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ABSTRACT

A prototype corporate version of SIGI PLUS a computer-based career guidance system, was developed by the Educational Testing Service (ETS) to serve the career counseling needs of adults in companies. It included a large store of nationally applicable occupational information that could be readily linked online to employer-provided company information. All information was integrated into a structure covering the process of career choice. The prototype system was field-tested at ETS. To expand the customizing options of the generic version, ETS programmed sections of the corporate version to enable users to select a SIGI PLUS occupational title and then see the full list of corporate jobs subsumed under the title and to make users aware of which occupations are linked to company jobs. Evaluation participants (66 ETS employees) completed two questionnaires, one administered both before and after use of SIGI PLUS and one only after use, and then used SIGI PLUS. In general, participants liked SIGI PLUS and found it useful either in confirming present career plans or suggesting new ideas. It was helpful in self-assessment, increasing awareness of career opportunities, and developing positive feelings about the future. Ninety percent would recommend the system. Small positive differences in employee attitudes were noted. (Instruments are appended.)  
 (YLB)

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# RESEARCH MEMORANDUM

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## SIGI PLUS AT ETS: DEVELOPMENT AND FIELD TESTING

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## 1. INTRODUCTION

Common wisdom suggests that the satisfied employee will also be the productive employee. Companies have responded to this principle in a variety of ways, offering workers such rewards as flexible fringe benefits, dental insurance, on-site exercise rooms, and in-house career counseling.

Unlike most other fringe benefits, career counseling is not equivalent to cash for spending outside the workplace, but it greatly benefits both employer and employees. It can help dissatisfied workers find in-house placement in more suitable positions. It can suggest ways for employees to achieve satisfactions by enriching their present jobs or by pursuing spare-time activities. Career counseling may lead some employees to leave, after finding that they can better achieve their career goals elsewhere; but even in this case, both employer and employees are well served, for many of these employees would have been unhappy and unproductive in their present positions. The reverse effect may also occur: career counseling may convince some employees that their dream occupations outside the company are not practical goals.

Even if a company is convinced of the value of career counseling, such a service is not easy to implement. Ideally, career counseling starts with assessment of the client's needs, provides relevant information, and helps the client to use this information for making a decision and planning how to reach it. Therefore a company committed to providing career guidance is faced with the difficult and costly tasks of gathering information resources, developing counseling techniques, and providing personal counseling services on an ongoing basis.

In order to lighten the effort, many companies are looking for resources that can help them implement in-house career guidance. An alternative only recently available is computer-based career guidance. One such system, SIGI PLUS, was developed at Educational Testing Service (ETS) as a guidance tool for counseling a varied audience, including students and adults, but is being used mainly at college campuses.

Though a useful tool, SIGI PLUS is not ideally suited for counseling adults in companies. Its occupational information is descriptive of the nation as a whole, and therefore of limited value for in-house guidance purposes. The obvious solution to this shortcoming is to integrate company-specific information into SIGI PLUS. This is precisely what ETS undertook to do.

Shortly after developing, field testing, and releasing the generic version of SIGI PLUS, ETS decided to develop a modified system which would better serve the needs of adults in companies. The result, the prototype corporate version of SIGI PLUS, comes with a large store of nationally applicable occupational information that can readily be accessed on-line to company information that the employer provides. All of the information--both national and local--is integrated into a structure that covers the complete process of career choice: self-assessment, information about alternatives, deciding, and planning.

To see how the system would perform in an actual corporate setting, the new prototype system was field-tested at ETS; ETS was considered a useful place to learn about this new system because it was where Research staff had first developed and now modified SIGI PLUS, and the developers could easily oversee the field test. The Princeton site of ETS has 2,100 employees in a variety of occupations. The Personnel Department was willing to make its job descriptions available and to refer employees to SIGI PLUS. (Since the initial field test, several other companies have also customized and field tested the corporate SIGI PLUS; their findings are not reported here.)

## 2. SIGI PLUS AT A GLANCE

The prototype corporate version of SIGI PLUS is similar in most respects to the original (generic) version, which was developed under a substantial grant from W.K. Kellogg Foundation, with additional funds from ETS. The generic SIGI PLUS has nine sections; they are described here very briefly.

INTRODUCTION gives an overview and helps users decide how best to use the eight remaining sections.

In SELF-ASSESSMENT users examine work-related values, interests (fields of knowledge), and activities (skills and interests).

SEARCH allows users to retrieve occupations from a database of about 230 on the basis of values, interests, skills, and educational requirements. An additional search is available to avoid certain attributes or activities (e.g., doing math, poor outlook).

INFORMATION allows users to ask up to 27 questions about occupations and, in response, receive national information.

SKILLS provides information about the skills required to

perform important job tasks and has users assess themselves on these skills.

PREPARING allows users to evaluate their readiness to enter an occupation after looking at educational and training requirements, plus work tasks that must be mastered.

COPING examines a number of practical considerations (e.g., money, child care, college credit for experiential learning) related to career change.

DECIDING helps users reach a decision by evaluating and combining (a) the desirability of each occupation they are considering (including their present job) and (b) their chances of success in entering it.

NEXT STEPS helps users plan a course of action to meet their objectives.

SIGI PLUS runs in color on the IBM-XT and fully compatible microcomputers with hard disk; it also runs monochromatically on the Radio Shack TRS-80 Models II, 12, and 16 (with hard disk), and on the VAX minicomputer.

Because SIGI PLUS is highly interactive, it is easy to use without off-line materials or counseling support, although most sites use it in a counseling environment. Counselors find that SIGI PLUS relieves them from many routine tasks--such as looking up information--so they can concentrate on the functions where their human skills are really needed. Each section can be entered directly and used independently of other sections, and the system as a whole can be exited at any time. Printouts are available at critical points. The displays are written in simple and clear English, and scripts are layered so that they can be read through quickly or examined in depth (if additional information or help is needed).

SIGI PLUS comes with an option that is especially useful for meeting the unique needs of each user site: local information may be added in several places. At the end of every section, a display may be added to provide locally relevant messages; also, two such "bulletin boards" are available to be the final displays the user sees before logging off. In COPING and NEXT STEPS, there is room for an additional screen for each of the main topics covered. Similarly, in INFORMATION, each of the national information displays (27 for each occupation) may be followed by a display written locally. All of the added local displays are clearly labelled "LOCAL INFORMATION."

The customizing option is very easy for the site manager to use. SIGI PLUS provides an interactive program with extensive prompts and suggestions; the displays are keyed in by a simple word processing program and may be modified frequently--even daily--to keep information up to date. Customizing is entirely optional; if the site manager chooses not to write a local display, no "hole" reveals the omission.

### 3. PREPARING FOR AND CONDUCTING THE FIELD TEST

3.1 The prototype corporate version. In talking with various companies about how they might use SIGI PLUS, ETS Research staff learned that the customizing options of the generic version would need to be expanded. The problem lay mainly in the INFORMATION section, where each occupation could be linked to only one local job. In most companies, however, it was not possible to establish a one-to-one correspondence between SIGI PLUS occupation titles and corporate job titles. For example, a company might have several job titles that should be linked to the SIGI PLUS occupation "Accountant."

Therefore, a prototype corporate version of SIGI PLUS was programmed to address this problem. In the INFORMATION section of this prototype version, users pick a SIGI PLUS occupation title and then see the full list of corporate jobs (if any) that are subsumed under that title. Users choose which of these company job titles they want information about, and the displays with national information are followed by as many local displays as are needed to cover all the jobs named.

SEARCH was also modified to make users aware of which occupations are linked to company jobs. If any such occupations appear on a SEARCH list, they are marked with an asterisk.

3.2 Customizing SIGI PLUS for ETS. The first step in customizing the system was to decide which ETS jobs to include. High-level management positions (e.g., vice presidents) as well as low-level service jobs were excluded. More than two-thirds of ETS job titles were linked to the SIGI PLUS occupation list. A crosswalk listing SIGI PLUS occupation numbers for ETS job titles was compiled, to be made available alongside the terminal in hard copy.

Inevitably, some important ETS job titles were not covered by the SIGI PLUS database. To account for these titles, three new occupations were added to the SIGI PLUS list: Director, Publicity; Program Administrator; and Examiner. The computer accesses these "dummy occupations" as if they were "national" occupations, but in fact they are seen only in the INFORMATION section of the version of SIGI PLUS running at ETS.

After deciding which copies of information would be made available for company jobs, Personnel provided the write-ups. These were edited (to meet space restrictions) and keyed in by the SIGI PLUS development team, and printouts of the information files were sent to Personnel for verification.

3.3 Conducting the evaluation. 66 ETS employees were selected by Personnel from those participating in the Job Request program. Each participant was given two questionnaires (see Appendices A and B) to fill out. Before using SIGI PLUS, the ETSers were sent a letter (Appendix C) explaining the nature of the study. No more than two employees were scheduled per day, in order to be sure that everyone had sufficient time.

Participants who came for a session with SIGI PLUS were greeted by a member of Research staff and asked to fill out Questionnaire 1. This questionnaire is meant to be administered both before and after use of SIGI PLUS and gets at the status of the participants' career decisions and plans, as well as their attitudes toward their job and ETS. The Research staffer briefly explained how the ETS version of SIGI PLUS works and how to use the off-line directories. The ETSers then were free to use SIGI PLUS as they pleased. Some of the ETSers returned for one or more additional sessions on SIGI PLUS. When they were done with their last session, they were given Questionnaire 2 and their second copy of Questionnaire 1 and were asked to fill them out and return them by inter-office mail. On Questionnaire 2, participants reported how they used SIGI PLUS, how they perceived it, and how using it affected their career decisions and plans.

#### 4. FINDINGS OF THE STUDY.

In general, participants liked SIGI PLUS and found it useful either in confirming present career plans or suggesting new ideas. It was helpful in self-assessment, in increasing awareness of career opportunities, and in developing positive feelings about the future.

Questionnaire 2 was the more comprehensive of the two instruments administered, so it is discussed here first.

##### 4.1 Personal information about the respondents.

Questionnaire 2 was returned by 66 people--55 women and 11 men. Most were from the Rosedale site, and almost all were full-time, permanent employees. About one-fifth had been at ETS 3 to 5 years; an equal number 6 to 9 years. The largest age group identified (42% of those responding to the question) was 31-40 years.

Level of education varied widely. The largest group (38%) named a high school diploma as their highest educational



attainment; the next largest group (16%) had a 4-year college degree; almost an equal number had a graduate degree. About one-quarter of the respondents were currently enrolled in a degree program; a similar number were taking non-credit courses.

4.2 Use of SIGI PLUS. When the ETSers were asked what motivated them to use SIGI PLUS, the largest number (48% of all respondents) said, "I am curious about other opportunities in this company." The next most popular response (44%) was, "I want to find out about advancement possibilities." The most negative responses were also the least popular: "I am thinking of leaving this company and I want to know what else I might do" (6%), and "I am unhappy in my present position" (12%).

Almost no respondents had trouble making an appointment to use SIGI PLUS at a convenient time and place.

Slightly more than half (57%) spent 1 to 2 hours on SIGI PLUS; about one-third spent 2 to 3 hours. Very few respondents returned for a second session of SIGI PLUS, but one-quarter of the respondents felt they had not completed as much of the system as they wanted. When asked why not (a free-response question), most cited time constraints.

4.3 Information in SIGI PLUS about company jobs. Most of the respondents said they were satisfied with the amount of information in SIGI PLUS. Only one respondent reported not understanding the information. About one-quarter of the respondents found that SIGI PLUS did not include all the company jobs they were interested in. The jobs they cited as missing were Documentation Control Assistant, Administrative Assistant, Senior Administrative Assistant, Test Security Specialist, Production Coordinator, Operations Coordinator, and Production Support Analyst. These jobs were not included in the system because they could not be linked to any SIGI PLUS occupation. Two respondents named Budget Analyst, although Budget Analyst III is included in the SIGI PLUS-ETS database.

About one-quarter of the respondents said they wanted additional information about company jobs. When asked to specify, they requested job-related information (rather than a generic wording for all ETS jobs) about advancement opportunities; availability of positions at ETS; how Personnel can help them; level of stress in jobs; and availability of on-the-job training.

Two-thirds of the respondents said they planned to get further information about occupations or jobs.

4.4 Effects of SIGI PLUS. Respondents were asked about two possible influences of SIGI PLUS: on how they see their present job, and on their thinking considering their career plans. In the

first case, the statement that drew the largest number of responses (41%) was, "It did not influence my feelings about my job." In the matter of career plans, the most popular response (56%) was, "I already had career plans and SIGI PLUS confirmed them"; on the other hand, 36% responded, "SIGI PLUS gave me some new ideas."

The questionnaire offered six possible ways SIGI PLUS might have helped the ETSers, and asked them to check all that apply. The most popular response (56%) was, it "helped me identify my skills and interests." Other popular options were, it "made me more aware of career development opportunities" (41%), and it "made me feel more positive about my future" (39%).

4.5 Other attitudes toward SIGI PLUS. The ETSers were asked to write what they had expected to get out of SIGI PLUS. Of the 50 who answered, 56% mentioned something to do with careers or jobs; of these, only 12% specifically referred to ETS. Sixteen respondents said they did not know or were not sure what to expect.

When the ETSers were asked whether they got what they expected from SIGI PLUS, 81% said "yes." Ninety percent said they would recommend SIGI PLUS to a friend or co-worker.

One question asked whether SIGI PLUS contained any reference to race, sex, nationality, religion, or anything else that was offensive, and if so, to explain. Two people said "yes." One of them did not explain the response. The other objected to some of the examples that were given in SELF-ASSESSMENT to illustrate use of skills in everyday life; this respondent felt a number of them were tasks that traditionally are associated with one sex.

A free-response question asked respondents what they liked best about SIGI PLUS. Eighteen people (27%) said SIGI PLUS was easy to use and/or easy to follow. Eleven (17%) cited the amount or usefulness of information. For six (9%), self-assessment (especially of values) was the best feature of SIGI PLUS.

Respondents were also asked what they liked least about SIGI PLUS. Nine (14%) found it redundant or too long; another nine (14%) found it too broad or superficial. Five (8%) pointed to deficiencies in the information. Four (6%) had difficulty moving around in SIGI PLUS. Three (5%) complained that the computer's response time was too slow. (Ironically, two people [3%] thought SIGI PLUS's best feature is that it is fast. Perceptions of speed may have been influenced by the respondents' past experiences with computers.)

The last free-response question asked for suggestions for improving SIGI PLUS. Five people (8%) suggested various ways of improving the information. Three (5%) pointed out ways to make SIGI PLUS easier to follow. Three (5%) respondents wanted SIGI

PLUS made available to more people inside or outside ETS. Two (3%) wanted the response time to be speeded up.

4.6 Changes in career plans. Questionnaire 1 was administered both before and after use of SIGI PLUS, in order to detect changes in people's plans and attitudes. The original intent of the study was for all participants in the study to fill out Questionnaire 1 at the same time, considerably in advance of using SIGI PLUS; this would have provided a baseline of attitudes to be compared to post-SIGI PLUS attitudes. Unfortunately, administrative problems made this approach impossible, and participants filled out the questionnaire immediately before and usually not long after their session on SIGI PLUS. This arrangement may have caused the participants to register fewer or smaller changes in attitude than they would otherwise have done.

Changes in the responses to item 1 ("Which of the following statements best describes your career plans?") were small: 76% of the respondents made no changes. Of those respondents who changed their career plans, two-thirds moved to the statement, "I am thinking of changing my job and I have some alternatives in mind."

4.7 Statements about plans for education. Responses to item 2 ("Which of the following statements best describes your plans for further education?") also did not change much; 70% of the respondents reported the same plans each time the questionnaire was administered. Once again, after using SIGI PLUS respondents were more sure of their plans. The number who responded "I need to get information about furthering my education" dropped from 16% to 3.5%. An additional 4% of the respondents said they were thinking of obtaining additional education or training in their field; an additional 11% said the same for education or training in a different field.

4.8 Attitudes about work. Questionnaire 1 also included a set of statements about job satisfaction and about attitudes toward ETS; respondents indicated on a five-point scale how strongly they agreed or disagreed with the statements.

Overall, the attitudes of the ETS employees toward their company and their work were quite positive. With the exception of item 4 ("This company is interested in my career development")--which interestingly showed a significant positive change after the use of SIGI PLUS--all items had a mean score of 3 or less (where 3="not sure," 2="agree," and 1="agree strongly"). Two items which showed a particularly positive attitude were items 5 and 8: more than two-thirds of the employees said they agreed or strongly agreed that they like their jobs, and more than three-quarters similarly agreed that ETS is a good company to work for.

Two items showed a significant change in the positive

direction: item 2, "I know what is required to advance in my career with this company," and item 4, "This company is interested in my career development." Of the remaining nine items, eight showed small, but not significant, positive changes. The exception was item 6, "This company is interested in keeping me as an employee," which went slightly toward the negative.

## 5. CONCLUSIONS

Since 90% of those responding said they would recommend the system to a friend or co-worker, the prototype corporate version of SIGI PLUS certainly was well-liked at ETS. Also, though only small differences were noted in employee attitudes measured before and after use of SIGI PLUS, all differences but one were in a positive direction. The lack of a dramatic change in attitudes might be due in part to a ceiling effect: most ETS employees are well satisfied with their jobs and the company.

One way to improve the corporate SIGI PLUS (endorsed by about one-quarter of the participants) would be to increase the amount of company information it can provide, especially about advancement opportunities. Ideally, one might provide a method for completely customizing the SEARCH, SKILLS, PREPARING, and DECIDING sections, all of which draw on large databases of national information.

Realistically, however, allowing for more ways to add company-specific information to the corporate SIGI PLUS may not be the answer, because personnel departments may be unwilling or unable to make the kind of commitment this would require. For the field test at ETS, simply customizing the INFORMATION section required ETS to invest a substantial amount of effort. It took about one person-month to obtain and edit the information, and another person-month to input the data to the computer and proofread it. Of course, this was a shakedown test. Since then, guidelines and software tools have been developed to streamline the process. Nevertheless, the task is not only large, but never completed, since job information needs to be updated over time.

How, then, can a company satisfy its employees' needs for lots of information about jobs without exceeding a realistic budget for development, inputting, and updating? One possible approach is to identify the most useful kinds of job information and devise convenient procedures and tools for developing them. A good "how-to" manual and improved software for entering data might help.

Another approach might be to develop an industry-specific database, which would offer generalized information that might reasonably apply to companies within a certain industry--e.g., engineering and manufacturing, finance, or pharmaceuticals.

A more feasible commitment that any company using the corporate SIGI PLUS can make is to make the system easily available to employees. About one-quarter of the ETS respondents said they did not get to spend as much time on SIGI PLUS as they wished, largely because their jobs did not let them stay away long enough. Career guidance is a process that takes time, even when it is aided by the most up-to-date technology. Managers must be made aware that workers will benefit from the time they spend on career planning.

The important question now is: Should ETS further develop its prototype corporate version of SIGI PLUS and market it to other companies? Experience to date at ETS and other companies suggests that the answer depends not entirely on the worth of the system to employees, but even more critically on finding ways to help companies gather and input their own information.

APPENDIX A: First Questionnaire for Field Test Participants

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QUESTIONNAIRE 1

1. Which of the following statements best describes your career plans?

Circle the number (1, 2, 3, 4, or 5) shown on the left.

1. I have just started working and have not yet formulated any further career plans.
2. I have no plan in mind for my career.
3. I plan to remain in my present position.
4. I am thinking of changing my job but I have no alternatives in mind.
5. I am thinking of changing my job and I have some alternatives in mind.

2. Which of the following statements best describes your plans for further education?

Circle the number (1, 2, or 3) shown on the left.

1. I am thinking of obtaining additional education or training in my field.
2. I am thinking of obtaining education or training in a different field.
3. I am not thinking about obtaining any education at this time.
4. I need to get information about furthering my education.

(see other side)

Circle the number (1-5) of the response that best describes the way you feel about each of the following statements:

S t r o n g l y	A g r e e	A g r e e	N o t S u r e	D i s a g r e e	S t r o n g l y
1	2	3	4	5	

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. My job is right for me.  | 1 | 2 | 3 | 4 | 5 |
| 2. I know what is required to advance in my career with this company. | 1 | 2 | 3 | 4 | 5 |
| 3. I don't see any possibility for advancement in my position         | 1 | 2 | 3 | 4 | 5 |
| 4. This company is interested in my career development.               | 1 | 2 | 3 | 4 | 5 |
| 5. I like my job.   | 1 | 2 | 3 | 4 | 5 |
| 6. This company is interested in keeping me as an employee.           | 1 | 2 | 3 | 4 | 5 |
| 7. I am well informed about job opportunities within this company.    | 1 | 2 | 3 | 4 | 5 |
| 8. This is a good company to work for.                                | 1 | 2 | 3 | 4 | 5 |
| 9. This company is interested in me as a person.                      | 1 | 2 | 3 | 4 | 5 |
| 10. This company is interested in my educational development.         | 1 | 2 | 3 | 4 | 5 |
| 11. I think I can grow within this company.                           | 1 | 2 | 3 | 4 | 5 |

APPENDIX B: Second Questionnaire for Field Test Participants

QUESTIONNAIRE 2 66 returned

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
(optional)

1. Site 43 = Rosedale 7 = Ewing 3 = Maple Point

2. Age: (optional) 62 responses

0%	<u>0</u>	(1)	18-23
23%	<u>14</u>	(2)	24-30
42%	<u>26</u>	(3)	31-40
19%	<u>12</u>	(4)	41-50
16%	<u>10</u>	(5)	51-65
0%	<u>0</u>	(6)	Over 65

3. Sex:

17%	<u>11</u>	(1)	Male	66 responses
83%	<u>55</u>	(2)	Female	

4. Highest diploma or degree held:

38%	<u>25</u>	(1)	High school diploma or GED	66 responses
8%	<u>5</u>	(2)	A certificate for a one- or two-year program in a trade/tech/business school	
12%	<u>8</u>	(3)	2-year college degree	
24%	<u>16</u>	(4)	4-year college degree	
1%	<u>1</u>	(5)	M.B.A. degree	
9%	<u>9</u>	(6)	M.A. or M.S. degree	
2%	<u>2</u>	(7)	Ph.D. degree	

5. Are you currently enrolled in a degree program?

26%	<u>17</u>	(1)	Yes	74%	<u>49</u>	(2)	No	66 responses
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If yes, please indicate type of program:

0%	<u>0</u>	(1)	Certificate	17 responses
35%	<u>6</u>	(2)	2-year degree	
41%	<u>7</u>	(3)	4-year degree	
0%	<u>0</u>	(4)	M.B.A degree	
24%	<u>4</u>	(5)	M.A. or M.S. degree	
0%	<u>0</u>	(6)	Ph.D. degree	

6. Are you presently taking any non-credit courses?

20%	<u>13</u>	(1)	Yes	80%	<u>52</u>	(2)	No	65 responses
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7. Present employment status:

98%	<u>64</u>	(1)	Full-time, permanent	65 responses
0%	<u>0</u>	(2)	Part-time, permanent	
2%	<u>1</u>	(3)	Temporary	

8. Present job title:

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9. Number of years employed by your company:

0%	<u>0</u>	(1)	Less than 1	63 responses
13%	<u>8</u>	(2)	1-2	
30%	<u>19</u>	(3)	3-5	
29%	<u>18</u>	(4)	6-9	
11%	<u>7</u>	(5)	10-15	
14%	<u>9</u>	(6)	16-20	
3%	<u>2</u>	(7)	21-30	
0%	<u>0</u>	(8)	Over 30	

10. Number of years in present position:

11%	<u>7</u>	(1)	Less than 1	64 responses
37%	<u>24</u>	(2)	1-2	
27%	<u>17</u>	(3)	3-5	
23%	<u>15</u>	(4)	6-10	
2%	<u>1</u>	(5)	10-15	
0%	<u>0</u>	(6)	Over 15	

11. What motivated you to use SIGI PLUS? (Check all that apply.)

(% of all respondents)

44%	<u>29</u>	(1)	I want to find out about advancement possibilities.
29%	<u>19</u>	(2)	I am curious to know if I'm in the right job.
48%	<u>32</u>	(3)	I am curious about other opportunities in this company.
12%	<u>8</u>	(4)	I am unhappy in my present position.
33%	<u>22</u>	(5)	I want to find out more about a particular job (not mine) in this company.
6%	<u>4</u>	(6)	I am thinking of leaving this company and I want to know what else I might do.
18%	<u>12</u>	(7)	My supervisor suggested I try SIGI PLUS.
24%	<u>16</u>	(8)	Someone in Personnel suggested I try SIGI PLUS.
35%	<u>23</u>	(9)	Other _____

12. Was it easy for you to get an appointment to use SIGI PLUS?  
97% 63 (1) Yes                      3% 2 (2) No                      65 responses

13. Were you able to use SIGI PLUS at a time that was convenient for you?  
100% 65 (1) Yes                      0% 0 (2) No                      65 responses

14. Was SIGI PLUS available at a location that was convenient for you?  
95% 62 (1) Yes                      5% 3 (2) No                      65 responses

15. How much time did you spend on SIGI PLUS?  
6% 4 (1) Less than 1 hour    32% 21 (3) 2-3 hours                      65 responses  
57% 37 (2) 1-2 hours                      5% 3 (4) 3-6 hours                      0% 0 (5) more than 6 hours

16. Over how many sessions did you use SIGI PLUS?  
94% 61 (1) One                      65 responses  
5% 3 (2) Two  
1% 1 (3) Three or more

17. Did you get to complete as much of SIGI PLUS as you wanted?  
74% 48 (1) Yes                      26% 17 (2) No                      If no, why not? \_\_\_\_\_  
65 responses

18. Are all the company jobs that interest you included in SIGI PLUS?  
80% 51 (1) Yes                      26% 17 (2) No                      (2 respondents [3%] wrote in "not sure")  
64 responses  
If no, what jobs are missing?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

19. Did you understand the information you found about jobs at your company?  
98% 63 (1) Yes                      2% 1 (2) No                      64 responses  
If no, please explain: \_\_\_\_\_  
\_\_\_\_\_

20. Is there any information about jobs at your company you would like to see added to the system?

24% 13 (1) Yes                      76% 41 (2) No    54 responses

If yes, what information?

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21. After using SIGI PLUS, do you plan to do anything to get more information about occupations or jobs?

66% 42 (1) Yes                      34% 22 (2) No    64 responses

22. How did SIGI PLUS influence how you see your present job?

(Check all that apply.)

(percent of all respondents)

- 17% 11 (1) It confirmed that my present job is right for me.
- 17% 11 (2) I decided that I'm in the wrong job.
- 23% 15 (3) It raised questions in my mind about how well my job is suited to me.
- 41% 27 (4) It did not influence my feelings about my job.
- 17% 11 (5) Other \_\_\_\_\_

23. How did SIGI PLUS influence your thinking concerning your career plans?

(Check all that apply.)

(percent of all respondents)

- 56% 37 (1) I already had career plans and SIGI PLUS confirmed them.
- 20% 13 (2) I had career plans and I am re-thinking them.
- 5% 3 (3) I didn't have career plans and it helped me formulate them.
- 8% 5 (4) I was having trouble choosing among career options; SIGI PLUS helped me make a decision.
- 26% 17 (5) SIGI PLUS showed me some alternatives I hadn't thought of.
- 36% 24 (6) SIGI PLUS gave me some new ideas.

24. Did using SIGI PLUS help you in any of the following ways? (Check all that apply.)

(percent of all respondents)

- 41% 27 (1) made me more aware of career development opportunities
- 29% 19 (2) helped me approach career development in a systematic way
- 56% 37 (3) helped me identify my skills and interests
- 12% 8 (4) prepared me for career development discussions with my supervisor
- 39% 26 (5) made me feel more positive about my future
- 18% 12 (6) helped me to assume control over my career development

25. What did you expect to get from SIGI PLUS?

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26. Did you get what you expected from SIGI PLUS?

81% 42 (1) Yes                      19% 10 (2) No                      52 responses

If no, please explain:

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27. Did you find any reference to race, sex, nationality, religion, or anything else in SIGI PLUS that was offensive to you?

3% 2 (1) Yes                      97% 62 (2) No                      64 responses

If yes, please explain:

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28. What did you like BEST about SIGI PLUS?

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29. What did you like LEAST about SIGI PLUS?

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30. Is there anything else you would like to tell us that might help us improve SIGI PLUS?

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31. Would you recommend SIGI PLUS to a friend or co-worker?

90% 54 (1) Yes

10% 6 (2) No

60 responses

APPENDIX C: Memorandum to Prospective Field Test Participants

MEMORANDUM FOR:

Date: September 30, 1985

Subject: An Invitation to Participate  
in the Pilot Testing of  
SIGI PLUS

From: Lila Norris

SIGI PLUS is a computer-based career guidance system designed to help you plan your career. Though originally designed for use in colleges and universities, SIGI PLUS has been modified so it can be used by employees in a variety of organizations. ETS has developed this new modification and wishes to determine how useful it will be to employees. To this end, we would like to invite you to participate in a SIGI PLUS pilot program. The requirements for participation include:

1. completing a brief questionnaire before using the system, requiring about 5 minutes to complete,
2. using SIGI PLUS (on an IBM PC-XT) in room T-182, requiring 2-3 hours; the total time can be broken into two or more sessions, and
3. completing a second questionnaire requiring a total of about 15 minutes.

In addition, we would like to interview a small number of users of SIGI PLUS. You may decline if you are asked to be interviewed.

Your division management has agreed to support your participation in this pilot program for the time you spend using SIGI PLUS. We ask that you complete the questionnaires on your own time. If you wish to be a part of this project, please call Judy Granat on extension 1637 so we can schedule you for your first session with the SIGI PLUS system. If you have any questions or want more information about the project before agreeing to participate, please call Mary Bennett on extension 5531.

If you do not wish to be a part of the pilot program, please sign in the space provided below and return this memo immediately to Jim Wohlheuter, mail stop 89-D.

We wish to complete the pilot test as soon as possible, therefore, your early response will be appreciated.

Thank you for your consideration.

I do not wish to participate in the SIGI PLUS pilot program.

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Name

Date