           tried something twice and it doesn't work.  This
           notation should be before and after every module.

PROBLEM:   At the beginning of Module 3, after they've answered
           questions in Module 2, it asks if they want to take
           the interest inventory or enter their Uniact scores-
           -often they will choose "b" (thinking the questions
           in Module 2 were the Uniact Inventory).  The system
           asks for the scores and they get stuck.

SOLUTION:  Put in a message that clarifies this and gives user
           instructions about which option to choose.

PROBLEM: On the part where they are listing various occupations in reference to interests, abilities, and experiences, the clients have to go through a long process to finally get the list of jobs that are related to all 3 (at the same time).  Also, in that loop, they asked the same questions that the client had already answered--"would you throw out or keep jobs in marketing/sales" (the client had said no for both "i" and "a" and it asked again for compet).

SOLUTION: Labels.  Perhaps a "how-to" sheet for them to take with them into the room.

PROBLEM: "Input Counselor #".  Clients get upset by not putting numbers in.  Career advisor has to stay with client until they get to main menu.

SOLUTION: Clients need to know we don't use counselor numbers. We could assign numbers to all counselors.  Have clients go thru self-assement of DISCOVER and give them a one-page sheet with counselor numbers on them.

The more to read the more difficult to use it.

PROBLEM: In the loop where they identify what they want, they can't get out.  The options are not easily understood.  Switching menus can be complex in trying to get out of a loop.

SOLUTION: Should be free to move back and forth between menus. This would eliminate fear that if they go back, they'll lose it.  Should keep in mind that some clients freeze up about going back and forth.

PROBLEM: Clients say they lost too many occupations that they couldn't get back.

SOLUTION: "See My List".  Clients hit "0" pretty quickly.

PROBLEM: Numbers for job information, get numbers from colleges.  Wrong section of manual/or wrong book.

SOLUTION: Screen encouraging user to review sections of the user guide prior to beginning work on the system

PROBLEM: Information vs. Guidance and Information--clarify descriptors; people don't understand difference between the two self assessment and information (not guidance)

SOLUTION: Reassurance at outset for persons uncomfortable/ anxious; afraid to break machine or racing through.

Make guidance/info the 1st choice, since most folks need that.

**What could be done to maximize the effectiveness of DISCOVER for Colleges and Adults?**

Should localize before and after module. Are some of the backgrounds useful or distractive of some instructions. The color of the screen makes a difference in the reaction. It increases the orderliness and understanding.

I do like the colors with DISCOVER and the way its set up. It's pleasing to the eye.

Should try and answer student's questions that are sophisticated instead of simple.

Clients should be encouraged to try system differently to see if they get the same results.

Since system is so long, clients get bored. If so, they should be encouraged to get up and walk around. Suggest using 2 machines simultaneously.

Clients should have an explanation of what is involved in using the system. Some come in with the "SDS" feeling, but should realize that DISCOVER is not like that. They should also realize that DISCOVER is an intermediate step.

Perhaps the information on DISCOVER should be linked with other information in CCIS

In DISCOVER, you can create your own problems. Had anxiety client to type stressers--questions based on answers. Helped her by teaching her how to manage her anxiety.

Warm-up screens to get used to system--simple yes/no.

After search, if not satisfied with list: (1) did you use self-assessment?(2) How many search criteria (3) What factors?

After self-assessment, did you use enough activities? Maybe a factor that makes the list too long or short and not satisfactory.

Need to be flexible if one is not satisfied with the list-- need to adjust the search/assessment criteria; can't all be essential.

After information, question regarding satisfaction with results of work on system? If satisfied, go to another module, if not, talk with Career Advisor or return to self-assessment.

Helping users compare areas of study or occupations (like CHOICES).

Human Resources into localization.

Use Career Key/sections for special information related to DISCOVER use.

Can always back up and change answers--successful users do this.

Explaining modules within DCA--use CCIS handouts.

## Staff Input
## SIGI PLUS

This report summarizes information from a group discussion with
Career Advisors that tried to get at ways to improve the use of
SIGI PLUS, i.e, suggestions for localizing system instructions
and suggestions on areas where clients need more help.  The
Career Advisors discussed problems encountered by SIGI PLUS
users, as well as some possible solutions to each.  The content
below is taken directly from Career Advisor comments; no attempt
was made to "clean up" their remarks for this report.


**Where in SIGI PLUS do individuals need assistance? (PROBLEM)**
**How can you assist individuals when the above situation occurs?**
**(SOLUTION)**

PROBLEM:   What to say to clients after using the system.

SOLUTION:  Maybe suggest other systems/assessment modules.
           Can't prepare clients for SIGI.

PROBLEM:   Client left and came back.  Lost information.
           Didn't go far enought in assessment.  The inventory
           on self-assessment was gone.

SOLUTION:  Didn't lose if go to other than initial stage.
           Should have notation at end of system to let the
           client know that it can be redone or picked up where
           they left off.  Tell clients to redo without looking
           at printout and compare.

           "Use #9 to get maximum information."  "Computer
           saves information--come back for return appointment"

PROBLEM:   Problems in the past have been with clients not
           getting printouts because they expect it to
           automatically come out.  Ex:  "print screen" and
           "print and enter" aren't the same.

SOLUTION:  Career Advisors should make sure there is paper.
           Technical problems on both ends between Career
           Advisors and printout.  Re: printouts, use "P" to
           print all info regarding occupation.

PROBLEM:   Does anyone use After SIGI PLUS?

SOLUTION:  Cautioning

PROBLEM:   Does client come back after using SIGI PLUS?

ANSWER:    No; with DISCOVER, yes.

SOLUTION: The reason they don't come back is because they don't understand how it can help them. Should note, "Check with Career Advisor if you don't understand or need other information." Talk about introduction to SIGI PLUS and DISCOVER. Videotape Introductions and say "people who talk to CAs get a better understanding." However, would need more CAs.

A video of S. Fran shows student going back to counselor. Should show this before putting them on the machine. Should make an original CCIS video and send to SIGI PLUS.

PROBLEM: Printing summary. Two out of 102 come back with printout. The 100 needed more help.

SOLUTION: People need to know. Following "Next Step" screen.

PROBLEM: Screen in front and back of program is not as clear as DISCOVER.

SOLUTION: Ask the student is the book useful.

QUESTION: Should we say where notebook is?

ANSWER: No.

PROBLEM: Second appointments on system.

SOLUTION: The Next Step or another screen should have it. After "sign off for the day," it should have "see your advisor for your next appointment."

PROBLEM: The biggest question with SIGI is how to turn it off.

SOLUTION: There is a quitting place. Should have a message at the end about cutting off machine. Should have "Don't worry about turning off".

PROBLEM: Self-assessment--direction on screen to stop and think about what's happening.

SOLUTION: None identified.

PROBLEM: Skills identification vs. prizing sets up conflict in computer.

SOLUTION: Suggests to a counselor more specific directions regarding how to talk with a career advisor, mention specific CA by name.

## What could be done to maximize the effectiveness of SIGI PLUS?

Take care of the thousands of spelling errors that come out when printed.  Also, I don't like the color of the screen--it's that kind of drab brown and rust--everytime I see it, I think "Yuck!"  But I really do like the way the system makes you work to clarify values and priorities--the cards are fun to do and also give the repris that making decisions concerning values, etc. isn't always as easy as saying I like/dislike this or that--that it's a process.

On #3, localizing screens overlay regular SIGI+ screens?

Same comments re: SIGI+ as DCA regarding Search/Self Assessment.

Use all life experience, not just jobs in thinking about skills

Printout of information is detailed and quickly accessed.

Use module material on management potential for persons interested in business.

Participant/observation of self-assessment/helping person with disabilities; connect with training new CAs.

One-hour appointments--process not a one-shot experience.

More information in Career Center re: Occupations than on SIGI.  Numbers in Career Key are different than in System.

COMPUTER FEEDBACK FORM

NAME:_____

SYSTEM USED:_____        DATE:_____

How useful/helpful did you find this system?

What did you like about this system?

What did you dislike?

What occupations/career fields were suggested which you would
like to investigate further?

Are the computer's suggestions consistent with your own ideas
about yourself and careers?  Why/why not?

DISCOVER

> Choose option B on the next screen, if you
  are a student in EGC 3000.

> DISCOVER does not print automatically, to
  print press the F4 key.

> Talk to a Career Advisor, if you have questions
  about your work on DISCOVER.

> Press F6 at any time to find your location
  in DISCOVER.

PRESS F1

THE CAREER JOURNEY

> If you have an "INDIVIDUAL LEARNING PLAN"
  (green sheet), review it now.

> Think and reflect about your reasons for using
  DISCOVER.

> Think about the information that you are
  trying to obtain using DISCOVER.

> Consider the modules that you want to use
  today.

PRESS F1

LEARNING ABOUT THE WORLD-OF-WORK

> Use the World-of-Work map on the carrel wall to
  see how occupations are organized.


PRESS F1

LEARNING ABOUT YOURSELF

> No need to race through DISCOVER, computers
  do not get tired.

> Look at your "INDIVIDUAL LEARNING PLAN" (green
  sheet).

> If you are unsure about what inventory to use,
  talk to a Career Advisor.

PRESS F1

# FINDING OCCUPATIONS

> The DISCOVER User Guide in the carrel lists
  occupation numbers beginning on page A-1.

> The DISCOVER User Guide also lists numbers for
  college majors beginning on J-1.

> Experiment with alternative responses, you may
  find some interesting and useful career
  options.

PRESS F1

LEARNING ABOUT OCCUPATIONS

> If you lose too many occupations, try again.
  Develop a new list of requirements, after
  each selection examine your new list of
  occupations.

> If you get tired--take a break--DISCOVER will
  retain your answers.

> If you are not satisfied with your initial list
  of occupations. Keep reworking Module 5 to
  develop alternative lists of occupations.

PRESS F1

MAKING EDUCATIONAL CHOICES

> The DISCOVER User Guide also lists numbers for
  college majors beginning on J-1.

PRESS F1

SCHOOL SEARCH AND INFORMATION SECTION

The DISCOVER User Guide lists:

Vocational-technical schools beginning on page B-1.

Two-year colleges beginning on page C-1

Four-year colleges beginning on page D-1.

Graduate schools beginning on page E-1.

PRESS F1

## FINANCIAL AID INFORMATION

> For further financial aid information, ask a
> Career Advisor about the Star Center.

PRESS F1

## CLOSING REMARKS

> You can return to DISCOVER to change or rework your answers.

> Use Career Key in the Career Center for additional information on specific occupations and job hunting.

> If you have any questions, talk to a Career Advisor. The Career Center has an excellent library and a friendly staff.


Press F1

LOCAL INFORMATION

Use Career Key in the Career Center for additional information
on specific occupations and job hunting.

If you have any questions, talk to a Career Advisor.
The Career Center has an excellent library and a
friendly staff.

Press PRINT OR ENTER

DISCOVER

> Choose option B on the next screen, if you
  are a student in EGC 3000.

> DISCOVER does not print automatically, to
  print press the F4 key.

> Talk to a Career Advisor, if you have questions
  about your work on DISCOVER.

> Press F6 at any time to find your location
  in DISCOVER.

PRESS F1

THE CAREER JOURNEY

> If you have an "INDIVIDUAL LEARNING PLAN"
  (green sheet), review it now.

> Think and reflect about your reasons for using
  DISCOVER.

> Think about the information that you are
  trying to obtain using DISCOVER.

> Consider the modules that you want to use
  today.

PRESS F1

### LEARNING ABOUT YOURSELF

> No need to race through DISCOVER, computers do not get tired.

> Look at your "INDIVIDUAL LEARNING PLAN" (green sheet).

> If you are unsure about what inventory to use, talk to a Career Advisor.

PRESS F1

LEARNING ABOUT THE WORLD-OF-WORK

> Use the World-of-Work map on the carrel wall to
  see how occupations are organized.


PRESS F1

## FINDING OCCUPATIONS

> The DISCOVER User Guide in the carrel lists
  occupation numbers beginning on page A-1.

> The DISCOVER User Guide also lists numbers for
  college majors beginning on J-1.

> Experiment with alternative responses, you may
  find some interesting and useful career
  options.

PRESS F1

## LEARNING ABOUT OCCUPATIONS

> If you lose too many occupations, try again.
  Develop a new list of requirements, after
  each selection examine your new list of
  occupations.

> If you get tired--take a break--DISCOVER will
  retain your answers.

> If you are not satisfied with your initial list
  of occupations. Keep reworking Module 5 to
  develop alternative lists of occupations.

PRESS F1

MAKING EDUCATIONAL CHOICES

> The DISCOVER User Guide also lists numbers for
  college majors beginning on J-1.

PRESS F1

SCHOOL SEARCH AND INFORMATION SECTION

The DISCOVER User Guide lists:

Vocational-technical schools beginning on
page B-1.

Two-year colleges beginning on page C-1

Four-year colleges beginning on page D-1.

Graduate schools beginning on page E-1.

PRESS F1

```
          FINANCIAL AID INFORMATION

  > For further financial aid information, ask a
    Career Advisor about the Star Center.




PRESS F1
```

## CLOSING REMARKS

> You can return to DISCOVER to change or rework your answers.

> Use Career Key in the Career Center for additional information on specific occupations and job hunting.

> If you have any questions, talk to a Career Advisor.  The Career Center has an excellent library and a friendly staff.

Press F1