

# **From College to Career**

## **Highlights of the Career Development Survey of Baccalaureate Degree Recipients**

**Collegiate Employment Research Institute**

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**Michigan State University**

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(e.g., entry of women into traditionally male occupations) on the careers of graduates, and (3) to generate information to help colleges and universities shape their curricula and career counseling programs, help students set more realistic career goals and expectations, and help educators gain a better understanding of the possible career paths of students they are teaching. This report highlights some of the initial results of this study.

What types of positions do college graduates hold? How similar are the career paths of recent graduates to those who graduated 20 to 35 years ago? How satisfied are graduates with their careers and life in general? How many job changes does a typical graduate make? What types of early job experiences are most valuable to later career development? Are certain occupations more mobile than others? What skills do graduates consider critical to their work? To what extent do graduates feel their undergraduate education prepared them for the work they do? Are there any differences between male and female graduates in their career paths, career satisfaction, or satisfaction with life in general? How might organizational changes affect an individual's career development?

To answer these and other questions frequently raised by educators, students, advisors, and career counselors, a career development study was undertaken by the Collegiate Employment Research Institute at Michigan State University. Approximately 32,000 baccalaureate graduates received a mail survey. The survey was designed to identify, through a career history profile, specific experiences and relationships that shape a successful and satisfying career for the individual.

This study had several objectives: (1) to determine the career paths of various types of graduates and whether they differed in their progression, (2) to explore the effects of recent changes in labor markets

### **Response Rate**

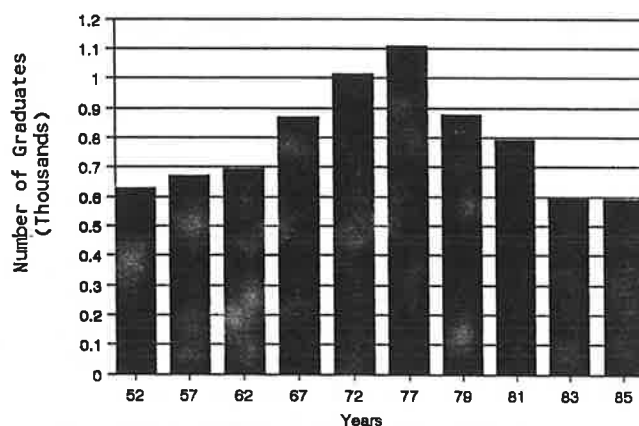
In the fall of 1986 and into the winter of 1987, an 8-page (machine scanned) questionnaire was sent to a stratified random sample of members from ten classes that had received baccalaureate degrees 1, 3, 5, 7, 10, 15, 20, 25, 30 and 35 years prior to the initiation of the study. Each class was stratified according to the college within the university granting the degree. A random sample from each college was taken. In some cases, every graduate from a particular college was surveyed to insure that the size of the sample was adequate.

Names of graduates were obtained from the university's alumni roster. After correcting the sample population for incorrect addresses, a 25% response rate was obtained or a return of approximately 7,900 questionnaires. The response rate was buoyed by an intense follow-up effort. Recent graduates were more likely not to respond because some were still in graduate school or correct addresses for others were not available (encountered nearly 10% in bad address returns for some years and colleges).

### **Participants in the Career Study**

The distribution of the respondents by graduation year is presented in the chart below. As the chart shows, the response pattern closely follows enrollment figures for this period until the early 1980's when the

**Distribution of Participants in the Career Development Study by Year of Graduation**

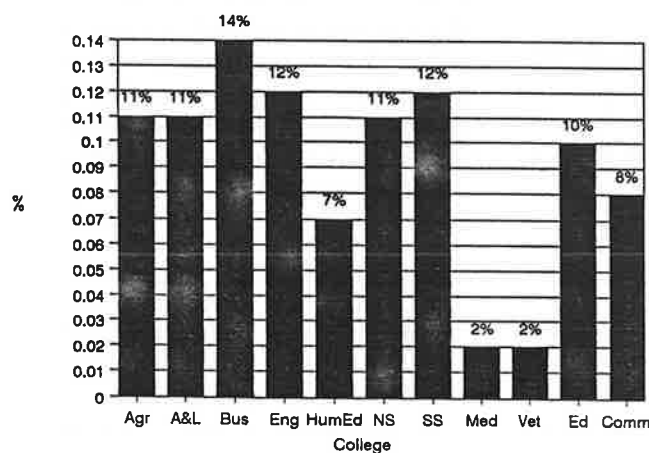


response rate dropped off, as already noted. In addition to the numbers indicated on this chart, 16 respondents, answering for their spouse or friend were not from the classes covered in this study.

We intentionally oversampled classes in recent years (graduates of the 1980's). A larger number of recent graduates will provide more information on early career experiences that current research on career development indicate strongly influences an individual's lifetime career path.

An accompanying chart breaks down the respondents by the college awarding their degrees. The colleges

**Distribution of Participants in the Career Development Study by College of Graduation**



Agr - Agriculture  
A&L - Arts & Letters  
Bus - Business  
Comm - Communications  
Ed - Education  
Eng - Engineering

HumEd - Human Ecology  
Med - Medicine  
NS - Natural Sciences  
SS - Social Sciences  
Vet - Veterinary Medicine

are fairly well represented in terms of the percentage of students actually graduated over the period covered. Slightly over 53% of the respondents were male. More men have responded in classes prior to 1972; in more recent classes, however, women have consistently higher response rates than men.

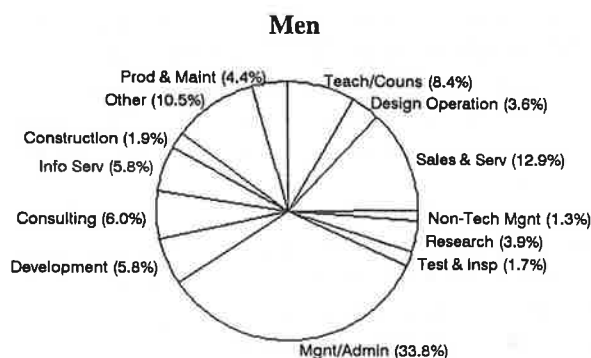
Although the study was based on the respondents' baccalaureate graduation year, many respondents have continued their education beyond the bachelor's degree. Additional degrees earned by participants include: 880 men (23.5% of male respondents) and 734 women (23.5% of female respondents) have a masters (MA, MS) or professional masters (MBA, MSW), 198 men (5.3%) and 55 women (1.8%) have a Ph.D., while 160 men (4.3%) and 72 (2.3%) women earned medical or veterinarian degrees and another 187 men (5.0%) and 53 women (1.7%) received law degrees.

Over 70% of the male respondents reported they were working full-time. Men could also indicate whether they participated in household activities: 25% noted that they did. Women who worked full-time represented 37% of the female respondents but the majority, approximately 58%, designated homemaker as their principal activity. Women were more likely than men to be in part-time positions, 4% as compared to 2%. Slightly over 100 respondents indicated that they were currently unemployed.

## Occupation and Work Activity

Using a broad classification of occupations, the overwhelming majority of graduates were working in professional and technical occupations. Managerial

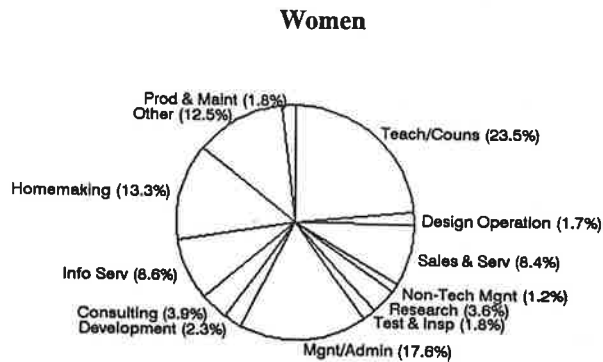
**Distribution of Graduates by Current Job Activity**



Agr/NatRes  
Info&Serv  
Mgmt/Admin  
Non-Tech Mgmt  
Prod&Maint  
Sales&Serv  
Teach/Couns

- Agriculture/Natural Resources  
- Information & Services  
- Management/Administration  
- Non-Technical Management  
- Production & Maintenance  
- Sales and Services  
- Teaching/Counseling  
- Testing and Inspection

## Distribution of Graduates by Current Job Activity

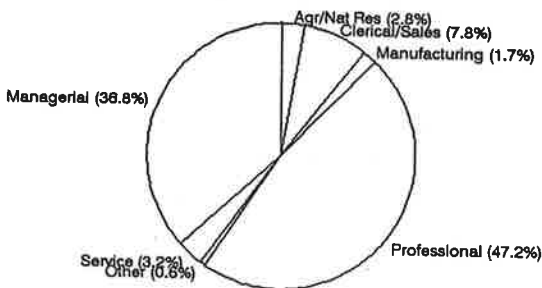


careers also described the occupations of a large number of graduates. As the charts indicate, women were primarily found in professional careers, especially teaching, with a smaller number in management (18% compared to 37% of the men). Women in the clerical-sales category tended to be in clerical positions while men were more often in sales.

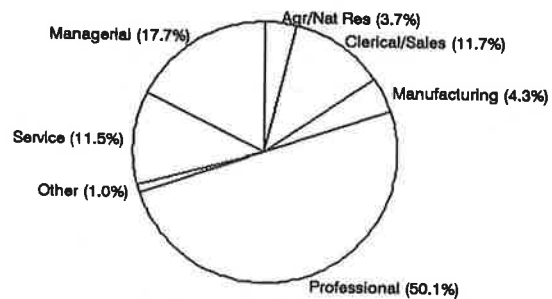
When comparing the current occupation distribution with the classification of first jobs after graduation, several noticeable shifts have occurred. Nearly 10% of the women left the work force to become full-time homemakers. The biggest decline for women was in clerical-related jobs. While the number of women in management increased by nearly 10%, the number of men in management increased 20% between first and current jobs. Two factors may explain why fewer

## Comparison of First and Current Occupations of Male and Female Graduates

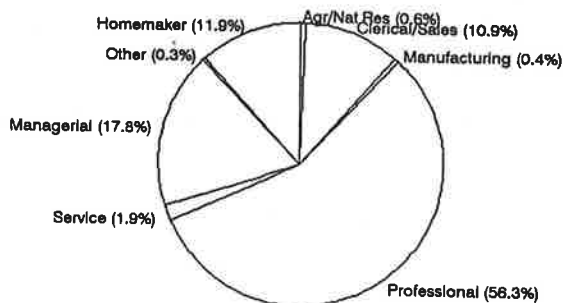
**Men: Current Occupation**



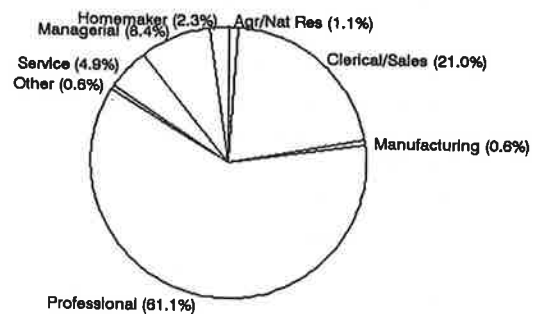
**Men: First Occupation**



**Women: Current Occupation**



**Women: First Occupation**



women are in management: (1) women are younger in this sample than men (female mean age of 35.3 as compared to 39.8 for men) and have not reached management level positions in their careers and (2) until recently, few management positions have been available to women.

When describing their current occupation in terms of primary job activities, women reported being heavily involved in teaching and counseling (23.5%), management (17.6%), and homemaking (13.3%). Men classified their work activities as primarily management (35%) and sales (13%). Smaller numbers of men and women perform functions, such as research, testing and inspection, and development. The charts at the bottom of the previous page show the types of jobs graduates are performing.

## RESULTS

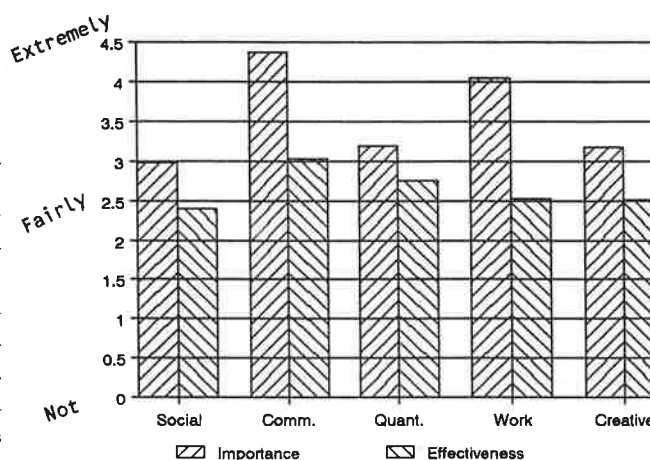
This survey generated an extensive amount of data for analysis. A thorough analysis of these data is underway. This report offers a few general findings, based upon the entire set of completed returns (7,651 cases contained enough data for analytical purposes). Because of missing information, which was found to be randomly distributed, all cases will not appear in each analysis.

### Career Success Factors and Undergraduate Education

An individual's career success can be influenced by that person's technical and social skills, as well as the work environment itself. While skill acquisition is a lifetime endeavor, many skills that are needed in the work place are developed in college. Two questions on the research instrument measured the importance of sixteen selected skills and competencies for success in the respondent's chosen endeavor and the effectiveness of the respondent's undergraduate program in developing these competencies. The sixteen competencies were grouped into five major categories: Social Context-ability to handle moral and ethical issues, sensitivity to the feelings of others, ability to utilize political process, and ability to place current problems in historical, cultural, and philosophical perspectives;

Communication/Reasoning-ability to acquire new skills/understanding, ability to write effectively, ability to communicate (orally/interpersonal) effectively, and ability to evaluate between alternative courses of action; Quantitative and Abstract Ability-ability to think analytically, ability to utilize quantitative tools, and ability to solve complex problems where little is known about the area; Work Environment-ability to organize and supervise work of others and ability to function as a member of a team; and Creativity-ability to formulate creative and original ideas/solutions and ability to convey meaning through artistic and creative expression. The highest rated factors, in terms of importance, were communication skills and work environment. The social context was the lowest in terms of importance. Undergraduate programs were viewed as being "somewhat" to "fairly" effective in developing the sixteen competencies. The difference between the success and effectiveness ratings was largest for communications and workplace skills. In other words, respondents felt that their undergraduate programs did not adequately develop communication and workplace skills perceived necessary to be successful in their current endeavors. An area of close agreement was found, however, for quantitative skills.

Ratings of the Importance of Career Skills and Educational Effectiveness in Developing Skills



### Skill Groups

Men and women both gave the same importance rating to communication and work environment skills. Women, however, rated social context and creative skills significantly higher than men while men gave

more importance to quantitative skills. These gender differences disappeared in most cases when major (defined as the college granting the degree) and occupation were taken into account. Arts and letters, social sciences, and education graduates tended to place much higher importance on social and creative factors. Engineering and natural science graduates placed their importance on quantitative skills. Managers were less likely to be concerned with social and creative skills than those in professional occupations. Clearly, these academic major and occupational distinctions suggest strong underlying gender differences as related to decisions such as the selection of college major. After controlling for major and occupation, a significant gender rating difference remained for quantitative skills.

When rating the effectiveness of their undergraduate programs, women and men differed sharply. Women, with the exception of quantitative skills, were more favorable in their effectiveness ratings than men. In arts and letters and education with regards to communication and creativity skills and in human ecology and education with regards to work environment, women gave higher marks to their educational programs. Gender remained a significant factor in determining the effectiveness ratings for all five factors after academic major was taken into consideration. Occupation apparently did not influence the effectiveness ratings.

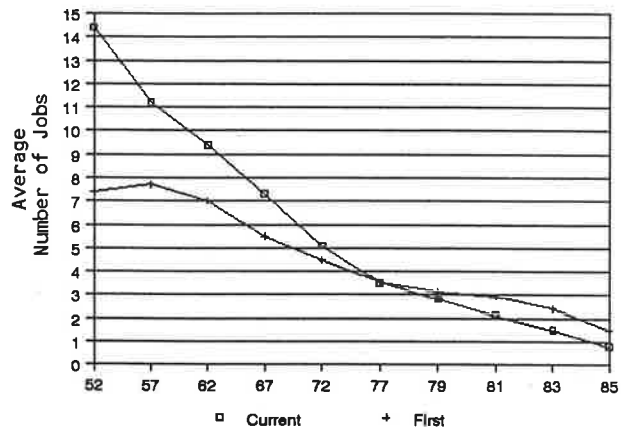
It is important to interpret these two sets of factors in the context of the question. The question asked respondents to rate each competency as it influenced his or her current occupational endeavors. Undergraduate education provides resources and skills for use in one's total life. Some of these factors, e.g. social context, may be much more important in other facets of an individual's life.

### Job and General Life Satisfaction

An individual's career often represents a major portion of that person's life. The career helps an individual define him or herself and people often use their career to help fulfill needs of achievement. Several questions were included that measured a respondent's satisfaction with the job and satisfaction with life in general. Before examining these two specific questions, job history patterns involving the number of jobs and number of employers the

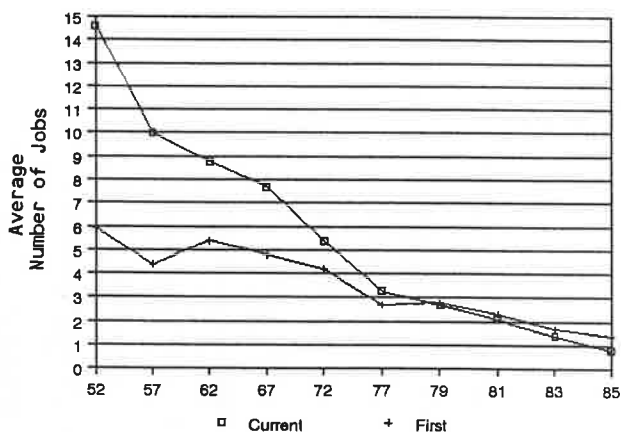
**Average Number of Years Spent in First and Current Jobs**

#### MEN



**Year of Graduation**

#### WOMEN



**Year of Graduation**

respondent has had throughout his or her career will be reviewed. After the discussion of job and life satisfaction, future career prospects will be addressed.

A college graduate has probably held or can expect to hold four different jobs after graduation and work for three to four different organizations. Arts and letters, education, and communications graduates tend to hold the same type of job in different organizations (reported working for more organizations than jobs held) while engineers and human ecology graduates held more positions, but more often remained in the same organization. Both men and women have held, on the average, the same number of jobs, 3.5 and have worked for the same number of organizations, an average 3.6.

A college graduate spent or can expect to spend slightly over 4 years working in their first job after graduation. Respondents have generally been in their present position for nearly six years. Length of employment however, is strongly influenced by year of graduation. For those graduating in the 1950's, tenure in the first job ranged from six to eight years and in their current position over ten years. Graduates since 1977 have spent less than three years in their first job and as expected, have served a shorter time in their current position.

Gender also affected the years spent in a position. In the graphs on the previous page, the number of years spent at the first job differed noticeably for men and women. Between 1952 and 1972, women spent nearly two to three fewer years in their initial positions.

Women during this period were likely to leave the work force for family reasons. Since 1977 the length of tenure in one's first job has dropped for both sexes; however, women have tended to stay a shorter time than men. Shorter tenure may indicate that women are employing different strategies in developing their careers.

Interestingly, women and men have very similar tenure patterns in their current jobs. Given the patterns of years in first and current jobs, the journey between these two points in a person's career may shed important insights into how careers develop for men and women. Examination of the career profiles continues in order to describe potential career paths.

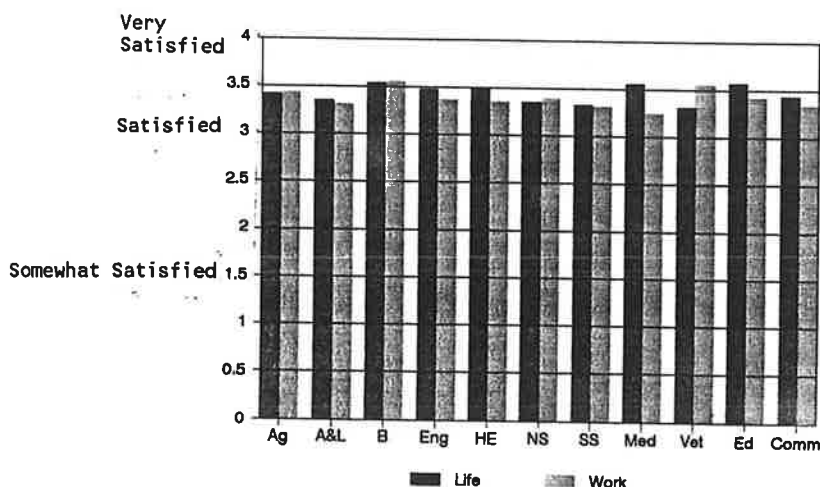
Having a position that required the supervision of others was common among the majority of graduates. Respondents from agriculture, business, arts and letters, education, and social science programs reported supervising an average of 20 to 25 people. On the other hand, medical, veterinarian, natural science, engineering and communications majors supervised noticeably fewer people -- between 10 and 15. Women, especially in the technical fields, supervised fewer people than men, averaging 15 as compared to 24 for men.

Approximately 53% of the respondents were "very" to "extremely" satisfied with their life in general. Slightly more respondents were not satisfied with their work (21%) than with their life in general (18%). Mean (average) ratings for the job and life satisfaction for

each college are graphed in the chart below. As this graph illustrates, colleges, with the exception of veterinary medicine, reported equal ratings for the two measures or slightly higher for general life satisfaction. The average job and life satisfaction rating was between the "satisfied" and "very satisfied" categories.

Very few differences were found among the satisfaction ratings across the general occupation categories. Homemakers felt very satisfied with their lives in general (rating 3.7) -- higher than all

Life and Work Satisfaction by Graduate's College



other groups that averaged 3.4. Work satisfaction was rated slightly lower than life satisfaction by all groups with manufacturing and sales and service employees being least satisfied with work. A general conclusion can be made that most of the participants in this survey have positive attitudes toward their lives.

Separate analyses of the job and life satisfaction measures were conducted for respondents, based on their age, marital status, and gender. Results showed a small correlation between job satisfaction and age ( $r = .10$ ) and life satisfaction and age ( $r = .09$ ) indicating that older respondents were more satisfied with their jobs and life in general than younger respondents.

Results that compared single and married individuals showed married people slightly more satisfied with their lives in general. No differences were found with respect to job satisfaction. Higher satisfaction with one's work did contribute to higher satisfaction in life ( $r = .32$ ).

Comparisons between males and females showed a significant difference in their reported levels of job satisfaction. Men were more likely to be satisfied with their work than women, according to the table below. Provided are the numbers and percentages of men and women rating their job satisfaction at each level.

Mean Job Satisfaction Rating	Men		Women	
	%	(n)	%	(n)
Not Satisfied	6.3	(253)	8.1	(281)
Somewhat Satisfied	13.3	(536)	15.0	(518)
Satisfied	25.3	(1018)	28.3	(978)
Very Satisfied	38.2	(1534)	33.8	(1167)
Extremely Satisfied	16.9	(679)	14.7	(507)

The age differences mentioned previously may partially explain why women are dissatisfied. Women have not had the time in the work force to move into the types of positions they aspire. Also, women may have the disadvantage of exiting and re-entering the labor market for family responsibilities. We are

exploring this relationship between job disruptions and career progression for women and expect to have results in future reports.

## Career Prospects

Over 73% of the respondents considered themselves to be successful in the current occupations. Graduates from business and education tend to rate their success higher than other groups. No college group had a low rating; all clustering around the "successful" point on the scale.

Nearly 84% of the male respondents indicated that their current positions were appropriate for their career paths and an additional 10% thought their positions were possibly appropriate for their career orientation. Fewer women, only 67%, believed their current positions were appropriate for their career, and another 14% believing their jobs were potentially career oriented. Women were more likely to be interim (7%) or in temporary (3%) employment situations. Another 9% of the women indicated that they were in their current positions because of family obligations (less than one-half percent of the men indicated used this response).

When career progress was measured against one's peer group, 63% of respondents felt their careers were progressing "better" or "much better" than their peers. Only 8% felt their careers were progressing poorly in comparison to their peers. The remainder felt they were progressing at the same pace.

## CLOSING COMMENTS

This general summary of the career survey was intended to provide a better understanding of why the Institute is collecting career-related information. The descriptions and trends of the careers presented in this report have stimulated some interesting questions regarding how successful and satisfying careers evolve. Answers to the questions presented at the beginning of this report will provide valuable information towards the development of career programs to aid students, recent graduates, and alumni pondering possible job changes. At this stage, results from our initial analyses have begun to shed light on these questions. Analytical work is continuing to build on these relationships so that other technical reports can be prepared.

The Collegiate Employment Research Institute was established by Michigan's Legislature in 1984. The Institute is charged with the task of examining issues on career development and employment for college graduates. Various projects are underway, including the study covered in this report, to provide information to educators and counselors for program development. If you have any questions on this study or any Institute project, please contact the Institute directly.

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