An Evaluation of the Effectiveness of Florida Choices Implementation in High Schools: Technical Report No. 20

by

James P. Sampson, Jr.
Debra S. Norris

December 1995

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

James P. Sampson, Jr. is Professor and Co-Director of the Center for the Study of Technology in Counseling and Career Development and Debra S. Norris is Assistant Director of the Curricular-Career Information Service at Florida State University. Appreciation is expressed to Julie Roberts for her assistance in identifying data collection sites, and to Janet Lenz, Barbara MacCallum, Robert Reardon, and Zelda Rogers. for their review of an initial draft of this report. Funding for this research was provided by the Florida Department of Education.

Table of Contents

List of Tables

**An Evaluation of the Effectiveness of Florida Choices Implementation
in High Schools: Technical Report No. 20**

Abstract

Experience has shown that implementation problems limit the effectiveness of computer-assisted career guidance (CACG) systems. Implementation problems generally involve planning, integration of CACG systems within career services, training, and staff anxiety and resistance. While a considerable amount of research has been conducted to examine the process and outcomes of CACG use, little research has been conducted on the process or outcomes of CACG system implementation. The purpose of this evaluation is to provide preliminary evaluation data on the implementation of Florida Choices in public high schools. The sample of schools included in this study was representative of high schools in Florida in terms of school size (small, medium, and large) and school location (urban and rural). All participating schools had been using Florida Choices for at least two years. A total of seventeen Florida high schools, representing both rural and urban geographical areas participated in this study. The results of this study were consistent with implementation problems that have been noted in the literature. Implementation factors, such as enablers, barriers, and additional resources needed, appeared to be consistent across schools. Irrespective of being from a small, medium, or large school, staff perceived training, collaboration, and resources as key implementation issues. Recommendations for improving implementation of Florida Choices are presented.

Background

Computer-assisted career guidance (CACG) has been defined as "on-line systems whose purpose is to engage the user in interactive material that either teaches and monitors a career planning process, or at least provides data to be used by the individual in educational and vocational decision making" (Harris-Bowlsbey, 1990, p. 11). Most CACG systems share a similar core sequence that reflects a rational decision-making model. The following core elements, typically referred to as modules or sections, are found in virtually all CACG systems: 1) Self-assessment related to psychological constructs (such as values, interests, or skills) and/or labor market information constructs, (such as anticipated demand for workers, physical requirements, indoor/outdoor work); 2) Generation of occupational alternatives based on self-assessment variables; and 3) Dissemination of occupational and/or educational information (Sampson, Peterson, and Reardon, 1989).[1]

The effectiveness of any CACG system is a function of both the design and the use of the software. In terms of promoting career exploration and decision making, a good CACG system that is poorly used may be no more effective than a poorly designed system. While research and evaluation studies have shown positive outcomes from CACG use (Sampson, 1984; Sampson, Norris, & Reardon, 1995), problems of uneven quality of system use have been noted. Five patterns of poor quality CACG use have been identified in the literature and include: (1) using systems as a substitute for needed services (Rayman, 1989;1990); (2) failing to connect system use with the counseling process (Gysbers, 1990); (3) using systems indiscriminately without attending to the varying needs of clients (Sampson & Reardon, 1991); (4) allowing systems to proliferate to the point where staff are incapable of remaining up-to-date with system functioning (Sampson & Reardon, 1991); and (5) overuse of systems as a universal solution to client problems (Gysbers, 1990).

A common theme in the above patterns of poor quality system use is a lack of congruence among client needs, existing organizational services, and CACG software. The implementation process provides an opportunity to reconcile client needs, organizational functioning, and CACG system use. For the purposes of this paper, implementation is defined as "a sequential process of revising or adding strategies to utilize computer technology within an organization for the purpose of meeting needs in a more effective manner" (Sampson, 1984, p. 188).

Implementation problems noted in the literature generally involve planning, integration of CACG systems within career services, training, and staff anxiety and resistance. CACG planning problems included: the tendency for nonexistent or reactive planning instead of a proactive approach (Sampson, Shahnasarian & Reardon, 1987); inadequate needs assessment (Riesenberg, 1983); poor linkage of needs and computer use (Ballantine & Strebler, 1990); piecemeal adoption practices (Walz, 1987); and limited counselor input in decision making (Rayman, 1989; Sampson, 1984). CACG integration problems included the lack a suitable context for using information

---

[1] For additional details on CACG systems, see Association of Computer-Based Systems for Career Information (1995), National Occupational Information Coordinating Committee (1989; 1994), Sampson (1994), Sampson & Reardon (1991), and Sampson, et al. (1990, 1995).

resources (Chapman & Katz, 1983), and confusion regarding the role of the counselor (Taylor, 1988). CACG training problems included: the low priority that training received when resources were limited (Ballantine & Strebler, 1990); the lack of general computer training (Walz & Benjamin, 1984); and the lack of specific CACG training (Rayman, 1989; Sampson, Shahnasarian, & Reardon, 1987). CACG staff anxiety and resistance problems included: general resistance to using computers in counseling (Rayman, 1990); fear of replacement (Bluhm, 1988); and negative staff attitudes caused by poor software installation (Watts, Kidd, & Knasel, 1989).

Statement of the Problem

The literature cited above indicate that implementation is a barrier to effective CACG use. While a considerable amount of research has been conducted to examine the process and outcomes of CACG use (Sampson, Norris, & Reardon, 1995), little research has been conducted on the process or outcomes of CACG system implementation. The data that does exist are mostly anecdotal, based on the observations of practitioners and researchers. While anecdotal data provide a useful indication of the range of implementation problems encountered, the lack of a systematic approach limits the conclusions that can be drawn. Given the importance of successful implementation to effective CACG use, research and evaluation involving CACG implementation are clearly needed.

Purpose

The purpose of this evaluation is to provide preliminary evaluation data on the implementation of Florida Choices in public high schools. Practitioners, CACG system developers, and researchers are potential consumers of the evaluation data generated by this study. Practitioners may gain a better understanding of current implementation practice that leads to more realistic perceptions of the issues and processes involved in successfully implementing a CACG system. CACG system developers may gain a better understanding of current implementation practice that can be subsequently used in creating improved system-specific implementation models and/or recommendations. Researchers may obtain data that guide the development of more focused research and evaluation studies.

Methodology

Participants
The sample of schools included in this study was representative of high schools in Florida in terms of school size [small (300-500 students), medium (500-800 students), and large(800-1200 students)] and school location (urban and rural). Seventeen schools were included, five schools were small in size, six were medium, and six were large. Nine schools were in urban locations and eight schools were in rural settings. All participating schools had been using Florida Choices for at least two years. A staff member from each school completed a telephone survey evaluating the effectiveness of Florida Choices implementation in their guidance program. Respondents included occupational specialists, directors of guidance, and media specialists.

Florida Choices

Participant responses to telephone interview questions were based on experience with the 1994-95 version of Florida Choices, with the exception of two schools that had not yet loaded the 1994-95 software due to hardware limitations. The 1994-95 version of Florida Choices included a self-assessment of interests, the identification of occupational and educational alternatives, and the presentation of occupational, educational, and financial aid information (including Florida-specific data). Training available for Florida Choices included: 1) Sessions presented at state-wide conferences; 2) School-based training workshops by Florida Department of Education staff or representatives of the developer of Florida Choices; and 3) School-based presentations provided by an experienced school staff member.

Procedures

The following procedures were used in conducting this study. A research plan, including sampling procedures and telephone interview questions, were collaboratively developed among the authors and Florida Department of Education (FDOE) staff. An FDOE staff member, who was familiar with Florida Choices use, provided phone numbers and addresses of contact persons at the selected schools. One of the authors then conducted all of the telephone interviews over a period of four months. The data were then aggregated into the Tables presented in the results section of this report. FDOE staff and the Florida Choices system developer were given an opportunity to comment on factual elements of the final draft of the report. The data obtained and the conclusions reached remain the sole responsibility of the authors.

Each of the following questions were asked in each telephone interview. Questions 1 through 8 provided contextual background for the specific implementation data sought in questions 9 through 12.

1) How long has Florida Choices been available at your school?

2) How long have you worked with Florida Choices?

3 Where is Florida Choices located in your school?

4) How are you currently using Florida Choices?

5) In which guidance and instructional programs is Florida Choices currently used?

6) What type of assistance, if any, is provided to students before, during, and after Florida Choices use? If assistance is available, who is responsible for helping?

7) In what areas has Florida Choices been most effective?

8) In what areas has Florida Choices been least effective?

9) Who has been involved in implementing Florida Choices?
    (Implementation is defined as: a sequence of steps completed to incorporate Florida Choices into a guidance program that includes system selection, planning for system use, staff training, evaluation, and refinement.)

10) What helped you to implement Florida Choices?

11) What barriers hindered your implementation of Florida Choices?

12) What additional resources or services, if any, would have assisted you in better implementing Florida Choices?

Limitations

First, since only one CACG system was used in this study, it is not appropriate to generalize the results to other CACG systems. It is possible that a unique influence on the implementation process was exerted by the design of the Florida Choices software in relation to other CACG systems, the implementation support materials provided by the CACG system developer, and the nature of the training services provided by the developer and the FDOE. Given the growing similarities among CACG systems noted by Sampson and Reardon (1991), this limitation may not be as problematic today as it was in the past. Second, data were collected from only one staff person at each school, leaving open the possibility that the unique perceptions of one individual in each school may have overly influenced the results.

Results

Tables 1, 2, and 3 provide responses by the various schools to the twelve survey questions, for small, medium, and large high schools, respectively. Examination of responses from the various schools for the first eight survey questions reveal that Florida Choices was being used in a variety of ways within small, medium, and large schools. The availability of Florida Choices and staff familiarity with Florida Choices ranged from 1 to 17 years. Florida Choices appeared to be located in a variety of areas within a school, ranging from the guidance center to computer labs and classrooms. Florida Choices was used in many different ways, from individual appointments to classroom experiences, as well as various structured guidance and instructional programs.

Types of assistance provided for Florida Choices before, during, and after system use varied across schools. Assistance before system use included individual, group and classroom orientation provided by either counselors, teachers, occupational specialists, peer counselors, or volunteers. Assistance provided during system use seemed to be on an as-needed basis for most schools. Assistance provided after system use included individual interpretation of printouts (provided by counselors, teachers, occupational specialists, peer advisors or volunteers), and integrating printouts with other career library resources.

The number of people reported as being involved in implementation ranged from one person to several people (including technical specialists, teachers, administrators, volunteers,

principals, and a curriculum director). Information on careers and colleges, scholarships, and the search functions were identified as areas in which Florida Choices is most effective. Areas in which Florida Choices was reported being least effective seemed to vary greatly for each site. Two consistent areas mentioned were the rate at which occupations were dropped and financial aid data.

In reviewing the responses to the first eight questions, it appeared that Florida Choices is used in a variety of ways. Schools differ, almost from site to site, on familiarity with Florida Choices, where it was located, and perceived strengths and weaknesses of the system.

Questions 9, 10, 11, and 12 addressed specific questions about the implementation process. Concerning who was involved in implementation (Question 9), no clear pattern of responsibility was apparent. A wide variety of professional and paraprofessional school staff were involved, with occasional participation by school district staff and parent volunteers.

With respect to the question of what helped with implementation (Question 10), common answers across all levels of schools included training and collaboration among staff. Training included experiences delivered by school-based staff and Florida Department of Education staff. Collaboration involved support from administrators and active involvement of teachers and other personnel. Having available resources, as well as an awareness that a need existed and having a philosophy toward improving services to students, were two other responses that were given.

A lack of resources and a lack of collaboration among staff were identified as barriers that hindered implementation (Question 11). The absence of adequate funding, the limited time available to learn how the program functions, and space constraints were identified as resource barriers. Scheduling conflicts involving access to computers and the need for students to be released from competing classroom activities were also identified as factors that hindered implementation. In the case of two schools, available software was not loaded due to the lack of appropriate computer resources.

Two common themes were identified as factors that would have aided in implementation (Question 12). These included issues surrounding resources and training. Having a better quality and a greater quantity of computers were identified as principle resource issues. Training suggestions included: 1) Demonstrating how Florida Choices could be incorporated into existing guidance and instructional programs; 2) Providing a hands-on focus in training; and 3) Explaining and discussing the implementation process.

Discussion

The results of this study were consistent with implementation problems that have been noted in the literature. As stated previously, implementation problems have involved planning, integration of CACG systems within career services, training, and staff anxiety and resistance. While inadequate training has been noted as a problem in the literature, in this study, training was perceived as facilitating implementation of Florida Choices. Proactive selection of Florida

Choices training as a priority for FDOE staff efforts, likely led to training not being perceived as an implementation barrier.

Barriers associated with collaboration among school staff related to planning and integration of Florida Choices into school guidance and instructional programs. Planning tasks allow staff the opportunity to clarify, and hopefully reach consensus on, student needs that Florida Choices use is intended to address. Planning also allows clarification and consensus building on how to best integrate Florida Choices into existing guidance and instructional efforts. Taking time for planning communicates the importance of career guidance in the development of students. Seeking staff input in the planning process facilitates subsequent staff commitment to effectively follow-through with implementation. Involvement of stakeholders (such as parents, local employers, and educators) in the planning process, can facilitate obtaining additional financial resources that can be used to purchase computers and add staff time. While staff anxiety was not identified as a barrier, collaboration problems may be a form of resistance, stemming from a lack of involvement of teachers in planning the use of Florida Choices.

Consistency in the results of this study was also evident across school size. Implementation factors, such as enablers, barriers, and additional resources needed, appeared to be consistent across schools. Irrespective of being from a small, medium, or large school, staff perceived training, collaboration, and resources as key implementation issues. Furthermore, responses to background questions one through eight, indicated that Florida Choices was being used in a variety of ways. In spite of this variety of system use, implementation factors remained consistent across schools.

Consistency was also evident in staff responses to the three questions dealing with implementation issues. Training was perceived as an enabler and an additional resource needed. Resources (computers and staff time) were perceived as a barrier and an additional resource needed. Collaboration was perceived as an enabler and the lack of collaboration was perceived as a barrier.

Recommendations

Data from this study suggest that training is a key element associated with staff perceptions of effective CACG system implementation. In addition to being perceived as valuable in and of itself, training, and follow-through activities emanating from training, provide opportunities for staff collaboration in planning CACG system use and coordinated solicitation of needed resources that were noted as implementation barriers. Thus, this study provides support for the continued funding of training development and delivery. The following recommendations are offered:

1) Current training materials for Florida Choices, related to the design and use of the system, need regular updating that reflects system evolution and state initiatives in education and labor.

2) Current training materials for Florida Choices need to be expanded to include the implementation process. Emphasis needs to be placed on staff collaboration in planning and evaluating system use, as well as soliciting additional resources.

3) Implementation training materials need to be setting specific, e.g., high schools, postsecondary schools, and one-stop career centers.

4) Funding for training delivery needs to be considered in the budgeting process for individual organizations and state agencies.

5) Training design and delivery needs to be regularly evaluated to ensure maximum cost-effectiveness.

References

Association of Computer-Based Systems for Career Information. (1995). 1995 directory of state-based career information delivery systems. Alexandria, VA: ACSCI Administrative Office, National Career Development Association.

Ballantine, M., & Strebler, M. (1990). The use of information technology in the careers service. Careers Service Branch, Department of Employment, London

Bluhm, H. P. (1988). Computers in guidance, counseling, and psychotherapy. Springfield, IL: Charles C Thomas.

Chapman, W., & Katz, M. R. (1983). Career information systems in secondary schools: A survey and assessment. Vocational Guidance Quarterly, 31, 165-177.

Gysbers, N. C. (1990). Computer-based career guidance systems: Their past, present and a possible future - a reaction. In J. P. Sampson, Jr. & R. C. Reardon (Eds.), Enhancing the design and use of computer-assisted career guidance systems: Proceedings of an international teleconference on technology and career development (pp. 20-24). Alexandria, VA: National Career Development Association.

Harris-Bowlsbey, J. A. (1990). Computer-based career guidance systems: Their past, present, and a possible future. In J. P. Sampson, Jr. & R. C. Reardon (Eds.), Enhancing the design and use of computer-assisted career guidance systems: Proceedings of an international teleconference on technology and career development (pp. 10-19). Alexandria, VA: National Career Development Association.

National Occupational Information Coordinating Committee. (1989). Career information delivery systems (NOICC Fact Sheet 003). Washington, DC: Author.

National Occupational Information Coordinating Committee. (1994) Status of the NOICC/SOICC Network. Washington, DC: Author.

Rayman, J. R. (1989, June). Factors that limit the effectiveness of CACG services. Paper presented at An International Teleconference on Technology and Career Development, Florida State University, Tallahassee, FL.

Rayman, J. R. (1990). Computers and career counseling. In W. B. Walsh & S. H. Osipow (Eds.), Career counseling: Contemporary topics in vocational psychology (pp. 225-262). Hillsdale, NJ: Lawrence Erlbaum Associates.

Riesenberg, B. (1983). Considerations in the selection of a computerized guidance system. In C. Johnson (Ed.), Microcomputers and the school counselor (pp. 17-29). Alexandria, VA: American School Counselor Association.

Sampson, J. P., Jr. (1984). Maximizing the effectiveness of computer applications in counseling and human development: The role of research and implementation strategies. Journal of Counseling and Development, 63, 187-191.

Sampson, J. P., Jr. (1994). Factors influencing the effective use of computer-assisted careers guidance: The North American experience. British Journal of Guidance & Counseling, 22, 91-106.

Sampson, J. P., Jr., Norris, D. S., & Reardon, R. C. (1995). Computer-assisted career guidance: Research and evaluation bibliography. Tallahassee, FL: Florida State University, Center for the Study of Technology in Counseling and Career Development.

Sampson, J. P., Jr., Peterson, G. W., & Reardon, R. C. (1989). Counselor intervention strategies for computer-assisted career guidance: An information processing approach. Journal of Career Development, 16, 139-154.

Sampson, J. P., Jr., & Reardon, R. C. (1991). Current developments in computer-assisted careers guidance in the USA. British Journal of Guidance & Counseling, 19, 113-128.

Sampson, J. P., Jr., Reardon, R. C., Lenz, J. G., & Morgenthau, E. D. (1990). North American conference recommendations. In J. P. Sampson, Jr. & R. C. Reardon (Eds.), Enhancing the design and use of computer-assisted career guidance systems: Proceedings of an international teleconference on technology and career development (pp. 99-109). Alexandria, VA: National Career Development Association.

Sampson, J. P., Jr., Reardon, R. C., Norris, D. S., Wilde, C. K., Slatten, M. L., Greeno, B. P., Garis, J. W., Strausberger, S. J., Sankofa-Amammere, K. T., Peterson, G. W., and Lenz, J. G. (1995). A differential feature-cost analysis of eighteen computer-assisted career guidance systems: Technical report No. 10 (6th Ed.). Tallahassee, FL: Florida State University, Center for the Study of Technology in Counseling and Career Development.

Sampson, J. P., Jr., Shahnasarian, M., & Reardon, R. C. (1987). Computer assisted career guidance: A national perspective on the use of DISCOVER and SIGI. Journal of Counseling and Development, 65, 416-419.

Taylor, K. M. (1988). Advances in career planning systems. In W. B. Walsh & S. H. Osipow (Eds.), Career decision making (pp. 137-211). Hillsdale, NJ: Lawrence Erlbaum Associates.

Walz, G. R. (1987). The present and future use of computers by counselors. Career Planning and Adult Development Journal, 3(2), 4-7.

Walz, G. R., & Benjamin, L. (1984). Systematic career guidance programs. In N. C. Gysbers and Associates (Eds.), Designing careers: Counseling to enhance education, work, and leisure (pp. 336-361). San Francisco, CA: Jossey-Bass.

Watts, A. G., Kidd, J. M., & Knasel, E. (1989). PROSPECT (HE) pilot evaluation: First report. Cambridge: National Institute for Careers Education and Counselling.

Table 1

Florida CHOICES Implementation in High Schools: Small Size Schools

	School 1	School 2	School 3	School 4	School 5	School 6
How long has Florida Choices been available at your school?	5 years	3 years	6 years	4 years	2 years	1 year
How long have you worked with Florida Choices?	7 years	2 years	1 year	3 years	2 years	1 year
Where is Florida Choices located in your school?	In the Career Center	In the Career Lab	Library and Career computer lab	Media Center	Career Resource teacher's work area	Career Room Within Guidance
How are you currently using Florida Choices?	No appointments; students drop in; may work on it during class time if work is done	CAIC is given as a 1st step. Use financial aid program with seniors. Choices booklets given in 9th grade classes	9th grade tech prep English classes- used Choices to help with a term paper on careers of interest; other grade levels make appointments to use; parents also come in to use system	Through 10th grade; will use CAIC (usually on Choices). They have to then write an essay on a career	Group and individual instruction	Classes, as well as individual appointments or on a walk-in basis
In which guidance and instructional programs is Florida Choices currently used?	Career education classes	DCT-term papers on specific careers; Career Research Classes; all 9th grade classes	Tech prep classes and English Classes	English Classes	Career exploration & college class; many social science classes & others who have an interest	English classes; guidance meets with all juniors & seniors to introduce program & show what's available

Table 1 - Small Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
What type of assistance, if any, is provided to students, before, during, and after Florida Choices use?	Teachers & occupational specialist talk with students about careers. Utilize resources such as DOT, OOH, individuals books. Encourage research. When beginning the system, students determine the way they want to use the system. Occupational specialist follows up with each student.	Before: Teachers orient to Choices through the Choices booklets. During: Guidance counselor answers questions, provides suggestions. After: students schedule individual appointments or continue researching with other resources	Media specialists explain to students; otherwise, it is up to the individual teachers	Group orientation via overhead which is hooked to a computer. Assistant helps during use.	An introduction is given as they work on their career portfolios, emphasizing what Choices can do for them. Individual assistance is available during use, and further exploration is encouraged after use.	Booklet; introduction in classes to juniors & seniors; peer aids assist users; peer aids go over printouts with students
Who was involved in implementation?	Occupational Specialist	Director of Curriculum	Guidance Department	Media Specialist	DOE, occupational specialist, counselor, career instructor	Director of Guidance
In what areas has Florida Choices been the most effective?	Information on vocational schools and colleges	Scholarships hitting big; Education section is helpful in that students can see what schools are offering	CAIC with 9th graders; also helpful for seniors looking up scholarships and colleges	Careers; scholarships; parents seem to enjoy it as well	selection of schools/colleges; and occupations that don't necessarily require college	Information on what jobs involve (students often base decisions on a job title - the information provides a reality check)
In what areas has Florida Choices been the least effective?	None	CAIC - if student didn't score well, they don't get as many options	Scholarships	None	Information is too general--both for colleges and occupations	College search

Table 1 - Small Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
What helped you to implement Florida Choices?	Workshops through Bureau of Career Development	Counselors, advertisements through morning announcements	Staff development training from Choices staff	Staff, including teachers and principles!	DOE; staff philosophy: When Choices was introduced, staff were looking for ways to improve services	Funds to buy computers; having a new building, and room for the system.
What barriers hindered your implementation of Florida Choices?	Not enough computers (only 1)	Teachers; time conflicts with students; Teachers saw students being in class as more important	Scheduling conflicts; getting the students in there to use it	None	Space; hardware– quality & quantity, at 1 time, not available in Macintosh format	Scheduling conflicts; getting students out of classes to use Choices
What additional resources or services, if any, would have assisted you in better implementing Florida Choices?	Computers	More computers. Can only have 3-4 kids on at a time, which consumes time.	Nothing	Training	Workshops need to introduce staff as to what Choices does, and how it can be used with kids & incorporated into guidance programs	More personnel to help with implementation; improvements with scheduling; more cooperation in allowing students to use Choices during class time.

Table 2

Florida CHOICES Implementation in High Schools: Medium Size Schools

	School 1	School 2	School 3	School 4	School 5	School 6
How long has Florida Choices been available at your school?	4 years	1 year	18 years	6 years	10 years	3 years
How long have you worked with Florida Choices?	4 years	1 year	17 years	6 years	6 years	3 years
Where is Florida Choices located in your school?	Guidance Department	Networked through computer lab; media center	Computer lab, networked throughout school	Career Center	Currently in guidance office in media center; expanding to computer classrooms, business & computer dept.	One computer is located in the Career Center. Math computer lab has 15-20 installed
How are you currently using Florida Choices?	Not currently using it; Don't have the hardware to support software changes. Previously used it in classrooms. Many scheduling problems due to lack of computers. Use the interest inventory with students. Talk with students about their choices.	With all different grade levels; Use CAIC, have students research careers and find educational paths; juniors and seniors use it to identify scholarships and colleges.	classroom programs; individual walk-in	Students come in, and use system as they see fit; 9th grades are scheduled to use Choices; Seniors use information from Choices for their papers	Career Development- students tend to use Explore; used w/At-Risk kids; teachers feel the need to use Choices more	As students come in, choosing colleges or gaining information about colleges. Anticipate training teachers so they can take groups into math computer lab and use systems
In which guidance and instructional programs is Florida Choices currently used?	English classes, American History classes	Life management (9th grades); English (juniors and seniors); math, social science	DCT programs; 9th grade programs; many 11th grade English classes	All grades; most come in on their own; Senior English classes and 9th grade life management classes.	English teachers use during teacher planning	Criminal Justice programs; hopefully will incorporate into business classes shortly

Table 2 - Medium Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
What type of assistance, if any, is provided to students, before, during, and after Florida Choices use?	Use peer counselors for training on computers. They schedule individual appointments. Peer counselors volunteer. 1 peer counselor per student..	Occupational specialist, guidance counselor and teachers in computer lab. Group orientation through the use of overheads and occupational specialist demonstrates use, followed by individual use.	If it's a classroom project, occupational specialist will go into the classroom, distribute booklets, provide orientation about system use and what they will obtain in their printouts. Afterward, occupational specialist gives a general interpretation, followed by a chance for individual questions.	12th graders use Choices to gain information for their career papers, and are under the supervision of their individual teachers; individual attention is given to students as they need it	Peer facilitators, parent volunteers, and counselors available for one-on-one guidance	Because there is only 1 computer, occupational specialist is usually right there with them. Always asks what their main concern is (career, information about specific colleges, scholarships, etc.). Presentations are made in junior & senior classes during the first 2 weeks of school about the system.
Who was involved in implementation?	Director of Guidance	Occupational specialist; technical specialists, teachers and transition specialists	Occupational Specialist; computer lab aide; teachers	Someone from the county level; Guidance Department	occupational specialist; guidance director	occupational specialist
In what areas has Florida Choices been the most effective?	interest inventory	found the interaction between the CAIC and occupational database extremely effective	Career exploration; college search	specific information on careers and financial aid	CAIC; College Search; they are really excited about financial aid	Students really like printout of colleges-individualized in certain states. Really like the preformatted letter option.

Table 2 - Medium Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
In what areas has Florida Choices been the least effective?	Not cost effective; time consuming; program is too long	the way the search function of the education database functions is very confusing; also, would like a localization feature within scholarships that would allow for entry of local scholarships	None	How quickly the number of careers can drop by the decisions one makes	terminal is too slow, not being able to do much with the system; too many variables to enter, and it's difficult to get out	Financial aid section is very time consuming, asking too many questions
What helped you to implement Florida Choices?	Training program; Choices representative presentation	There was a need. Until Choices was purchased, we had no computerized career educational program	Supportive administration; teachers who become aware of what students get out of the program	In-Service Training	Personnel training from Bureau of Career Development	2-3 hour training provided by DOE. Attending state conferences & inservice meetings. Teachers that know about it are very interested.
What barriers hindered your implementation of Florida Choices?	Not enough computers; changes in software doesn't match with hardware realities. Limited time; too many students; lack of interest; lack of resources.	funding	funding--really tough to find	Nothing	financial; computers; not networked; not easy to upgrade; old equipment, CD-ROM unavailable; personal time needed to become proficient; practice necessary	About 3 years ago, only available on IBMs. Definitely need a hard copy listing programs of study, as well as a chart of the different paths. So many paths to follow, it becomes easy to forget about an earlier option of interest.

Table 2 - Medium Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
What additional resources or services, if any, would have assisted you in better implementing Florida Choices?	Computers; computer room.	Computer lab just became networked; prior to this, lack of networking was a problem. It would have been beneficial to have someone show how to use Choices in a classroom setting, including suggested overheads, etc.	Funding!	Inservice now, and with every new update	They've been great!	People don't realize what's available on Choices. We need a hands-on training experience and a hands-on book.

Table 3

Florida CHOICES Implementation in High Schools: Large Size Schools

	School 1	School 2	School 3	School 4	School 5	School 6
How long has Florida Choices been available at your school?	5 years	10 years	10-15 years	8-9 years	8 years	6-7 years
How long have you worked with Florida Choices?	5 years	6 years	10-15 years	5 years	9 years	6-7 years
Where is Florida Choices located in your school?	Success Center-A center where students go to research postsecondary options, enhance study skills, and obtain career information	Occupational Specialist's Office	In Guidance Director's office	In the Media Center and in the college/career center	Career Center	Career Center
How are you currently using Florida Choices?	In classes; individual appointment	As a classroom activity and by individual appointments. Some teachers require for paper.	Not currently using it; just recently got computer. In the past, used in classes.	Student makes apt., or teachers give CAIC to classes; Networked - life management (9th grades).	Used in the classrooms; also, individual appointments	1 on 1 with students and as a basis for English classes to write research
In which guidance and instructional programs is Florida Choices currently used?	English department; career development; vocational classes; i-v department. In some science classes, students will research science careers. In history, comparison of how jobs were long ago as to current descriptions.	English; work program; ESE classes.	Special Education classes; English classes.	Various classes; sociology teacher has students pretend they're married and work through Choices to make decisions; various teachers have students write papers on careers of interest	English classes	DECA (marketing class), DCT, business cooperative education, 9th grade-for new and emerging careers.

Table 3 - Large Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
What type of assistance, if any, is provided to students, before, during, and after Florida Choices use?	Students must do interest inventory, Self-Directed Search. Discuss role of personality and interests in the selection of careers. Adult is in the room with students; will guide and talk through. After, discuss printouts. Will also pull from the Chronicle and coordinate with other information. May recommend using another system, then return and use educational section of Choices.	Peer counseling class, one on one. Peer counselors lead students in completing booklets, then will sit with each student as they go through the system, and will inform of other resources. After use, take the printouts and will follow up (teachers, occupational specialist, peer counselor) in the room with other resources (catalogs and OOH)	Teachers will encourage student use through career lessons. Director goes into classes and provides an orientation and information session. Shows booklets. Question and answer time. Students enjoy using the system.	The computers are free standing. Most students have already been exposed to system in 9th grade. Parent volunteers available for help.	Occupational specialist takes students through a step-by-step procedure; Occupational specialist is available during Choices use; teachers help interpret printouts	Classroom instruction given prior to use; personal assistance given during use; individual follow up as needed. Have had smaller special education classes that used it as a group.
Who was involved in implementation?	Occupational Assessment Specialist and aide	Teachers, occupational specialist, guidance counselor	Occupational specialist	Occupational specialist, life management teachers, media specialist, parent volunteers, parent volunteer coordinator, principal	Occupational Specialist	Occupational Specialist

Table 3 - Large Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
In what areas has Florida Choices been the most effective?	Only as effective as the students allow it to be. Highly motivating for students in special education classes and the international baccalaureate program	Educational part- quickly provides information on schools. Direct, definite information, especially helpful are the reports on how many people apply and are accepted each year	It operates as an eye-opener. Gives information quickly. Constant readjusting of preferences is healthy for students; provides a reality check. Students realize there is no right or wrong answer.	With 9th graders, Choices helps them to begin thinking about what they want to do, and provides a reality check. Many want to earn $90,000 with a high school diploma.	Career and college information	Listing undergraduate schools
In what areas has Florida Choices been the least effective?	None	Doesn't have medical or pre-medical schools. Salaries seem low (but then we compare to other sources)	None, once students get started. Some students become frustrated with the speed at which their list is narrowed to zero	If the student missed the 9th grade orientation, the CAIC can be confusing.	Financial aid - other state information comes up, even when specifically searching for Florida only; CAIC - too specific, lose to many options	Financial aid
What helped you to implement Florida Choices?	First heard through a workshop, saw what the system could do. Supportive supervisor who encourages teachers to use it. Showing teachers results of how students benefit. Good relationships with teachers; knowing their subjects, and helping them to incorporate it into their curriculum.	System coordinator. Staff training on individual basis. Teacher support.	Teachers' enthusiasm. Keep the positives going. Staff support is the key. Students getting information and sharing it with each other and teachers builds excitement.	Part of the school improvement plan, Blue Print 2000; they were the impetus to moving to 1 on 1 career service provision; parent volunteers allow them to have 8-9 students on at a time	Training by the Bureau of Career Development for occupational specialists	Staff training by Bureau of Career Development

Table 3 - Large Schools (continued)

	School 1	School 2	School 3	School 4	School 5	School 6
What barriers hindered your implementation of Florida Choices?	Main barrier is time. Not enough computers. Need to be able to access more classrooms	Installation complicated; certain computers unable to handle the software. A lot of difficulty in loading.	Competition/ conflict over computers and other resources. Computer was in the shop for over a year.	None - sometimes worried about the number of parent volunteers; not being networked	Funding!	Earlier versions were very user unfriendly and unforgiving of mistakes
What additional resources or services, if any, would have assisted you in better implementing Florida Choices?	More computers; more personnel.	To have someone come in and help implement. Technical support, loading onto computer, and implementing into the classroom.	Need more staff to be involved, to use and understand the system. If they can see that it is a tool that will make their job easier, they'll go for it.	None	District state license versus individual school licenses (very expensive). Many schools couldn't update because of cost &/or lack of computers	Additional occupational specialists-with 2700 clients, it is impossible to offer preferred interventions.