Transitions To The Workplace: Expectations and Realities for Liberal Arts Graduates

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The Results of Steele Grant Research

In this environment of World Wide Webs, Pegasus Parades, and Gophers, career planning, counselors, and human resources professionals are challenged to evaluate other work in the context of almost unpredictable future change, to discard obsolete myths, and to acquire effective practices for the future. One of the most problematic paradoxes of today's and future job markets resides in the often competing needs for technological expertise along with the functional skills typically associated with liberal arts graduates. The new economy requires adaptability, flexibility, and broad understandings of the nuances of communication along with a well-developed sense of comfort with technology. Confounding these sometimes competing needs are the interpretations and expectations of prospective employees and employers relative to the meaning of both selection descriptors (e.g., academic majors or specific skills) as well as satisfying work. Thus, the questions is posed, "Are liberal arts colleges producing the type of employees they think they are, and are employers getting whom they expect when they hire liberal arts graduates?"

Literature during the past twenty years suggests that myths abound for both employers and college graduates alike in the attempt to define meaningful matches between entry level positions and prospective professional beliefs. Employers often believe that a "best match" requires certain career orientations (e.g., aspirations for vertical mobility, and/or positive definitions of career choice), and certain biographical experiences. Entering professionals hold their own belief systems which may or may not match those of employers. These beliefs frequently reside in psychological frames of career decision-making that emphasize traits, abilities, interests, and needs as bases for predicting work selection (e.g., Dawis & Lofquist, 1984; Holland, 1985; Super, 1957; Smith, 1988). While these variables may assist us in predicting good career matches, current theorists are finding that individual perspectives of the meaning of work may contribute more to our understanding. In fact, Krumboltz (1992) posits that career belief systems, which in turn are influenced by education, by social roles and by ethnic and gender membership, may contribute more to our understanding of work satisfaction than the psychological theories in use. But, who really knows what attributes and beliefs predict career satisfaction and success?

THE PROBLEM

This investigation studies a population of recent graduates most surrounded by myths, that is, liberal arts graduates. On the one hand, liberal arts graduates are touted as having the most adaptable education and skills appropriate for the new economy (Reich, 1992). On the other hand, they are thought of as being the least focused vocationally, and, thus, the least likely to be employed in entry-level careers. Useem's (1989) study, for example, both questions and supports the conclusions of earlier research at such companies as General Motors and American Telephone and Telegraph. The latter studies found that liberal arts graduates generally rose to the top of corporations because of their adaptability, their communications skills, and their problem-solving competencies. Useem suggests, however, that making the connections with corporate entry-level jobs is particularly problematic, since many corporate belief systems require specificity of vocational purpose in their new hires. In addition, liberal arts graduates may be faced with limited work salience if predictions of underemployment are accurate (Johnston & Packer, 1987). Thus, this project attempted to define the expectations and experiences of liberal arts graduates in entry-level jobs and to assess how convergence or divergence of expectations affect work satisfaction.

Evaluation of these areas is warranted to understand the changing developmental, psychological, and social processes that impact the most intrusive and pivotal component of our lives, that is, work, in the presence of our rapidly changing work world. In addition, improvement in our understanding of the interaction between career belief patterns and work satisfaction will enable employers to predict better the relative value of various reinforcers in their work environments. For example, if it is important to the liberal arts graduate to be confident of the importance of their work to the organization, the employer could build in job satisfaction simply by communicating to the employees the relative value of their work in the overall organizational operation.

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With surveys of selective liberal arts college graduates (Carnegie IIe), we hoped to achieve five objectives: a) to define the various dimensions of liberal arts graduates' transitions to the workplace, including their expectations; b) to provide a test of the theory that career beliefs and expectations interact in predictable patterns with career choice; c) to evaluate the impact of biographical influences, self concept, and educational experiences on career beliefs; d) to describe unique career belief patterns of liberal arts students in general as well as subgroups within the population, including gender comparisons; and, e) to provide information critical to employers in their selection and retention of liberal arts employees. In addition, this study offers a model for collaborative research within institutions whose primary mission is teaching rather than research.

To Define the Various Dimensions of Liberal Arts Graduates Transitions to the Workplace, Including Their Expectations. Investigations of liberal arts graduates intersection with the work world have simply not been done in the past. Richardson (1984) attempted to begin this work with undergraduates at Northeastern University, but her work was not continued. In addition, claims of small liberal arts colleges about the value we add have rarely (if ever) assessed graduate transitions in a way that linked work place needs with graduates skills and expectations.

To Provide a Test of Theory. Although work with person-environment congruence theories contributes significantly to our understanding of career client needs, the variance accounted for by interests, values, or typology varies greatly, even with well-designed studies. Osipow (1990) suggests that researchers need to expand their view to include a more in-depth study of the interaction of variables at critical transition points, and this would include graduation. In addition, he contends that theorists have not identified critical barriers that impede career development. Krumboltz (1991) maintains that career belief systems are critical measures for understanding both transitions and impediments in decision-making. This study allowed for the evaluation of the importance of career belief patterns in graduates decision-making. In addition, it clarified, to some degree, the interaction of career beliefs, expectations, and experience.

To Evaluate the Impact of Individual Difference and Past Events on Career Beliefs. Practitioners in career counseling constantly assess needs of individual clients. With limited resources, we plan programs and experiences for our students without predictable knowledge of the outcome. Since social learning theorists contend that individual interpretations (beliefs) are as important in career decision-making as specific abilities or interests, additional knowledge of the interaction of past events with career beliefs allows us to tailor educational opportunities more precisely and parsimoniously. In addition, this knowledge can assist organizations in their selection of our students as employees.

To Describe Unique Career Belief Patterns of Liberal Arts Students. Breneman (1990) contends that pure liberal arts colleges uniquely guide 18 to 23 year olds in the perpetuation of traditional educational and humanistic values. Many admissions offices claim more than that. They maintain that our graduates are uniquely qualified to contribute to the community through their highly developed functional skills as well as their values. This claim seems to be made with little documentation of successful links with the world of work. More importantly, we know very little about the actual career beliefs and values of our students and, therefore, know little about their reasons for choosing their particular career directions as they make their graduation transitions. Their beliefs about their own employability, their work values expectations, their needs for intrinsic versus extrinsic reinforcement may be very different from the image projected by our institutions.

Most career research has been conducted on students of large research universities. Since the mission of select liberal arts colleges is specifically different from that of large universities in their commitment to influence values, one cannot assume that results from studies at large universities apply to liberal arts graduates overall. Although our students socio-economic profiles may be similar to those of students in state institutions (approximately 40% have parents with less than $50,000 income; many are first-generation college; most live within 250 miles of the college they attend), the potential for institutional influence on their values is great, and that includes career values. Since Breneman (1990) contends that 200 selective traditional liberal arts colleges remain, a study of this kind should produce important results that can be generalized to at least 300,000 students in the historical context of the 1990s.

To Provide Information Critical To Employers in Their Selection and Retention of Liberal Arts Employees.
This information should provide new insights into selection and reward parameters for new college employees.

RESEARCH QUESTIONS

The following research questions are posed based on these purposes:

1.   Can we describe a "typical liberal arts graduate" relative to their career-related experiences and beliefs as they make their transitions to the world of work?

2.   Do certain career preparation experiences of liberal arts students influence their career belief patterns?

3.   What other biographical, demographic, and experiential histories influence career beliefs?

4.   Do individual career expectations interact in predictable patterns with organizational expectations of liberal arts graduates?

5.   Are there differences in the career beliefs and organizational expectations of men versus women liberal arts graduates?

6.   What unique patterns of career beliefs and attitudes can be predicted from major selection?

7.   Do specific patterns of career beliefs in fact act as barriers to career decision-making as suggested by the literature on career beliefs?

8.   Which factors are the most significant contributors to changing career beliefs in the workplace?

9.   Do liberal arts graduates feel prepared (and are they prepared) for the type of learning, including technological skills, required now in the workplace?

THE RESEARCH DESIGN

A pilot study was first conducted in the spring of 1992 with seniors at six highly selective (Carnegie IIe) institutions. These were Carleton College, Centre College, Fisk University, Kalamazoo College, Knox College, and Rhodes College. Each college career development officer was responsible for confidentially distributing, collecting, and passing back The Career Beliefs Inventory and the Liberal Arts Career Beliefs and Expectations Survey to 104 volunteers from their senior classes. Numbered records were retained in order to send the subsequent surveys in the fall of 1993, that is, 18 months later.

Two surveys were administered to the seniors. The first, the Career Beliefs Inventory (CBI), initially served as the primary measurement of the independent variable, career beliefs. The CBI is a 96 item instrument that measures the strength of career beliefs in five different areas along a five point Likert scale. Krumboltz (1991) reports satisfactory reliability estimates based on the administration of the inventory to over 8000 subjects in different groups. By constructing correlations between individual scale items and job or school satisfaction, validity research yielded varying coefficients. Only scales that obtained correlations of .2 or above were maintained in the final instrument, however, problems emerged with the robustness of the scales as constructed.

The second survey, based on work done at the Collegiate Employment Research Institute at Michigan State University by Gardner and Chao (1991), obtains basic biographical data, self-reports of functional career skill development, expectations about the world of work, assessments of career influences in students' lives including career-related experience, and an overall evaluation of self-concept. Job task expectations (Sim, Szilagyi, and Keller, 1976) are grouped into seven scales: autonomy, feedback, dealing with others, value of work, skill-levels

used, task identification, and friendship. A follow-up survey asks for evaluation of these variables based on actual experience.

After the initial pilot study, we added 15 additional colleges whose primary missions focused on the liberal arts. An additional 351 seniors completed the early surveys. Because our findings suggested problems with the robustness of the Career Beliefs Inventory scales, we eliminated this instrument and added fifteen expectations items that had shown significance in previous research at Michigan State University.

A follow-up survey was administered during the second phase which was sent approximately 14 to 18 months after graduation. This survey rephrased several of the major scales on expectations and career skills; additional questions on their transition experiences were also included. Of the total 455 participants from phase I, 205 returned the phase II survey.

PARTICIPANT PROFILE

Students who participated in the first phase can be characterized as white (92%), women (78%), who were 24 years old (Table 1). These students had earned an average grade point average (GPA) of 3.26, ranging from 2.00 to 4.73 (unadjusted for a 5 point scale) in natural sciences (15%), social sciences (55%), and arts and letters (30%) disciplines. Their self-esteem scores, as measured by the BEM scale, were very high (average 1.5) with very little variation among different cohorts. The educational attainment of their parents revealed that 64% of their fathers and 55% of their mothers received bachelor's degrees or higher (38% of fathers and 25% of mothers earned degrees higher than a bachelor's). Slightly over 50% of the first phase population reported their family incomes were less than $50,000 and the remainder reported greater than $50,000. Except for the over-representation of women, these characteristics appear consistent with students from selective liberal arts institutions.

TABLE 1. Profile Characteristics of Students Returning Phase I and Phase II Surveys (%)

	Phase I (n = 445)	Phase II (n = 205)
Gender: Female Male	78% 22%	79% 21%
Grade Point Range Average	 2.00 to 4.73 3.26	 2.00 to 4.73 3.36

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Table 1 (continued)

	Phase I (n = 445)	Phase II (n = 205)
Academic Major		
Natural Science	15%	18%
Social Science	55%	52%
Arts & Humanities	30%	30%
Ethnicity		
White	92%	96%
Other Minority	8%	4%
Family Income		
< 29,999	20%	18%
30,000-49,999	32%	33%
50,000-69,999	24%	23%
70,000-99,999	0%	
>100,000	24%	25%
Father's Education		
Less than BA	36%	38%
BA/BS	26%	26%
More than BA	38%	36%
Mother's Education		
Less than BA	45%	49%
BA/BS	30%	26%
More than BA	25%	25%
Siblings		
Have brother	62%	59%
Have sisters	60%	63%
Oldest	50%	53%
Youngest	36%	34%
Age		
Range	22-48	22-48
Median	23	24
Mode	23	23
Average	24	25
Status Prior to Graudation		
Go to graduate school	23%	27%
Had a job offer	20%	24%
Undecided: not active	26%	28%
Undecided: active	31%	32%

The first question in phase I concerned the students' plans upon graduation and the amount of effort being expended toward those plans. Based on their response, students were sorted into four groups. The first group consisted of students who had applied, been accepted, and intended to go to graduate or professional school (23%). The second included those who had accepted a job offer or had received an offer and planned to work immediately after graduation (20%). Several of those students had also been accepted to graduate school but opted to work first. Those students who were not sure what they were going to do, but were actively applying to graduate school or

seeking interviews with employers were placed in the third group (31%). The fourth group found students who were undecided but not actively doing anything (26%). This latter group had slightly lower self-esteem from other group, but the difference was not significant.

The characteristics of those who responded to phase II were similar with two exceptions. Minority participation fell off considerably. Since this cohort was very small from the start, any attempt to view the transition experiences of these students is now problematic. Students who were undecided/inactive in phase I failed to respond as expected, dropping from 26% of the population to 18%. The response was particularly low from humanities majors among this group. This non-response situation, however, is consistent with that encountered by other researchers. These individuals may have had more difficulty adjusting after graduation: a topic addressed later in the paper.

PRE-GRADUATION: PROMISING PLANS AND HEALTHY PERCEPTIONS

The primary focus of the phase I instrument was on capturing the students' perceptions of and attitudes toward career and work. Questions dealt with factors that influenced their career selection, types of competencies they believed employers were seeking, methods used to find employment, and the characteristics of the jobs they expected to obtain. Their responses establish benchmarks against which their actual experiences can be compared.

Career Interests. Two key factors shaped the career focus of these liberal arts students. First, their own internal interest and curiosity as opposed to external drivers such as status and salary. Secondly, these students possessed a genuine desire to serve people. All job groups, with the exception of those going to school, selected careers that provided opportunities for advancement -- a strong need to be involved in activities that offer hierarchical movement (preferably upward) accompanied by more responsibilities. Influences varied beyond those three core factors. Those going to school attributed their decision to courses taken or a professor's mentorship. For those inactive/undecided, having the flexibility to shift careers was important. Flexibility offers someone options, especially if they have not focused on what they may want to do. An important and interesting influence on those who will work was their mother's encouragement and support.

TABLE 2. Factors That Influenced Career Decision (mean and percent important)

Reasons for Career Decision	All Mean % Imp.		School Mean % Imp.		Work Mean % Imp.		Active Undecided Mean % Imp.		Inactive Undecided Mean % Imp.	
Interest	4.69	96	4.79	98	4.63	94	4.61	95	4.68	98
Desire to serve people	3.95	71	3.96	71	3.77	65	4.02	72	4.01	74
Opportunities for Advancement	3.67	63	3.52	57	3.85	71	3.70	65	3.60	59
Job Security	3.56	59	3.50	60	3.65	61	3.56	60	3.54	55
Courses Taken in College	3.51	56	3.68	61	3.47	58	3.65	64	3.22	39

Table 2 (continued)

Reasons for Career Decision	All Mean % Imp.		School Mean % Imp.		Work Mean % Imp.		Active Undecided Mean % Imp.		Inactive Undecided Mean % Imp.	
Father's Encouragement	3.29	49	3.17	51	3.45	52	3.31	46	3.22	49
Professor's Encouragement	3.23	45	3.53	54	3.19	45	3.23	47	2.98	34
Ability in Languages	3.15	46	3.33	50	3.04	40	3.12	47	3.11	46
Salary	3.09	41	3.06	37	3.29	51	3.04	43	3.01	33
Prestige/Status	2.99	38	3.07	41	3.10	42	3.00	38	2.81	29
Friend's Encouragement'	2.97	35	2.89	34	2.99	36	3.04	38	2.94	32
Ability in Science	2.26	20	2.61	31	2.19	15	2.24	19	2.03	14
Mother's Encouragement	3.50	56	3.44	54	3.75	67	3.48	52	3.34	54
Kind of Co-workers	3.45	53	3.35	50	3.53	55	3.43	52	3.52	56
Job Prospects	3.40	53	3.43	53	3.64	63	3.31	51	3.26	47
Flexibility to Shift Careers	3.43	48	3.26	41	3.39	47	3.37	48	3.71	57

Job Seeking Strategies. Regardless of their current post-graduation plans, all respondents were asked how they were planning to seek employment. Several approaches or resources were common to all groups; clearly using one's own initiative and one's family network were the preferred methods. Internships were considered a key instrument toward employment; yet more than one-third of the respondents indicated that they had gained no career related experience before graduating. This situation was particularly prevalent among those inactive/undecided where 54% had no career related exposure. Faculty, not advisors or career staff, are expected to play an important role in the job search for everyone except those who have already found work. Clearly the inactive/undecided have given very little thought to how to find a job, as many simply answered they did not know.

TABLE 3. Methods and Resources Important to the Job Search of Liberal Arts Students
(means, percent not using this option)

Options	All		School		Work		Active Undecided		Inactive Undecided	
	Mean	% Not Using	Mean	% Not Using	Mean	% Not Using	Mean	% Not Using	Mean	% Not Using
Internship	4.25	42	4.18	45	4.26	31	4.39	36	4.08	55
Resume Workshop	3.52	39	3.15	53	3.61	34	3.55	26	3.64	46
Interview Training	3.50	43	3.22	59	3.45	33	3.52	31	3.73	55
Employer Career Center	3.54	54	2.74	69	3.68	40	3.72	39	3.58	69
Faculty Contacts	3.71	44	3.93	41	3.32	44	3.71	37	3.86	56
Advisor Contacts										
Career Staff Contacts	3.38	48	2.79	61	3.38	47	3.44	28	3.76	64
Alumni Contact	3.50	48	3.64	54	3.26	44	3.49	43	3.62	52
Family/Friend Contact	3.91	24	3.95	40	3.62	22	3.96	7	4.05	30
Job Fairs	2.89	47	2.64	64	2.65	48	3.01	28	3.06	55
Job Lists	3.10	37	3.12	57	2.94	27	3.18	24	3.11	44
Resume Data Bank	2.70	60	2.65	71	2.62	58	2.63	48	2.95	66
Employment Agency	2.49	69	2.60	75	2.36	72	2.35	62	2.71	70
Own Initiative	4.23	20	4.20	34	4.24	12	4.30	7	4.30	28

Table 3 (continued)

Options	All		School		Work		Active Undecided		Inactive Undecided	
	Mean	% Not Using	Mean	% Not Using	Mean	% Not Using	Mean	% Not Using	Mean	% Not Using
Internship	4.25	42	4.18	45	4.26	31	4.39	36	4.08	55
Resume Workshop	3.52	39	3.15	53	3.61	34	3.55	26	3.64	46

Workplace Competencies. Students were asked to review twenty-three characteristics and competencies that employers use to evaluate potential employees and to rate their abilities from below average to above average. Factor analysis produced five descriptive factors from this set. Creativity which loaded equally on several factors has been considered separately. Overall students were not modest in their assessment: they believed themselves average or better in nearly all these areas. Students rated themselves "above average" in attitude (positive attitude, hard working, ability to organize, work independently, and highly ethical) and image (self-confident, verbal articulation, leadership, physical appearance and overall communication skills). Rated just beneath those areas were their basic skills (writing ability, problem solving, understanding of world events, GPA, and general knowledge) and flexibility (flexibility, able to work as team member, and open to location). They rated themselves lowest in advanced skills which included quantitative methods, computer skills, career related work experiences, and specific career goals.

TABLE 4. Self-Assessment of Characteristics Used by Employers to Evaluate Candidates (mean)

	ALL	School	Work	Activity Undecided	Activity Undecided
Image	4.04	3.89	4.11	4.02	4.09
Attitude	4.48	4.40	4.57	4.45	4.50
Basic Skills	3.96	4.00	4.01	3.92	3.94
Flexible	3.92	3.75	3.90	4.00	3.99
Advanced Skills	3.51	3.56	3.72	3.21	3.58
Creativity	3.98	3.74	3.89	3.88	4.10

Scale: 1 = Below Average   3 = Average   5 = Above Average

Image: Communication skill (overall), self-confidence, physical appearance, verbal expression (articulation), leadership ability.
Attitude: Hard working, positive attitude about work, ability to organize, moral and ethical character, ability to work independently.
Basic Skills: General knowledge, grade point average, problem-solving ability, knowledge about world events, write effectively.
Flexible: Flexible about job requirements, able to work at as a team member, flexible about job location.
Advanced Skills: Previous work experience, quantitative methods, computer skills, specific career goals.

Several significant differences were found between selected groups on several of those dimensions. Inactive/undecided and humanity majors rated themselves lower in advanced skills than the other groups and majors. Both undecided groups indicated they were more flexible than those continuing their education or entering the work force.

Connection Between College and Career. Four questions were developed to tap into the respondents' beliefs on how well their academic program prepared them for their first employment encounter. The combined rating of 3.49 suggested that students agreed that their academic training had prepared them for what they would experience in the work force after graduation.

Career Beliefs. Fifteen statements about labor market and career dynamics were used to determine the students' belief about their early career paths. Students believed they would need more training to obtain the job they really desired and to be competitive in the labor market; at the same time they knew their early career would be a process requiring flexibility and adaptability -- holding several different jobs, open to variety of locations, and starting somewhat less (position and salary) then they wanted. A number of students also believed that their career's progress would not be accelerated due to the influential people they knew.

TABLE 5. Career Beliefs of Liberal Arts Students

Career Beliefs	Mean	% Disagree	% N	% Agree
First job - determines career direction	3.07	29	35	25
Need more training	3.62	19	20	61
Able to change jobs	3.43	18	32	50
Where I live - affect career	3.28	23	31	46
Happy in different jobs	3.73	12	17	71
Once decided - stay in career	3.06	28	38	34
Where - not important	3.78	69	19	12
Not competitive - without more training	3.61	23	14	63
Progress - influenced by people	2.82	40	30	30
Prepared to train in job	3.72	15	18	67
Move job within 3 years	2.95	32	41	27
Distressed - if make wrong career	3.06	33	30	27
Because of competition - settle for less than I want	3.35	20	30	50
Prefer to be close to college/home	2.74	43	34	23
If in right career - confident success	4.15	6	10	84

Scale: 1 = Strongly Disagree 5 = Strongly Agree

Where the student stood in regard to post-graduation planning, strongly influenced selected beliefs.

* Those who have jobs strongly believed that the first job determines one's career direction (F = 3.159, .025).
* Students who are looking for employment were less concerned with obtaining more training before finding their desired job (F = 10.301, .000). Natural science majors, however, were more committed to additional training before obtaining their ideal job than students from other academic disciplines (F = 2.96, .050).
* Students who are looking for employment believed they would not be able to change jobs as easily as students in the other status categories (F = 4.23, .006).
* Women held much stronger convictions on the belief that location (where one lives) would affect career satisfaction than men with the exception of men graduating in the humanities (F = 5.88, .003).
* Students continuing their education believed that they would not be as competitive in the labor market without additional training (F = 5.211, .002).
* Men who were looking for a job tended to agree that one's career progress was influenced by the people an individual knew while women were more likely to believe in a meritocratic system (F = 2.267, .080).
* Natural science majors in general indicated that they would be distressed if they made a wrong career choice. However, men from this major, and especially those natural science graduates who were looking for jobs, strongly indicated that they would be stressed if they made the wrong choice. Humanities were likely not to be stressed about their career direction.
* Those students still looking for work preferred to stay closer to home or their college.

Job Characteristics. By responding to a series of questions that described various aspects of a job, responses permitted the positions students expected to obtain to be defined in terms of the skill variety utilized, autonomy, feedback from supervisors, task identity (extent to which employee does an entire piece of work), specific knowledge, value of work, friendship opportunities, and dependency (degree to which an employee is required to work with others to complete the work).

Prior to graduation, students expected a moderate amount of skill variety; to be moderately involved with others to complete their work; and to be in positions that required a moderate amount of specific knowledge. They expected much more in the way of autonomy, feedback, and opportunities for friendships. Characteristics that they desired most from work were: (1) recognition that the work they did was of value to others and (2) the responsibility for the entire piece of work so that they could see the results.

TABLE 6. Job Characteristics Expected and Encountered (mean)

	Expected Phase I	Encountered Phase II
Autonomy	3.78 Great amount	3.72 Great amount
Skill Variety	3.47 Moderate amount	3.12* Moderate amount
Task Identity	4.15 Great extent	4.05 Great extent
Feedback	4.01 Great amount	3.3* Moderate amount
Dependent	3.17 Moderate extent	3.05 Moderate extent
Friendships	3.80 Great extent	3.52* Moderate extent
Specific Knowledge	3.39 Moderate extent	3.44 Moderate extent
Value of Work	4.18 Great extent	3.72* Great extent

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Some interesting differences were found between various cohorts. Those students with job offers expected less autonomy ($F = 2.785$, .040), more feedback ($F = 4.033$, .008), and more specific knowledge requirements ($F = 2.261$, .08) than those going to school or undecided. Women believed they would receive more feedback ($F = 3.23$, .07), use more skills ($F = 3.44$, .06), and have higher task identity ($F = 5.09$, .025) than men. Men going to school and undecided but looking expected to find more dependency in their positions than other students.

Academic major also produced some differences. Social science and humanities students expected to find jobs that utilized a wide range of skills ($F = 4.71$, .01). Social science students expected a higher level of feedback ($F = 2.26$, .10). Natural science majors believed there would be fewer opportunities for friendships in the jobs they sought ($F = 4.095$, .017). Humanities students felt that their jobs would not require as much specific knowledge in comparison to the level expected by other majors.

Types of Occupation. From the job title and description of job responsibilities that respondents provided for the first job they expected to obtain after graduation, jobs were sorted into occupational categories[1]. One quarter of the students defined their occupational choice in managerial/supervisory terms. The remaining students clustered in three groups: (1) management support (i.e. finance) and professional (i.e. engineering, scientists) (14%); (2) social sciences and health (18%); and (3) teaching (17%). Approximately 10% of the students denoted sales related positions or involvement in the creative arts.

TABLE 7. Job Title Anticipated and Actual Titles of Position Held

Occupational Type	Phase I %	Phase II %
Managers/Administration	23	12
Mgt. Support/Engineering/ Scientists/Professional	14	25
Social Sciences/Health	18	11
Law	5	--
Teachers	17	24
Sales/Clerks	12	23
Creative Arts/Other	10	7

POST-GRADUATION: NEW EXPERIENCES AND CHANGING PERCEPTIONS

Twelve to eight months after graduation, 95% of the responding graduates were engaged in school or work: 60% were working, 31% in school, and 4% were working full-time and attending school. The remaining 5% (10 individuals) reported that they were unemployed at the time. Based on their intentions prior to graduation, these young adults are doing what they said they would be doing as shown in Table 8.

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[1]These categories closely approximated the grouping utilized by the Department of Labor in the Occupational Employment Survey.

TABLE 8. Post-Graduation Intentions and Current Activity

Phase I Intentions	Phase II Activity
Attend school	87% attending school 7% working 5% unemployed
Work	84% working 12% attending school 4% unemployed
Undecided: Actively looking	78% working 15% attending school 6% unemployed
Undecided: Not active	78% working 19% attending school

Work Environment: Realities and New Perceptions. Approximately 93% of employed graduates were working full-time, only 7% part-time. They had been in their position an average of 11.2 months (median = 13 months) with a range from just starting to 60 months. The latter respondent had worked full-time while in school and continued with that organization after graduation. Respondents reported working an average of 42 hours per week, earning an average salary of $20,252 (figure includes part-time workers). Asked how much discretionary time they were allowed to engage in their own interests; respondents indicated that nearly 25% of their time was discretionary, 11.2 average hours per week. However, 19% reported having no discretionary time and the median was 6 hours or 14% of total hours worked.

Based on their current activities, these liberal arts graduates expected to only work for one or two employers within the next five years. Actually, 21% planned to work for the same employer and 30% expected to work for only one other employer. The remaining 49% revealed intentions to work for numerous employers over the next few years: 29% expect to work for two more employers; 14% three more; and 6% between four and ten employers.

TABLE 9. Profile of Employed Graduates

Work Status	93% full-time, 7% part-time
Length of Employment	Average: 11.2 months Median: 13 months Range: Just started to 60 months
Hours Worked Per Week	Average: 42 hours
Starting Salary	Average: $20,252 (not adjusted for part-time) Range: $500 to $55,000
Discretionary Time	Average: 11.4 hours Median: 6 hours 19% indicated none
Intend to go to Graduate School	81%
Employers - next five years	Average: 1.6 employers Median/Mode: 1

One intention of these students was clear: 81% indicated that they planned to attend graduate school in the near future. Only 19% expressed no interest in further formal education.

Job Search Strategies. To obtain their first job, graduates utilized a variety of strategies. The preferred approach was to use one's own initiative -- it was utilized by 86% of the respondents who considered it to be very important to their search. Only two other approaches were heavily utilized and were rated (moderately) important: employer contacts through family and friends (67% used) and internships (56% used).

Two activities that support ones' job search were also used by a majority of students, resume preparation (62%) and interview training (59%) workshops, though their impact on the job search was only moderately important. Table 10 presents the fourteen job search activities and methods with figures for those not utilizing the resource, the mean rating of the item's importance to secure a position, and the distribution of the rating responses.

TABLE 10. Graduates Use and Ratings for Resources and Strategies for Finding a Job

	% Did Not Utilize	Mean	% Not Import.	% Mod. Import.	% Very Import.
Internship	44	3.47	17 (30)[2]	7 (12)	32 (58)
Resume preparation workshop	38	2.90	21 (34)	19 (30)	22 (36)
Interview training	41	3.05	19 (22)	15 (25)	25 (53)
Employer - career center	70	2.62	14 (47)	6 (20)	10 (32)
Faculty contacts	67	2.29	21 (64)	3 (9)	9 (27)
Advisor contacts	71	1.82	22 (76)	3 (10)	4 (13)
Career staff contacts	64	2.32	24 (66)	2 (6)	10 (28)
Alumni contacts	65	2.30	20 (57)	7 (19)	8 (23)
Family/friends contacts	33	3.44	18 (27)	6 (18)	36 (54)
Job fairs	56	2.34	28 (63)	7 (17)	9 (10)
Job lists	43	3.03	21 (36)	13 (23)	23 (41)
Resume data bank	69	1.85	24 (76)	53 (10)	5 (14)
Private employment agency	75	2.21	16 (64)	3 (12)	6 (24)
Own initiative	14	4.31	7 (8)	9 (10)	60 (82)

Scale: 1 = Not Important 5 = Very Important

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[2]Percentages in parenthesis represent distribution of responses when those who did not utilize are excluded. These figures reflex the perceptions of those actually using the source. For example, of those who had an internship experience, 30% said the internship was not important in securing their position, 12% said it was moderately important, and 58% said it was very important.

Comparisons on the ratings of selected cohorts were made. Men and women reviewed those strategies differently. Because of the small sample size, these comparisons should be viewed cautiously.

- Women rated their academic advisor as less important than men (F = 9.56, .007); men from social science programs rated their advisors higher (moderately important) than all other respondents.
- Men felt that their family contacts were more important to their job search than women (F = 4.176, .059).
- Women found resume data books to be less helpful than men (F = 8.43, .014).
- Those respondents who were only moderately satisfied with their present position rated their "own initiative" as less important than either those who were poorly or highly satisfied (F = 17.22, .000).
- The one respondent who had planned to continue his/her education but ended up working believed the employment agency was really important in obtaining his/her current position.

Effort was expended to obtain their jobs. Respondents interviewed with an average of five organizations (median = 3) before obtaining a job. Nearly 17% reported that they interviewed with more than 10 companies; 12% interviewed with nobody. These interviews generated at least one job offer (median) although the average was 1.6 offers with one individual receiving as many as eight offers. For 15% of these respondents, these interviews produced no job offers.

Job Title Congruency. Return to Table 7 to compare the types of jobs students thought they would have and those they actually obtained. Many students had focused on a management position as the likely starting position; however, only about 12% actually had management type of positions. More than likely they were in management support and professional positions (25%). The number in sales positions nearly doubled from what was expected; again most students were not aware of the prevalence of sales jobs among college students. Teaching captured more people than those who originally planned to enter this field, while fewer turned-up in social science/health (including social work) and creative art positions.

Academic Connection to Career and Job. In the first phase, respondents believed that their college experiences were relevant to their career. A year into their first job, respondent agreement had slipped significantly, dropping from 3.49 to 3.24 (t = 3.62, .000). While still relevant, more people were less positive. There is a big difference in definition between career and job. One's educational experiences will have an influence over a lifetime (career); even though it may not resonate with the first job experience.

Skill Congruency. Respondents reviewed a list of skills and competencies, similar to those contained in Phase 1, indicating whether they were important in the evaluation of their performance. In addition, respondents indicated whether the competencies were developed in college and if they needed opportunities to learn or receive more training. This question was framed differently so direct comparison to ratings could not be made to means found in Table 4. The six competencies recognized by the most people as being important in their evaluation (88% or higher) were from the attitude and image competency sets.

Top Six Competencies in Evaluation	% Important	% Developed in school	% Need to learn
Overall Communications Skills	98	86	10
Ability to Organize	95	61	13
Strong Work Ethic	91	56	8
Ability to Work Independently	91	63	5
Self-Confidence	89	56	18
Verbal Articulation	88	64	9

Students felt that their institutions developed their writing skills. The other competencies, with the possible exception of verbal articulation, are influenced more by stimuli outside the classroom.

Respondents did identify some deficiencies in a group of skills rated just below these six. The biggest problems were in computer skills where 32% felt they needed training and in being flexible about job requirements (31%). Only 60% of the respondents felt that they had adequately developed computer skills while in college. Another area where 20% said they needed to learn more was "general knowledge," implying the need for understanding how the real world actually operated.

An interesting comparison stems from taking the difference between percentage indicating important and percent developed in school. This calculation results in negative values for two areas, research skills and writing effectively. This suggests that these skills, particularly research skills, were developed beyond their importance in the students' first jobs. This in no way detracts from the importance of these skills later in one's career, however, large positive differences occur in emotional and behavioral areas, attitude toward work, work ethic, flexibility, self-confidence, and organizational ability, that are not curriculum driven competencies. While an institution can provide an environment that supports or stimulates these competencies, the responsibility does not rest with the institutions as the sole developer of these skills.

Of the competencies least likely to be developed in college, career goals stands out. Only 25% of those students felt that college contributed to their career aspirations. Also of interest is the lack of importance on having career goals as it pertains to the first job and planning. Table 11 reviews the importance and developed percentages for all the competencies.

TABLE 11. Importance of Selected Skills and Competencies in Job Performance Evaluation and
the Contribution of College to Develop These Competencies

Competencies	% Important	% Developed in School	% Need Training	Differing Imp. - Dev.
Attitude - Strong work ethic	91	56	8	35
Positive attitude toward work	85	41	11	43
Organizational ability	95	61	13	34
Moral/ethical character	71	39	4	32
Work independently	91	63	5	28
Average	87	52	8	34
Image - Overall communication skills	98	86	10	12
Self-confidence	89	56	18	33
Physical appearance	59	26	6	33
Verbal articulation	88	67	9	21
Leadership ability	69	54	14	15
Average	81	58	11	23
Basic Skills - General knowledge	84	68	20	16
Problem - solving ability	82	71	7	9
World events	43	40	16	3
Write effectively	73	75	-8	-2
Average	71	63	13	6

Table 11 (continued)

Competencies	% Important	% Developed in School	% Need Training	Differing Imp. - Dev.
Advanced Skills - Quantitative methods	40	41	12	-1
Computer skills	71	60	32	11
Career goals	38	25	18	13
Research skills	57	71	8	-14
Average	51	49	17	3
Flexible - Flexible - job requirements	75	24	31	51
Flexible - location	31	11	13	20
Teamwork	83	58	13	25
Average	72	31	19	36
Creativity	62	38	11	24

Job Tasks Encountered. Returning to Table 6, a comparison can be made between the expected job characteristics and the characteristics actually encountered. In four areas, expectations matched with reality. They found the amount of autonomy, task identity, dependency, and specific knowledge requirements they expected. In other words, they obtained positions that demanded a moderate amount of defined subject matter but allowed them to be responsible for completing an entire assignment without having to depend on other people. Their work environments allowed them autonomy to decide how to complete tasks.

Even though they expected to use only a moderate range of skills to perform their work, they experienced a narrower range of skill application. Though this shift was significant, it was not as dramatic as three other areas: feedback, friendships, and value of work. Respondents quickly found that they receive little information as to how well they are performing -- certainly not to the level of feedback they enjoyed from their faculty. They also did not experience the opportunities to develop friendships that they expected -- the workplace failed to be as collegial as their campus community. A final expectation that was jarred concerned the value of work that they do. Expecting their efforts to be of value to others, both inside and outside their organizations, respondents found that some of their work was of little value to others. Though this may well change as their career develops, the initial confrontation with the fact that not everything has meaning was disturbing.

The academic background of the respondents provided several additional and interesting insights. Natural science majors found the type of jobs they expected: the skill variety of their jobs was fairly high as was task identity, although the amount of autonomy and feedback was modest. Prior to graduation, natural science majors believed that their work environments would only provide modest opportunities to form informal relationships with other employees. What they found pleased them: environments which permitted extensive opportunities to make friends (a significant difference). All in all, natural science found work environments that exceeded their expectations.

The discontinuity between perceptions and reality fell on the shoulders of social science and humanities graduates. Both groups showed significantly lower ratings in phase II in skill variety, feedback, friendship, and value of work. Humanities students were particularly struck by the limited amount of feedback on their performance and the lack of any external value associated with their work and the lack of opportunities to make friends. Social science majors were disappointed in the limited opportunities to utilize a wide variety of skills and competencies in their job.

TABLE 12. Job Characteristics: Perceptions (I) and Reality (II): Significant Differences by
Academic Major (mean and t-statistics)

Natural Science	Social Sciences	Humanities
Friendship I 3.36 Friendship II 3.87 (t = 2.11, .050)	Skill Variety I 3.56 Skill Variety II 3.05 (t = 4.99, .000)	Skill Variety I 3.48 Skill Variety II 3.06 (t = 2.06, .049)
	Feedback I 4.04 Feedback II 3.51 (t = 5.36, .000)	Feedback I 4.05 Feedback II 3.21 (t = 4.10, .000)
	Friendship I 3.81 Friendship II 3.55 (t = 2.49, .015)	Friendship I 3.72 Friendship II 3.22 (t = 3.58, .001)
	Value of Work I 4.18 Value of Work II 3.86 (t = 4.03, .000)	Value of Work I 4.18 Value of Work II 3.37 (t = 3.69, .001)

Workplace Socialization.   New employees become socialized into their new organization through interaction with co-workers, learning language pertinent to work, understanding office politics, and knowing about the organization's history. This is how they learn the ropes. This process can take place quickly, usually within the first six months of employment. The timing of phase II was not ideal to capture the dynamics of the socialization process. Nevertheless, a set of questions probed into the comfort and familiarity with their organization. The items grouped into six socialization dimensions: politics of the organization, organizational goals, organizational history, ritual and culture, co-worker relationships, performance indicators, and professional terminology and language.

According to the overall scores, these graduates were well socialized into the organizations they joined. Their strongest areas were in understanding how to successfully perform in their job and the language/terminology associated with their position and organization. Their weakest area was understanding the organization's goals and attempting to align personal goals with the organization's goals. A strong correlation was found between length of time on the job and several dimensions of socialization. The sample was divided into two groups: those in their position less than 11.5 months (n = 57) and those in their position longer (n = 73). A comparison was made between the two groups (ANOVA) with the results in Table 13.

Those workers with a year or more of tenure were strongly socialized into their organizations. They felt comfortable with the language, people, performance indicators, and office politics. They had learned the history of the organization and have come to accept or, at least, support the goals of the organization. Respondents with less tenure recognized the performance expectations for getting ahead, had begun to develop support networks and friendships among co-workers, and were learning the language and the political arrangements of their organizations. They were, however, struggling with familiarizing themselves with the organization's history, customs and rituals and more importantly, believing the value sets of and embracing the goals established by their organization.

TABLE 13. Organizational Socialization According to Time in Position (ANOVA comparisons)

Socialization Dimension	Overall (mean)	Tenure < 11.5 months	Tenure > 11.5 months	ANOVA
Politics	3.96	3.84	4.06	$F = 5.03, .027$
Goals	3.70	3.50	3.85	$F = 7.45, .007$
Language	4.09	3.91	4.23	$F = 6.53, .012$
People	3.97	3.83	4.08	$F = 4.47, .036$
Performance	4.16	4.03	4.26	$F = 4.27, .041$
History	3.87	3.59	4.07	$F = 20.27, .000$

Scale: 1 = Strongly Disagree   5 = Strongly Agree

Job and Career Summary. Based on their initial experience in the workplace, several questions sought how stable they felt in their position: Were they strongly attached to their jobs? Did these jobs fulfill their early career expectations? Were they satisfied with their jobs? These measures provide some insights into intentions to seek new positions with other organizations.

Job satisfaction was very high: 61% described in positive terms their satisfaction. Only 15% consistently selected negative descriptions, placing them in the low satisfaction category. Major ($F = 2.96, .05$) produced a significant difference on this scale. Humanities majors (mean 5.7) were the least satisfied of all majors, scoring nearly one-half less than the highly satisfied natural science majors (mean 12.2).

Despite high job satisfaction, respondents failed to strongly identify with their job. Approximately 20% demonstrated a strong attachment to their job: the job defined who they were, the job held strong ties they did not want to break, the job absorbed a lot of their time, and they had no intention of quitting. At the other end, 27% were not committed to their current job, preferring to look for a new one and having constant thoughts of quitting. The majority, 53%, were in the middle -- only moderately committed. They enjoyed work but were unwilling to turn their life over to their employer and were trying to maintain a balance of interests. Women, in general, tended to be more job committed than men with an interesting exception. Men in the humanities were strongly committed to jobs while women in humanities had the lowest job commitment, shared only by men in the natural sciences ($F = 2.985, .055$).

Overall, these recent graduates viewed their future careers in their current organizations positively. Forty-five percent felt that their organizations offered good opportunities for promotions and career advancement. An additional 20% considered the opportunities for career growth to be limited. The remaining 35% held out the possibility that opportunities existed -- they just were not sure. Those respondents who had jobs when they graduated held the strongest convictions that their organizations had opportunities for advancement. They wanted to continue their career in that organization. Graduates who had expected to go to school but were presently working were the least likely to believe that career opportunities were available where they worked ($F = 3.32, .022$).

TABLE 14. Job Satisfaction, Commitment to Job, and Career Future of Currently Working Liberal Arts Students

Job Satisfaction	
High	61%
Moderate	25%
Low	14%
Importance of Work to Identity	
Very Job Oriented	19%
Moderately Job Oriented	53%
Not Job Oriented	27%
Career Opportunities with Current Organization	
Good Career Opportunities	45%
Possible Career Opportunities	35%
Limited Career Opportunities	20%

Adjustments After Leaving College. Leaving college is the final step to independence for many students: to reside in their own residence, to establish new friendships, and to be responsible for budgeting income. For some students this is not an easy transition. For example, starting salaries may not be sufficient to find affordable housing or meet needs once loan payments kick-in the monthly budget. In a response to series of questions students responded that they were able to find convenient, affordable living accommodations, to make new friends at work, and to find leisure activities that did not include alcohol. Respondents did report frustrations making friends, primarily outside of work, uneasiness about meeting their financial obligations, feeling unknowledgeable about health insurance, and not finding enough time for recreational and volunteer activities.

TABLE 15. Personal Adjustments After Graduation

	Mean	% Disagree	% Neutral	% Agree
Make friends through work	3.9	11	17	72
Make friends at church	1.6	87	6	7
Difficult to make friends	2.9	45	20	34
Most friends from college	2.6	59	11	30
Find affordable housing	3.8	13	20	67
Sufficient income meet needs	3.4	20	23	57

Table 15 (continued)

	Mean	% Disagree	% Neutral	% Agree
Do not expect financial difficulty	3.5	18	22	60
More knowledge health insurance	3.7	20	13	67
Leisure time - sport activities	2.3	64	17	19
Leisure time - volunteer	2.1	72	17	11
Leisure time - involves alcohol	1.9	74	18	8
Lifestyle healthier than college	3.4	20	34	46

Scale: 1 = Strongly Disagree   5 = Strongly Agree

In comparisons by various cohorts, several significant findings were found:

- Generally, women felt that their income was more sufficient than men, except those from humanities majors. Men from humanities strongly agreed that their income was sufficient while women expressed concern that it was not ($F = 2.45$, .038).
- Natural science majors were more likely to feel financially secure while social science and humanities graduates were not as confident ($F = 4.03$, .020).
- Women felt they needed to know more about health insurance ($F = 9.45$, .003) than men. Likewise they were less likely to participate in sport activities in their leisure time. Actually, men from natural sciences and humanities spent less time than women in sport activities; but men from social sciences more than made up for their lack.
- The more tenure in one's position, the more likely that the respondent felt their lifestyles were healthier than in college. However, those who were inactive/undecided reported less healthier lifestyles the longer they had been working.

THOSE CONTINUING THEIR EDUCATION

Respondents who had continued their education were represented in 40 different academic programs. Mentioned most frequently by 10 individuals was law school: other programs listed at least three times included medicine, chemistry, mathematics, divinity, elementary education, social work, and history. The majority of students (53%) expected to attain a master's degree, including MBAs. Ten (15%) were engaged in doctoral programs while 4% were in medicine and 19% in law. A small percentage, 4%, were pursuing additional bachelor's degrees, including teacher certification.

Respondents were asked to evaluate their educational experiences, particularly the link between their undergraduate preparation and their graduate course work. These students placed a high value on their educational endeavors believing their program offered a valuable degree as well as stimulating their interests. For the vast majority, generally more than 80%, believed their undergraduate institutions had prepared them well, especially in the areas of critical thinking, research methods, and writing. A slightly lower percentage, 73%, felt they were able to directly apply their undergraduate learning to their new program.

The harshest criticism of their undergraduate experience was directed toward their advisors. Nearly 45%, closer to 55% including those who were not sure, believed that their advisors failed to provide the assistance necessary to identify the "right graduate" program for them. The remaining 45% remarked that their advisors did supply appropriate information. The same students that were unhappy with their advisors also were unhappy with their undergraduate institutions in general in providing assistance in finding the graduate program that best matched their needs.

Nevertheless, these students were committed to the course they had set. Nearly 65% felt they were satisfied with their current institution; only 13% were contemplating changing at this time, though 23% would not reveal a preference at this time. An even higher percentage, 84%, were happy with their course of study; only 12% wanted to change with very few riding the fence. While 59% felt that the graduate program solidified their career decision, 21% were noncommittal and 20% had doubts about their career choice.

TABLE 16. Relationship of Undergraduate Experience to Graduate School

	Mean	% Disagree	% Neutral	% Agree
Value of Education				
Degree valued	4.41	6	3	91
Studies interesting	4.11	10	9	81
Undergrad Preparation/ Importance in Current Program				
In general	4.11	9	7	84
Writing (effectively)	4.33	7	9	84
Research skills	4.29	7	10	83
Critical thinking	4.46	2	4	93
Apply undergrad knowledge	4.01	9	19	72
Undergrad Advise or Assistance				
Institution assisted	3.21	26	30	44
Advisor helped with appropriate info	3.04	43	13	44
Confidence/Commitment				
Stay at current institution	3.86	13	23	64
Stay in current program	4.21	12	4	84
Confident in career choice	3.70	20	21	59

Scale: 1 = Strongly Disagree   5 = Strongly Agree

Asked how they were adjusting to their new student situation, especially outside of school, students were able to find easily affordable housing and make friends within their graduate program. Friendships from college or community (i.e. church) did not play a prominent role in their lives. Money, of course, was a problem. Nearly 50% were struggling to make ends meet though they did not believe they were headed for financial difficulties. For those who had free time, sports/fitness activities were important though there was little time for volunteering.

TABLE 17. Personal Adjustment to Graduate School

	Mean	% Disagree	% Neutral	% Agree
Make friends through program	4.10	4	9	87
Make friends at church	1.47	92	4	4
Difficult to make friends	2.74	46	19	35

Table 17 (continued)

	Mean	% Disagree	% Neutral	% Agree
Most friends from undergrad	2.29	66	11	23
Find affordable housing	4.00	10	9	81
Sufficient income meet needs	2.71	47	24	29
Do not expect financial difficulty	3.06	29	36	36
More knowledge health insurance	3.38	23	27	50
Leisure time - sport activities	2.17	64	17	18
Leisure time - volunteer	1.87	76	17	7
Leisure time - involves alcohol	1.73	78	13	9
Lifestyle healthier than undergrad	3.43	23	27	50

The most revealing descriptions about graduate school came in the open-ended commentary on their transition from their undergraduate institutions. They had expected an educational environment that replicated the supportive interactive community of their liberal arts days! Few found it; rather they found graduate school to be lonely, often highly competitive, without the mutual, shared support of faculty and peers.

UNEMPLOYED

A year after graduation, only 5% (10) were unemployed and seeking employment. They were working hard, having applied on average for thirty positions, but were obtaining only a few interviews. Nearly half were teachers who supplemented their income by substitute teaching. The others were working part-time as they searched. Seventy (70) percent were living at home.

The primary reasons given for having difficulties centered on labor market dynamics (jobs not available in my field, academic major does not connect to a job) and personal preparation (resume problems, do not know where to find work, do not know what I want to do, and interviewing skills).

DISCUSSION AND DISCOVERIES

Define Various Dimensions of Liberal Arts Graduates' Transitions. We began this project in the hopes of defining typical experiences of liberal arts students as they entered the world of work and, thus, harnessing some of the variables that would make those transitions more predictable. We discovered that liberal arts graduates from small to medium sized selective colleges are, by and large, a group of confident, satisfied workers with well-developed "functional skills." They value their undergraduate education and view lifelong learning as important.

Of the four models of liberal arts students in transition (those going to graduate or professional school, those who had accepted a job immediately upon graduation, those who were actively applying to graduate school and at the same time seeking interviews, and those who were undecided but not actively doing anything), we could predict the least well for those

who were undecided and actively applying to graduate schools and jobs at the same time. Within that group, not surprisingly, the greatest frustration occurred for the Humanities graduates. They were frustrated by the absence of a job market for faculty, should they enter doctoral programs. They were even more frustrated by the apparent absence of connection between their majors and the problems solved in the world of work. Thus, this group seemed unable to design systematic approaches to making their transition to either graduate school or non-academic careers, and their resulting frustration exacerbated their decision-making even further. Given the responses of the students who were undecided but not actively seeking opportunities, it almost appeared that an existential approach rather than "shotgun activities" produced better results.

The experiences of students going directly into the workplace are much clear and probably more accurate. Graduate satisfaction with their college preparation lessened, however, as they became more involved with their jobs many felt under-prepared in computer skills and also indicated a need for greater flexibility in general, but particularly in their problem-solving approaches. They also said that they were dissatisfied with the general knowledge they gained while in college, wishing for more information on how to evaluate practical information such as the relative benefits of insurance policies, investments, personnel benefits, etc. In other words, they did not complain about the relevance of their liberal arts course work: instead, they wanted to add practical information to what they already learned.

Working graduates and those who entered graduate school valued, with almost blind loyalty, the strong community and the faculty they had while in undergraduate school. They searched for a comparable set of support systems and appeared to have difficulty finding them. Working graduates expectations for friendship opportunities, for security, and for feedback within the workplace seemed particularly problematic and suggest important avenues of future education for students in transitions.

Seniors almost always looked toward the faculty as appropriate mentors, and usually as workers and graduate students expressed dissatisfaction with the advice given by the faculty. Greater utilization of faculty partnerships by career development specialists and employers alike could result in better work force preparedness for the students.

Not surprisingly, Humanities majors had the greatest number and kinds of surprises when they did work. Since they were the most intellectual and the least career-focused, they found it difficult to discover opportunities for themselves in the workplace and were often disappointed when they found their jobs. They indicated a concern for the quality of where they worked and for security in a job, but seemed unable to focus on the practical applications of their skills to workplace needs. Based on 'possible self' theories (Meara et al, 1995), this significant group of workers might be aided in their transitions by earlier experiences in their college work that allowed them to be engaged with professionals dealing with work problems outside academia. The more these experiences could be integrated with the classroom, the greater seems the potential effect.

Provide a Test of Theory. Initially, our test of theory relied upon the use of Krumboltz Career Beliefs Inventory. Our statistical analysis suggested that, at least for our population of students, the CBI was not robust. Individual items linked together to produce scales for the CBI seemed to have little reliability. In addition, for our sample, the scales were not significant when we attempted to compare them with similar items on the Michigan State Survey. Thus, we discarded the CBI subsequent to the pilot study, but assessed expectations and beliefs as they occurred on the survey. As indicated above, certain expectations such as friendship and feedback in the workplace predicted job satisfaction, but seemed to have no bearing on whether a graduate actually got a job. The group of graduates who were undecided and actively looking for anything at all might hold the most promise for future research since their failure to locate opportunities may correlate with their negative expectations about finding significant work. Their feeling of "I'll" take anything seems to diminish their actual opportunities, and this may arise from their belief that there are no opportunities available.

Evaluate the Impact of Individual Differences and Past Events on Career Beliefs. Since we had no definition of our liberal arts students in the beginning of the study, it was difficult to project the possible areas in which there might be differences in career beliefs. Not unexpectedly differences by academic major did appear without respect to the plans after graduation. Science majors believed that they would need to be involved in additional academic work at some point. They expected autonomy in the workplace and seemed to get it. They expected little feedback and even less friendship and got more of both than they expected. Social Studies and Humanities majors, on the other hand, were disappointed in the variety

of skills they used, the feedback they got, the amount of friendship, and the value of work. They expected much more than they experienced. These differences are significant as we prepare our students for the world of work, but also as employers hire entry-level workers from different backgrounds. We have suggested below several measures that employers might want to consider to accommodate these differences.

We also wanted to discover which events or interventions made the greatest difference in shaping liberal arts graduates expectations and beliefs about the world of work. Career services professionals emphasize the educational nature of our work, declaring our efforts to be critical in preparing students for well-informed transitions. In fact, many feel that the value of teaching students about the world of work and what they need to do to access it is at least equal to the value of assisting them in finding a job (placement). Unfortunately, graduates' perceptions of our work remains narrow in focus. They measure our worth in very concrete terms: Did we, or did we not find them a job? Although 58% considered internships to be extremely valuable in their job search, and interview training and resume writing workshops to be important, 40% indicated that they had not used these services. Thus, since students say they use consider faculty more important in the job-search process than career services personnel, career services professionals are called to change the paradigm they operate under. We must begin to form partnerships with faculty in this endeavor. We must become a more active part of students = academic and life planning from their freshman year on. We need to think of new ways to redefine for students what our roles should be. In some cases, that may require both extensive dialogue with students and more intrusive provision of placement services in order to engage the students in more educational activities. Finally, we must develop evaluation methods that measure our work in the context of our mission and specific objectives. After all, if we are unclear about what we accomplish and why, the students and our college officers cannot be expected to know what we think we do.

Describe Unique Career Belief Patterns of Liberal Arts Students. We have limited data with which to compare this population of graduates. Studies at a major university suggest that students from liberal arts colleges have greater confidence in their abilities, greater socialization, and greater job satisfaction than those in public universities. Since the populations of graduates are not directly comparable in their major selection (many were engineers at the public institution) or in their demographics including gender, further study is warranted.

Provide Information Critical to Employers in Their Selection and Retention of Liberal Arts Employees. The following recommendations offer suggestions for improving the identification of liberal arts students who could socialize more smoothly into an organization. Ideas are posed for career professionals in their endeavors with students.

RECOMMENDATIONS

Employers should:

1) Expect non-specific vocational plans prior to hiring liberal arts graduates without a decrease in overall job adaptation and performance. Encourage interviewers to identify specifically the types of problem-solving required by specific entry-level jobs. This would provide liberal arts applicants with the information necessary to link their skills with the needs of the organization.
2) Recognize the value of the work being done in an over-all organizational context. This would expand employee understanding of the importance and meaning of their particular set of responsibilities.
3) Provide a system of continuous feedback initially to allow the entry-level liberal arts graduate time to develop their own system of assessment according to company expectations. Determining the appropriate levels of creativity, autonomy, and teamwork can be confusing initially to the graduate who expects independence, but also is used to being graded.
4) Broaden work assignments for the liberal arts graduate. Liberal arts graduates expect significant responsibility, and they are used to broad-based problem-solving.
5) Increase the opportunities for initiating liberal arts students into the world of work through internships and other forms of long-term experiential learning prior to their graduation. This serves both to educate the students about the world-of-work and to pre-screen potential employees.
6) Emphasize your organization =s opportunities for life-long learning. If a liberal arts graduate talks about going to

graduate school, they may simply mean that they value learning, they expect to learn more on and off the job, and that employers who reward them for additional learning are, like their college, worth committing to.

Colleges career centers should:

1) Encourage students to seek (even provide) skill-training in basic computer tools such as spreadsheets, graphics, and word-processing integration. This should be possible with creative uses of existing resources, including peer trainers.

2) Establish more effective partnerships with faculty that include connecting workplace issues and the concerns of the liberal arts through these partnerships. This might include class lectures given by career services professionals and employers alike, use of faculty members in consulting roles with employers, other types of workplace exchanges, sharing information on student expectations and outcomes, and special training sessions with faculty advisors on the changing nature of work. Although connecting with faculty is very challenging, particularly in certain disciplines, students most valued contacts on campus remain the faculty members, even when their advice is less than satisfactory.

3) While teamwork is essential, encouraging students also to work independently at times without feedback or friends could more effectively model the workplace that they should anticipate.

4) Discover ways to help undecided students with little experience and large fears find early positive affective experiences associated with problem-solving beyond the classroom (Meara et al, 1995) should be a first step. Several colleges have taken initial steps toward this goal with the introduction of University 101 courses, externship programs, and leadership seminars. A more specific focus on undecided students throughout the four-year experience would enhance their understanding of the transitions that occur at graduation.

5) Offer senior seminars on practical living issues (the Senior Transition course) such as credit, insurance, leases, etc. Again, many colleges currently conduct workshops on these topics, but few students take advantage of them. If these seminars were built into a curriculum for experiential learning or even into available academic classes, the graduates transitions would be enhanced.

6) Educate students on Internet resources that describe employment or internship opportunities. "Surfing the Net" can be introduce students to a wide variety of employment and professional information throughout the students four years of college.

7) Identify the "new needs" of the new workplace to the students to inform their expectations and encourage the development of critical skills. These needs include technological skills, contract employment, entrepreneurial abilities, horizontal careers, and consensual decision-making, among others.

8) As career counseling professionals, create imaginative ways to provide intersections of the world of work with the academic arena. Some colleges have begun to help students develop work portfolios. Some professionals regularly schedule lectures on the new work place with various courses including economics, sociology, and psychology. Some career professionals have become experts in other arenas, including focus group assessment or marketing in order to permeate the ivy walls of the liberal arts. Breaking out of our self-contained environment can only expand student opportunity.

9) Connect outcomes faculty expect from classroom experience to experimental learning practices and outcomes. For example, if faculty value good communication skills (verbal and written), communication assessment, can be built into the co-op or internship process. Faculty can become vested in activities that share commonalities with their goals and what they value.

10) Provide time for reflection. Several of these suggestions require time for students to reflect on their college experiences and how they affect their expectations. Increasing college time is spent rushing through the experience collecting as many courses as possible. Little energy remains within students and staff to expend on reflection exercises. However, the simple practice offers the potential for large rewards when students gain a better understanding of and are better prepared to transition from their institution.

CONCLUSIONS

What do we know about liberal arts graduates from small to medium sized selective colleges? We have a group of confident, satisfied workers with well-developed "functional skills," whose transitions to the work world can be enhanced by knowledgeable career development specialists who would be better linkages between the liberal arts college culture and the world of work. We also know that this study is just a beginning. Additional research in critical areas of self-efficacy, expectations, and early skill-building will enhance liberal arts graduate transitions while improving their match with the problems of the work world.

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