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ABSTRACT

This study examined four cohorts of recent college graduates--those who earned BA or BS degrees while working full-time, those who earned the degrees in continuing education, those who earned the degrees while working part-time, and those who earned an advanced degree while working full-time--to determine whether the jobs they obtained after graduation actually required the degree they recently completed. Findings obtained from approximately 1,500 recent graduates revealed that 31 percent were in employment not requiring a degree; graduates in positions not requiring a degree were more likely to graduate from Arts and Letters, Social Science, and Human Ecology programs; graduates in positions requiring a degree had significantly higher salaries than comparable graduates in employment not requiring a degree; grade point average was not a deciding factor in employment status; experiential learning through internships was more prevalent among those with degree-required positions; those in degree-required positions indicated that their academic major and job were highly related, whereas the opposite was true for those in jobs not requiring a degree; job title did not adequately distinguish between groups; a higher percentage (over 75 percent) of graduates in non-degreed positions remained in Michigan to work; and 30 percent of those in non-degreed positions who remained in Michigan resided close to the University. Findings are detailed for each of the four cohorts in eight tables of data. (Author/CK)

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Do I Really Need A College Degree For This Job?

Research Note

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SUMMARY

The question of whether the jobs college graduates obtained after graduation actually required the degree they recently completed has been raised in national dialogue. Four different cohorts of recent graduates (BA/BS working full-time, BA/BS continuing education, BA/BS working part-time, and advanced degree working full-time) were examined using follow-Up data from Michigan State University. Information obtained from approximately 1500 recent graduates revealed these findings:

- 31% of the respondents were in employment that did not require a degree; 35% among undergraduates and 8% among advanced degree graduates.
- Graduates in non-degreed positions were more likely to graduate from Arts and Letters, Social Science, and Human Ecology programs; although all colleges had graduates in this situation.
- Graduates in positions that required a degree had significantly higher salaries than comparable cohorts without degreed employment.
- Grade point average was not a deciding factor as many students with excellent grades held jobs that did not require a degree.
- Experiential learning experiences through co-op and internships was more prevalent among those who held degree-required positions.
- Those graduates in degreed positions indicated that their academic major and job were highly related; it was just the opposite for the non-degreed group.
- Job title did not adequately distinguish between groups. Many non-degreed graduates held positions similar to their counterparts in the other group; however, sales and secretarial jobs predominated.
- A higher percentage of graduates in non-degreed positions remained in Michigan to work -- over 75%. This was 10% to 15% higher than the degreed group.
- A sizeable segment (30%) of the non-degreed who remained in Michigan resided in Ingham County -- close to the University.

RESEARCH NOTE

DO I REALLY NEED A COLLEGE DEGREE FOR THIS JOB?

Recently, the Bureau of Labor Statistics reported that, during the 1980's, more than 20% of college graduates were working in positions that did not require a degree and predicted that this figure would raise to over 30% by the end of the 1990's (Hecker, 1992 and Shelley, 1994). The 1990-93 recession exacerbated matters, possibly pushing many more college graduates into non-degree based employment. The truth of the matter is, most colleges and universities don't know whether the jobs their graduates enter actually require a degree. Anecdotal evidence, such as job title or type of employer, may allude to those in positions typically associated with personnel holding positions not requiring a college degree. At Michigan State University the career staff knows these conditions exist and, through filtering available information and inferences, may have developed stereotypes (myths) about graduates holding these positions. Yet, the extent of this situation and the characteristics of those "trapped" (for whatever period of time) in these positions is not known.

To clarify the situation, the question "does the job you have accepted require a college degree?," was added to the University's Follow-Up Survey in the fall of 1993. The groups to receive the amended form were (1) a small group from the 1991-92 classes who received a year-out survey in an attempt to augment that year's follow-up response rate and (2) all second mailings (unemployed and non-respondents from a first survey) to graduates from the 1992-93 classes. All subsequent classes have received the new question on the first mailing.

The information being reported captures a mix of students that may not be typical of all graduates from this period. Second mailings tend to capture more responses from majors which receive late job offers such as education and fewer responses from groups who were more likely to have job offers by graduation, such as engineering and accounting. Nevertheless, the information provided below depicts a broad spectrum of typical Michigan State University graduating students. Over time additional data will be added to this file and a more composite picture may then be drawn.

OVERALL PROFILE

At the time these data were analyzed, 1488 working graduates answered the question about whether their job required a degree. Eighteen (18) percent were graduate students and 82% were undergraduates. Among the undergraduates, 87% were working full-time (7% also attending school full-time) and 13% worked part-time (5% were also in school) while 92% of the advanced degree candidates were working full-time (2% were full-time students) and 8% worked part-time (4% were also enrolled). **Approximately 31% reported that their job did not require a degree: 35% among undergraduates and 8% among advanced degree graduates.**

Enough information was available to present detailed analyses for these four groups:

- (a) BA/BS Working full-time
- (b) BA/BS Enrolled in school working full- and part-time
- (c) BA/BS Working part-time
- (d) Advanced degrees working full-time.

Comparisons will be made on selected characteristics between those holding jobs requiring a degree and those holding jobs not requiring a degree:

Personal:	Gender and Race
Academic:	College, GPA, and Co-op/Intern
Job:	Starting salary, Related to degree
Labor Market:	Occupation, Industry, Location

BA/BS Working Full-Time

Of the 967 graduates working full-time, 295 (30.5%) reported that their job did not require a degree. Slightly more women and white graduates held positions that did not require a degree when compared to those with degreed jobs. For men, 29% accepted employment in positions not requiring a degree compared to 31% for women. Thirty-five percent of white students held positions not requiring a degree; followed by Asian-Americans (31%) and Afro-Americans/Black (23%). For other minority groups the number of observations were too small to draw any meaningful comparisons.

All undergraduate colleges had graduates in positions that did not require a degree. Colleges with 30% or more of their graduates reporting in this situation included Social Sciences, Arts and Letters, Human Ecology, Agriculture and Natural Resources, and Communication Arts. Engineering and Education reported particularly low percentages of graduates in non-degreed positions.

The grade point average for those in degree-required positions averaged 3.02 (median 3.03) which was slightly higher than the non-degree average of 2.93 (median 2.94). The grade point ranges were very similar for both groups: 2.02-3.95 for the degreed-required positions compared to 2.04-3.91 for the non-degreed.

Approximately 26% of those in degreed positions participated in experiential learning programs (co-op or internship which included student teaching) compared to 13% of those in non-degree positions.

The average starting salary for those with degreed jobs was \$26,588 (median (\$25,700), nearly \$6,000 higher than graduates in the non-degreed positions which averaged \$20,742 (median \$19,750).

Whether a degree was required for a position may not be as important as whether the employment opportunity is related to one's field of study. Graduates were asked to rate the relatedness of their first job to their academic major on a 5 point scale: 1 - "not at all related" to 5 - "very highly related." For graduates in the degreed positions, 73% of the graduates reported their jobs were "highly to very-highly" related to their degree, while 12% felt major and job were "not at all" to "somewhat" related. In comparison, only 30% of graduates with non-degreed positions believed their job and major were highly related while 54% indicated that their jobs and academic majors were "not at all" to "somewhat" related.

Table 1. BA/BS Working Full-Time: Cohort Profile

<u>Characteristic</u>	<u>Require Degree</u>		<u>Degree Not Required</u>		<u>% Degree Not Required</u>
	n	%	n	%	
Sex					
Male	303	45	126	43	29
Female	369	55	169	47	31
Race					
White	467	92	250	94	35
Afro-Am./Black	22	4	5	2	23
Hispanic/Chicano	9	2	4	1	30
Native American	NA	--	1	<1	100
Asian/Pacific Isl.	9	2	4	1	31
Other	NA	--	1	<1	100
College					
Agriculture	71	11	35	12	33
Business	171	25	49	17	22
Engineering	98	15	12	4	11
Human Ecology	23	3	15	5	39
Natural Science/LB	33	5	23	8	26
Education	44	6	8	3	15
Communication Arts	78	12	35	12	31
Arts and Letters	37	5	25	8	40
Social Science/JM	108	16	84	28	44
Nursing	8	<1	9	3	53
Grade Point Average					
Mean		3.02		2.93	
Median		3.03		2.94	
Range		2.02 - 3.95		2.04 - 3.91	
Experiential Learning	171	26%	37	13%	
Starting Salary					
Mean		\$26,588		\$20,742	
Median		\$25,700		\$19,750	
Range		\$10,000 - \$55,000		\$10,000 - \$40,000	
Related To Degree (%)					
None-Somewhat		12		54	
Moderately		15		16	
Highly-Very Highly		73		30	
Mean		4.05		2.54	

Graduates can be further described through selected labor market characteristics: occupation, industry, and location. Using the job title and job responsibilities provided by the graduate, each survey received an occupational code based upon Occupational Employment Survey (OES) definitions. These definitions better reflect current job titles than the Dictionary of Titles (DOT) that may be familiar to readers. Unlike the OES which assigns job titles, such as assistant manager, to the job being supervised (assistant retail sales manager to retail sales

clerk), a separate category has been established for this title in this database. The occupations have been grouped according to their major OES headings for this analysis. Standard Industrial Classification (SIC) codes, taken from Standard and Poors, were used to classify the company that employed the graduate. Job location was specified by city and state. For those residing in Michigan, the location was further specified by county.

Graduates with jobs requiring a degree found employment in these occupations: management support (accountants, professional technicians, financial specialists, purchasing agents, etc.) 22%, engineers 14.3%, teachers 11.9%, and sales 11.8%. Common jobs not requiring a degree included sales 16% and insurance/secretarial/customer service representative 12.9%, followed by managerial support (8.4%), and management (8.0%). Except for engineering, both lists (Table 2) contain similar job categories; jobs not requiring a degree were expanded to include protective services and child care in addition to insurance/secretarial.

Jobs that require a degree are more likely to be found in manufacturing and technical support companies while those not requiring a degree were predominately service jobs. Retail sales organizations comprised 18% of firms employing college graduates in non-degreed positions. Education, while being the largest employer for degreed jobs, also offered a number of positions to college graduates that did not require a degree.

Table 2. BA/BS Working Full-Time: Labor Market Information (%)

<u>Occupation</u>	<u>Required Degree</u>	<u>Occupation</u>	<u>Degree Not Required</u>
Management Support	22.0	Sales	16.0
Engineers	14.3	Insurance/Secretarial	12.9
Teachers K-12	11.9	Management Support	8.4
Sales	11.8	Management	8.0
Management	7.2	Health Practitioners	6.3
Writers/Artists	4.8	Assistant Managers	5.9
Assistant Managers	4.0	Teachers K-12	5.2
Health Practitioners	4.0	Protective Services	4.9
		Writers/Artists	4.2
		Child Care/Aides	4.2
<u>Industry</u>	<u>Required Degree</u>	<u>Industry</u>	<u>Degree Not Required</u>
Education K-12	9.8	Retail Other	12.0
Manufacturing: Trans. Equip.	5.9	Health Services	6.5
Health Services	4.4	Retail: Merchandise	6.2
Social Work	4.2	Business Services	5.8
Computer Services	3.9	Motion Picture/Recreation	4.7
Accounting Services	3.6	Social Work	4.3
Wholesale - Database	3.6	Education K-12	4.0
Retail: Other (not merchan.)	3.6	Management Services	3.6
Manufacturing: Chemical	3.2	Safety/Justice	3.6
Public Administration	3.2	Real Estate/Holding	3.3

Table 2. (cont) BA/BS Working Full-Time: Labor Market Information (%)

<u>LOCATION</u>	<u>DEGREE REQUIRED</u>	<u>LOCATION</u>	<u>DEGREE NOT REQUIRED</u>
<u>State</u>			
Michigan	65.4	Michigan	76.4
Illinois	8.3	Illinois	4.3
Ohio	2.7	Florida	1.8
Indiana	2.3	Ohio	1.6
California	1.9	California	1.3
Foreign	1.8	Georgia	1.3
<u>County: Michigan</u>			
Ingham	21.6	Ingham	28.7
Oakland	21.6	Wayne	16.0
Wayne	19.9	Oakland	15.7
Genesee	4.6	Kent	5.9
Kent	4.2	Washtenaw	3.3
Washtenaw	3.4	Grand Traverse	2.7

The majority of graduates (more than 65%) remained in Michigan after graduation. However, those with a non-degreed position were much more likely to stay in Michigan: 76%. Illinois (principally Chicago) was the next most prominent location for employment.

For those from both groups who remained in Michigan, Ingham, Oakland, and Wayne counties attracted approximately 60% of these graduates. Ingham County, however, was clearly the preferred location for those with jobs that did not require a degree: nearly 30%.

Comparisons. Comparisons were made between those with positions requiring a degree and those not requiring a degree. T-tests were used for the continuous variables of starting salary, GPA, and related to degree and Chi-Square was used for gender, race, experiential participation, and location (in and out of Michigan).

The groups differed significantly on grade point average, starting salary, and job related to degree. Those graduates who held positions that did not require a degree were more likely to reside in Michigan, had not been involved in experiential career-related work experiences, and came from the Colleges of Social Sciences, Arts and Letters, Human Ecology, and Agriculture.

BA/BS Continuing Education and Working

Of those graduates who indicated that they were pursuing an additional degree after completing their bachelor's degree, 157 reported that they were working either full- or part-time. Within this group, 38% were working part-time and 62% full-time. Overall, 46% felt that their job did not require a degree. It was even more evident among those working part-time. Of those respondents, 67% held non-degreed jobs compared to only 33% of those working full-time.

The graduates in this category were typically female (53%), and white (76%). Men, however, were more likely to be in positions that required a degree (51%), while women were more apt to be employed in non-degreed positions (58%). Proportionally more women (49%) were in non-degreed positions compared to 41% for men. Among white graduates, 50% reported they were in positions that did not require a degree.

Engineering graduates almost exclusively worked in positions requiring a degree while pursuing their education. Also, 67% of Business, Education, and Nursing graduates held similar positions. Graduates from the other colleges were more likely to be working at jobs not requiring a degree, particularly Human Ecology, Natural Sciences, Arts and Letters, Agriculture, and Social Science.

Ten (10) percent of the graduates working in positions not requiring a degree were working on another bachelor's degree (compared to 2% for those in degreed employment) and 6% (4) were enrolled in a community college or trade school program (found in "other" category). A majority of the degreed graduates who were employed were working on master's degrees (74%) or PhD/JD (9%), while 45% of the non-degreed job holders were in master's and 10% in PhD or professional degree programs. The "other" category is deceiving since it contains selected medical programs such as dentistry and osteopathic medicine. All the degreed and six of the non-degreed "others" were in medically related programs. Only in the non-degreed employment positions did associate degree programs (basically vocational) appear.

The grade point averages were slightly higher for the degreed employed group: 3.11 compared to 2.91. The ranges were similar, except that the bottom for the non-degreed group fell approximately .15 below the degreed group.

Salaries on average differed by \$6,500 for the two groups with the advantage favoring those with degreed employment. The ranges indicated that the difference could be attributed to higher salaries among the degreed group. Comparisons by part-time and full-time employment found no difference between part-time cohorts; however, the difference among full-time employed, based on the averages, was \$9,000.

Approximately 66% of those in degreed jobs indicated that their degrees were "highly" to "very highly" related to their jobs, compared to 18% of those in positions not requiring a degree. Nearly 70% of those in non-degreed employment found no relation between their degrees and employment.

The occupations of graduates with degreed positions were primarily engineers (16%), management support (14%), and education (22% all levels). Education and the automobile industry were the primary employers (industries). Approximately 55% remained in Michigan, evenly distributed among Ingham, Wayne, and Oakland counties.

For those without degree-required employment, "any job would do" in order to earn money to cover school expenses. Occupations predominant among this group were clerical, food service, and secretarial. Health service and retail sales organizations were the principal employers. Over 80% of these graduates remained in Michigan, with 34% of them in Ingham county -- considerably higher than Wayne which accounted for 21%.

Table 3. BA/BS Continuing Education, Working Full- and Part-Time: Cohort Profiles

<u>Characteristics</u>	<u>Required Degree</u>		<u>Degree Not Required</u>		<u>% Degree Not Required</u>
	n	%	n	%	
Sex					
Male	43	51	30	42	41
Female	42	49	41	58	49
Race					
White	60	87	60	92	50
Afro-Amer./Black	6	9	2	3	36 (all minority)
Chicano/Mexican	--	--	--	--	
Hispanic	2	3	--	--	
Native American	--	--	1	1	
Asian-Amer./Pac.	1	1	2	3	
Other	16	--	7	--	
College					
Agriculture	7	8	9	12	56
Business	10	12	5	7	33
Engineering	15	18	1	1	6
Human Ecology	2	2	5	7	71
Natural Sci./LB	7	8	10	14	59
Education	8	9	4	6	33
Communica. Arts	7	8	5	7	42
Arts & Letters	8	9	10	14	56
Social Sci./JM	18	21	22	31	55
Nursing	2	2	1	1	33
Grade Point Average					
Mean	3.11		2.91		
Median	3.13		2.92		
Range	2.21 - 3.90		2.07 - 3.92		
Salary					
Mean	\$27,917		\$19,381		
Median	\$29,000		\$17,000		
Range	\$6,000 - \$68,000		\$10,000 - \$32,000		
Related (%)					
None - Somewhat	14		69		
Moderately	20		13		
Highly - Very Highly	66		18		
Mean					

Table 3. (cont) BA/BS Continuing Education, Working Full- and Part-Time Profiles

Degree Attempting

BA	--	--	2	3
BS	2	2	5	7
MA	16	19	11	15
MS	30	35	14	19
MBA	17	20	8	11
PhD	2	2	2	3
MD	--	--	4	6
DVM	--	--	--	--
JD	6	7	1	1
Other	4	5	14	19

Table 4. BA/BS Continuing Education: Labor Market Information

<u>Degree Required</u>		<u>Degree Not Required</u>	
<u>Occupation</u>	<u>%</u>	<u>Occupation</u>	<u>%</u>
Engineers	16	Clerical/Admin. Support	18
Management Support	14	Food Service	15
Teachers K-12	13	Insurance/Secretarial	10
Post-Secondary Education	9	Sales	6
Social Work	8	Health Practitioners	8
Health Practitioners	8		
<u>Industry</u>			
Education College	14	Health Services	19
Education K-12	13	Retail: Other	18
Man: Transportation	8		
<u>State</u>			
Michigan	55	Michigan	81
Illinois	9	Washington DC	3
Ohio	6	Missouri	3
<u>Michigan Counties</u>			
Ingham	28	Ingham	34
Wayne	26	Wayne	21
Oakland	17	Oakland	14
Macomb	11	Washtenaw	9

Statistical comparisons among those working only part-time found few differences. The two key characteristics between those in degreed employment and graduates in non-degreed positions were: (1) "related to degree" and (2) remained in Michigan. Those with degreed employment had a higher level of relatedness between job and degree. They were also less likely to be living in Michigan.

Major differences were found among those employed full-time. For GPA, salary, and major relatedness, those with degree-related employment earned higher grade points, received higher salaries, and reported that their jobs were more related to their academic majors than those in non-degree related employment. Those graduates without experiential learning experiences tended to have positions that did not require a degree. Finally, proportionally more graduates from Social Sciences, Natural Sciences, and Arts and Letters programs held positions not requiring a degree than graduates of the other colleges.

BA/BS: Part-Time Employment, Not Continuing Education

Part-time employment is seldom considered a positive path into labor markets, unless there exists an association with continuing one's education, as discussed previously. For those 90 graduates who could only find part-time employment, this option may be viewed as less than positive, as 71% reported that the positions they held did not require a college degree.

The group which had part-time employment requiring a degree was rather unique. It comprised of white (100%), women (81%), who were in teaching, child development or social work positions within school districts or health service organizations. These positions were viewed as appropriate steps to gaining full-time employment. Nearly 90% of these graduates resided in Michigan, primarily Ingham, Oakland, and Kent counties.

The picture for these in non-degreed positions was much different. While the group was still predominately white (93%), more men were present (39%). All colleges were represented in this group with more graduates coming from Social Sciences, Communication Arts, and Arts and Letters. The average grade point was 2.99 (mean 3.03) which was above the averages for similar groups reported above. In other words, this group was comprised of some very good students.

Jobs not requiring a degree were primarily food service (waiters/waitresses, bartenders), sales, and teaching positions. The employers were retail establishments, business services, and education. Some teachers were accepting positions as classroom aides and other functional jobs within education for which they were over-qualified in order to find a full-time teaching job.

Salaries were not significantly different between groups, and grade point averages were significant, but only at the .05 level. The groups did differ on job and academic major relatedness with those in degreed positions naturally rating this dimension higher or more related. Gender was important as men who had part-time work were more likely to be in positions that did not require a degree. Only Education and Human Ecology were not likely to have graduates in positions not requiring a degree.

Table 5. BA/BS: Part-Time Employment: Cohort Characteristics

<u>Characteristics</u>	<u>Required Degree</u>		<u>Degree Not Required</u>		<u>% Degree Not Required</u>
	n	%	n	%	
Sex					
Male	5	19	25	39	83
Female	21	81	39	61	65
Race					
White	25	97	52	93	67
All - Other	1	3	11	7	91
College					
Agriculture	--	--	7	11	100
Business	--	--	6	9	100
Engineering	--	--	3	3	100
Human Ecology	3	11	2	3	40
Natural Sci/LB	2	8	4	6	67
Education	9	35	2	3	18
Comm. Arts	1	4	11	17	92
Arts & Letters	4	15	8	12	67
Social Sci/JM	7	27	21	33	72
GPA					
Mean	3.21		2.99		
Median	3.19		3.03		
Range	2.54 - 3.93		2.03 - 3.96		
Salary					
Mean	\$12,653		\$13,729		
Median	\$10,250		\$12,000		
Range	\$6,000 - 28,000		\$2,800 - 41,600		
Related (%)					
None-Somewhat	12		66		
Moderately	4		8		
High-Very High	84		26		

Table 6. BA/BS Part-Time Employment Labor Market Information (5)

<u>Degree Required</u>		<u>Degree Not Required</u>	
<u>Occupation</u>	<u>%</u>	<u>Occupation</u>	<u>%</u>
Teacher K-12	64	Food Service	27
Social Work	12	Sales	10
Health Practitioner	8	Teacher K-12	5
<u>Industry</u>	<u>%</u>	<u>Industry</u>	<u>%</u>
Education K-12	67	Retail: Other	29
Social Work	8	Business Services	7
Museum	8	Education K-12	7
<u>State</u>	<u>%</u>	<u>State</u>	<u>%</u>
Michigan	88	Michigan	78
		Illinois	5
<u>Michigan County</u>	<u>%</u>	<u>Michigan County</u>	<u>%</u>
Ingham	23	Ingham	38
Oakland	18	Wayne	19
Kent	14	Oakland	8

Advanced Degree: Working Full-Time

Of the 237 master's, doctoral, and medical degree recipients who responded that were working full-time, only 6% (15) reported that they did not have degree-required employment. Table 8 provides the characteristics of the two groups.

While women dominated both groups, proportionally more women appeared to have jobs that did not require the degree they had earned. Minorities comprised 14% of those with jobs requiring their degree while 23% (only 3) were in positions not requiring their degree. Those in positions not requiring a degree were drawn from the colleges of Social Science (6), Business (4), Communications (2), Arts and Letters (2) and Education (1).

Grade point averages were similar. Salaries, however, differed by more than \$10,000 on average. Thirty-three percent of those in positions not requiring degrees indicated that their degrees were not related to their work.

Those graduates in positions not requiring a degree were distributed across a wide variety of occupations and industries, including food services, secretarial, and management. Those with degrees were concentrated in education (25%) and health services (34%).

Table 8. Advanced Degrees (masters/doctoral): Cohort Characteristics

<u>Characteristics</u>	<u>Degree Earned Required</u>		<u>Degree Earned Not Required</u>	
	n	%	n	%
Sex				
Male	93	42	5	33
Female	129	58	10	67
Race				
White	153	86	10	77
All - Other	25	14	3	23
College				
Agriculture	3	1	--	
Business	27	12	4	27
Engineering	13	6	--	
Human Ecology	1	<1	--	
Natural Science	17	8	--	
Vet. Medicine	22	10	--	
Education	43	19	1	7
Communications	20	9	2	13
Arts and Letters	7	3	2	13
Social Science	28	13	6	40
Nursing	4	2	--	
Osteopathic Medicine	20	9	--	
Human Medicine	17	8	--	
GPA				
Mean	3.64		3.58	
Median	3.70		3.11	
Range	2.66 - 4.00		3.27 - 3.82	
Salary				
Mean	\$33,346		\$24,910	
Median	\$31,000		\$23,050	
Range	\$14,000 - 80,000		\$12,000 - 46,400	
Related (%)				
None - Somewhat	4		33	
Moderately	6		27	
High - Very High	89		40	
Occupation (%)*				
Health Practitioners	34		Social Sciences	20
Teacher K-12	14		Assistant Manger	13
Post Secondary Education	11		Mgt. Support	13
Mgt. Support	9			
Social Work	8			
Physical/Life Sci.	6			

*One reported in: child care, food service, protective services, basic office support, secretarial, and writer/artist)

Table 8 (cont). Advanced Degrees (masters/doctoral): Cohort Characteristics

Industry (%)			
Health Services	23	Finance/Comm.	15
Ed. College	19	Health Services	15
Ed. K-12	15	Retail	8*
Agriculture	8	(Others reporting at this level: computer science, ed. K-12, safety/ justice, recreation, manuf. auto)	
Public Admin/Govt	5		
Location			
Michigan	62	Michigan	80
Illinois	5	(CA, PA and TX - one each)	
Foreign	4		
Michigan Counties			
Ingham	20	Ingham	25
Wayne	19	Wayne	25
Oakland	15	Genesee	17
Genesee	7	Kent	17
		(Isabella, Roscommon - one each)	

Michigan was the residence for a majority from both groups with 80% of graduates not in a degreed position living in Michigan. Within Michigan, this group was spread from Wayne to Roscommon to Kent counties.

There does not appear to be a single factor that can be identified to explain why this small group of graduates had not obtained jobs that required the degrees they earned. In part, the lack of opportunity may be a function of limited opportunities and family obligations.

DISCUSSION

This review of recent data collected on a group of approximately 1500 graduates from Michigan State University from the 1992-93 academic year (a few also from 1991-92) found that 31%, 35% among undergraduates and 8% among advanced degree graduates, worked in positions that did not require a degree. While the sample has potential bias in that some majors, such as Engineering, were under-represented while Education was over-represented, the figure of 35% fell within the range predicted by the Bureau of Labor Statistics. With better job opportunities, stimulated by a revived economy, this figure may fall. Nevertheless, the findings suggest that:

1. The economy has failed to create enough jobs that require a college degree, particularly for those graduates from non-technical academic programs.
2. Some students lack an understanding of the demands of the job search process.
3. Early career paths may not be as linear as believed with students starting in a variety of different positions.

These findings also challenge, as well as confirm, some of the myths career professionals hold regarding those students who fail to find "acceptable" employment after graduation. Several of these myths are unveiled and placed on the table for discussion in hopes that career professionals will better understand their clients.

Graduates who work in non-degreed jobs did not do as well academically as those in degreed jobs. In other words, students with higher grades get better jobs! The comparative statistics in fact suggest that this is indeed true, as those in degreed positions had significantly higher grades, even though the averages were only about .10 apart. The large number of observations brought a high degree of power to the statistics which allow a small difference to be significant. Further, the over-representation of Education majors who had higher GPA's than the other colleges may have skewed the averages. Without Education the difference was even smaller. In fact, for practical purposes, both groups were similar in terms of academic performance.

The 2.93 GPA for BA/BS graduates in non-degreed positions corresponds to the overall senior class average. The range clearly indicates that students with GPA's above 3.50 have problems finding employment commensurable to their degree. Many good students are struggling; thus finding employment is not simply a matter of being smart.

Job titles easily indicates which graduates are in non-degreed employment. In other words, a job title with manager in it means a graduate has it made! Job titles may, in fact, not reflect the type of position a graduate has. The same job titles are common to both groups, especially in the manager categories. Assistant manager/manager titles often do not accurately convey the duties and responsibilities of graduates. A recent survey of merchandising management graduates from the College of Human Ecology found over 60% indicated that their job title was assistant manager/manager. Further inquiry revealed that only 30% of these assistant managers actually had managerial responsibilities. In their current positions, however,

this same sample reported only 36% in management with nearly all having managerial responsibilities. Apparently, over the past several years (1980's) job title inflation has occurred in a similar fashion to grade inflation. The OES definitions account for this tendency by placing all first time entrants into the labor market with job title of manager in the category of the position they supervise.

Certain job titles do appear on the non-degreed list that are clearly not where career professionals want to see graduates start: clerical, food service (waiters/waitresses), and similar "junk jobs." However, the real trap for college jobs may be sales positions -- some sales positions are directly related to academic majors, such as Engineering and Business. Yet, many of the sales jobs are retail in nature and are less likely to require a college degree.

Career advisors need to use caution when associating successful labor market entry with certain job titles. Titles may imply more than they actually offer. During the job search, graduating students need to focus on the actual job responsibilities rather than pursue a job title. Unfortunately, students focus on a job title, especially manager positions, and they often come up short.

All "junk jobs" are found in the fast food establishments and convenience stores! Jobs not requiring a degree are offered to graduating students not only by notorious "junk job" employers, but also by organizations not often mentioned. Educational institutions and health service organizations (hospitals) for example, employ many college graduates as aides, assistants or in low level technical positions. Graduates often expect that these positions will lead to more appropriate positions once in the system. This movement may well be true, but evidence is lacking to confirm that graduates in non-degreed positions find degree-related employment later in their careers.

Those graduates in jobs not requiring a degree tend to stay close to home. This assumption is fairly accurate as 75% or more of those with non-degreed employment resided in Michigan. Location for those graduates may be further specified with a third in Ingham County. For those attending graduate school, the reason appears obvious. For the others, the uncertainty of the labor market causes them to remain in comfortable environments where they can possibly obtain help once they decide to seek it. Efforts by career advisors to assist these graduates can be centered in a few counties: 60% or more could be served by offering programs in three areas, Ingham, Wayne, and Oakland counties.

Graduate students with experiential learning experiences will find better positions. Clearly, students who participated in career-related employment or related activities (co-ops and internships) were more likely to be in positions that required a degree. The evidence continues to mount that "expert practice" -- seeing the world of work as it really is -- provides employment rewards for first time entrants.

Liberal art graduates (Arts and Letters, Social Science, Natural Science, etc.) have the most difficult time finding appropriate employment. This was certainly the case among this sample of graduates. The colleges whose students were most reluctant to become involved in job search planning prior to graduation reported the highest rates of non-degreed employment. One college whose results were surprising was Nursing where 50% were in non-degreed

employment. A comparison within this group revealed few differences; the two that emerged, however, could help explain this unexpected pattern. Eighty percent of non-degreed employment of nurses was in Michigan (compared to 60% for other graduates) and nurses had higher salaries (averaging approximately \$2,000 annually). These findings suggest that the nurses in non-degreed positions may have worked in positions requiring two year degrees; returned to MSU for a four year degree; and remained in their original positions, unable to move into a position requiring a bachelor's degree. The patterns of non-degreed employment confirm conventional wisdom and further substantiate the need for career advisors to work closely with students, faculty, and advisors from these colleges.

This preliminary analysis of available data on the degree-relatedness of first employment after graduation is not encouraging. Even with a more representative sample and an improved economy, the ratio may not drop as much as one would hope. Many factors influence early employment beyond the supply of jobs available in the labor market. Given the dynamics of the new economy, graduates face challenges in finding the employment they desire. This study provides some understanding to the magnitude of the problem. However, it fails, as does other research, to determine if these graduates in non-degreed positions move into positions that better reflect their academic training. (In future surveys, graduates will be asked to indicate if their position has career potential).

Graduates in positions that do not require a degree are misused human capital: they are underemployed. There are others, those in full-time employment in their field but undercompensated or underutilized, who are also underemployed. These latter graduates, however, encounter opportunities to enhance their positions. Do those college graduates who cannot find a position requiring a degree have the same opportunities? Or do their careers continue to lag further behind?

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