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Survey of New Jersey Employers to Assess the Ability of Higher Education Institutions to Prepare Students for Employment

Prepared for: The New Jersey Commission on Higher Education

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Executive Summary

In the Survey of New Jersey Employers to Assess the Ability of Higher Education Institutions to *Prepare Students for Employment*, over 400 New Jersey's employers express their views on the purpose of higher education, how well the state's colleges and universities are preparing students for work and what changes can be made to improve that preparation.

The survey finds that many employers believe that graduates with associate and bachelor's degree are prepared for employment. At the same time, the majority believes that the quality of job applicants from New Jersey's colleges and universities has remained steady or improved in recent years and is as good or better than those from colleges and universities outside of New Jersey.

• The vast majority of employers believe that recent graduates are very prepared or somewhat prepared for employment. One in three employers believes that graduates with associate's degrees and graduates with bachelor's degrees from New Jersey colleges and universities are very prepared for employment (31% and 36%, respectively). One in two thinks that they are somewhat prepared (55% and 53%, respectively).

• The majority of employers believe that the quality of job applicants from New Jersey's twoyear colleges and four-year colleges and universities has remained steady or improved over the past three years (83% and 86%, respectively).

• However, more than half of employers say it is very or somewhat difficult to find wellprepared graduates from two- and four-year colleges, in general (51% and 57%, respectively).

• Employers were asked to rate the level of preparedness of graduates in sixteen skill areas. Most employers believe that recent associate and bachelor's degree graduates are well prepared in communication skills, such as reading, writing, listening, and speaking and in soft skills, such as teamwork, integrity and honesty, and knowing how to learn. A smaller share of employers believes that graduates are well prepared in the area of analytic skills, including critical thinking, problem solving, and judgment and decision-making and in the area of management skills, including time management and resource management.

• Employers are divided on what is the most important function of higher education. While one in two (52%) say that the most important function of a four-year college or university is to prepare students for specific careers, one in four (25%) say it is to provide students with general knowledge and learning skills and 21% say it is to prepare students for work in general. Only one in three employers say that the function of a two-year college is to prepare students for specific careers and to provide students with general knowledge and learning skills (36% and 34%, respectively). One in four (25%) say it is to prepare students for work in general.

• Employers believe that higher education can be improved by making it more relevant to what happens in the workplace. The majority (69%) of employers say that more experienced-based learning, such as internships, would improve higher education. They also offer support for

implementing ideas from business into college curriculums and establishing a faculty loan program so that schools can become more familiar with their companies' skill needs.

I. Introduction

The survey was conducted by telephone during fall 2004 with 402 New Jersey employers with five or more employees who had hired one or more graduates of the state's two-year and four-year colleges and universities in the past three years. Nearly half of the employers had hired a two-year college graduate and 84% had hired a graduate of a four-year college or university. One third of all employers had hired both graduates of two-year colleges and graduates of four-year colleges and universities.

Eight in ten employers who hired associates degree graduates hired graduates of public two-year colleges in New Jersey. One third of these employers hired graduates of private two-year colleges in New Jersey and two in ten hired graduates of colleges in other states. Eight in ten employers who hired graduates of four-year colleges and universities hired graduates of public institutions in New Jersey. Nearly half (47%) hired them from private colleges and universities also in New Jersey. Three in ten hired individuals from four-year colleges and universities outside of New Jersey.

Seven in ten respondents (72%) were private, for-profit businesses. An additional 16% were non-profit organizations and 9% were government agencies. Two in ten (22%) of the private, for-profit businesses were in the retail industry. An additional 15% were in the finance / insurance / real estate industry, and 14% were in the health care industry.

II. Overall Assessment of Higher Education Graduates

Employers give generally favorable reviews regarding how well two- and four-year schools are preparing students for jobs in their company. Nearly one-third (31%) of employers say that graduates of New Jersey's two-year colleges are very prepared for jobs in their company and more than half (55%) say they are somewhat prepared (see Fig. 1). Employers in the retail trade and finance / insurance / real estate industries are most likely to say these graduates are very or somewhat prepared (96%, respectively), while employers in the health care and other industries are less likely to say so (88% and 78%, respectively).

Fig. 1: Employer's Assessment of the Level of Preparation of Recent Graduates

| | Graduates with a 2-Year Associate's Degree | Graduates with a 4-Year Bachelor's Degree |
|---------------------------------|--|---|
| Very Prepared | 31% | 36% |
| Somewhat Prepared | 55% | 53% |
| Not Very or Not at All Prepared | 11% | 9% |

Similarly, more than one-third (36%) say that graduates of the state's four-year colleges and universities are very prepared for jobs, while one in two (53%) say they are somewhat prepared. Employers across industries generally agree with this assessment. For example, 92% of employers in the retail trade industry and 88%, respectively, of employers in the finance / insurance / real estate and health care industries say these graduates are very or somewhat prepared, while 84% of employers in other industries say the same.

Employers give high grades of New Jersey's colleges and universities for their ability to prepare graduates with the skills they need to succeed at work. While only 13% of employers give the state's two-year colleges an "A" on how well they are preparing graduates with the skills and attitudes necessary to succeed in the workplace, more than half (55%) give them a grade of "B" (see Fig. 2). An additional 27% give them a grade of "C."

Similarly, 18% of New Jersey employers give the state's four-year colleges and universities an "A" on their preparation of graduates for work, while 58% give them a "B." Nearly one in four (22%) assign the state's four-year colleges a grade of "C" on how well they are preparing their graduates with the skills and attitudes necessary to succeed in the workplace.

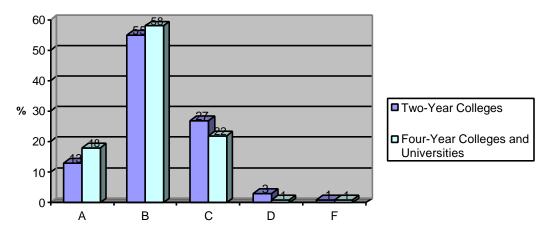


Fig. 2: Employers Grade New Jersey Colleges and Universities on How Well They are Preparing Students for Work

Employers at businesses that employ fewer than twenty-five workers are more likely than employers of twenty-five people or more to give a grade of "A" to New Jersey's two-year colleges (21% and 9%, respectively) and four-year colleges and universities (21% and 16%, respectively). Employers in the finance / insurance / real estate industry give the highest marks to New Jersey's two-year colleges, with 79% giving them a grade of "B" or better. Among retail industry employers, 67% give them a grade of "B" or better, as do 63% of health care and other industry employers. The retail industry is the most satisfied with how well the state's four-year institutions are preparing students with the skills and attitudes necessary to succeed in the workplace, with 84% giving them a grade of "B" or better. New Jersey's four-year colleges and universities also garner a grade of "B" or better from 81% of health care industry employers, 72% of finance / insurance / real estate employers and 70% of employers in other industries. This assessment of the state's institutions of higher education may be on the upswing. Over the past three years, one in three (32%) of employers believe that the overall quality of job applicants from New Jersey's two-year colleges has gotten better, while 51% say it has stayed the same. The same holds true for job applicants with a bachelor's degree from a four-year college or university in New Jersey, the quality of which employers say has gotten better or stayed about the same (31% and 55%, respectively). In addition, employers say that the overall quality of job applicants with associate's degrees from New Jersey colleges is about the same or better than those coming from colleges outside of New Jersey (70% and 19%, respectively), as is the quality of applicants with out-of-state bachelor's degrees (68% and 21%, respectively).

Despite this level of quality, many employers in New Jersey say it is very or somewhat difficult to find well-prepared job candidates with an associate's degree from two-year colleges (18% and 33%, respectively) (see Fig. 3). Finding well-prepared job candidates with associate's degrees from one of New Jersey's public two-year colleges is very or somewhat difficult for many employers (17% and 35%, respectively), as is finding them from one of the state's private two-year colleges or universities (23% and 28%, respectively).

Employers in the retail trade industry, in particular, struggle to find prepared associate's degree graduates. More than half (57%) of these employers say that it is very or somewhat difficult to well-prepared candidates with associate's degrees, as do one in two (50%) of employers in the health care industry. In contrast, only 42% of finance / insurance / real estate employers say the same.

At the same time, 20% of employers say it is very difficult and 37% say it is somewhat difficult to find well-prepared job candidates with a bachelor's degree. Finding well-prepared job candidates with bachelors' degrees from one of New Jersey's public four-year colleges or universities is very or somewhat difficult for many employers (16% and 41%, respectively), as is finding them from one of the state's private four-year colleges or universities (18% and 40%, respectively).

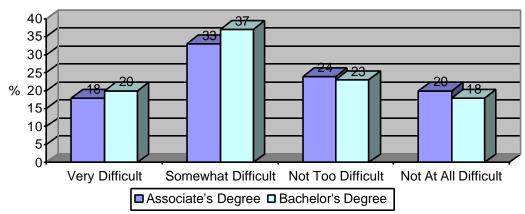


Fig. 3 : "How Difficult is it for your Company to Find Well-prepared Job Candidates from N.J. Colleges and Universities?"

In particular, employers of fewer than twenty-five workers are more likely than employers of twenty-five workers or more to say it is very difficult to find well-prepared bachelor's degree candidates (25% and 18%, respectively). More than half (59%) of employers in the health care industry and 58% in the retail trade industry say it is difficult to find qualified four-year college graduates of New Jersey's schools, compared to 50% of employers in the finance / insurance / real estate industry.

III. Level of Preparation of Graduates by Skill Area

A. Graduates of Two-Year Colleges

In thinking about employees with an associate's degree from New Jersey's two-year colleges whom their company has recently hired, employers express a range of opinion on what skills are necessary for success at their company and how well graduates are prepared. When asked to identify the most important factors to success in their company for recent associate's degree graduates, employers are most likely to say teamwork (48%), integrity and honesty (45%) and social skills, such as persuasion and being service oriented (32%). They also cite critical thinking (27%), problem solving (22%), judgment and decision-making (20%). They are least likely to say science (1%), resource management (2%) and technical skills (9%).

Overall, employers believe that most recent graduates with associate's degree are prepared in many of these skill areas. Most employers believe that recent graduates are prepared in the area of communication skills, including reading, writing, listening and speaking (see Fig. 4). In addition, most employers believe that recent graduates are prepared in the area of soft skills, including teamwork, integrity and honesty and knowing how to learn.

Less than half of the employers believe that recent graduates are prepared in the areas of analytic skills, including critical thinking, judgment and decision-making and problem solving. Smaller percentages of employers report that recent graduates are prepared in the areas of management skills, including resource management and time management.

B. Graduates of Four-Year Colleges and Universities

Among recent bachelor's degree graduates, employers are most likely to say that teamwork (46%), social skills and critical thinking (32%, respectively) and integrity and honesty (30%) are the most important factors for success. They also cite problem solving (25%), judgment and decision-making (18%), and time management (17%) as important factors for success. Again, they are least likely to identify science (3%), resource management (6%) and math (9%) as important.

As with workers with associate's degrees, employers say that workers with bachelor's degrees are prepared in many important skill areas, including communication skills and soft skills (see Fig. 5), and less prepared in areas such as analytic skills and management skills.

Fig. 4. Level of Preparedness for Work of Associate's Degree Graduates, By Skill Area For Those Employers Who Believe The Skill Is Important

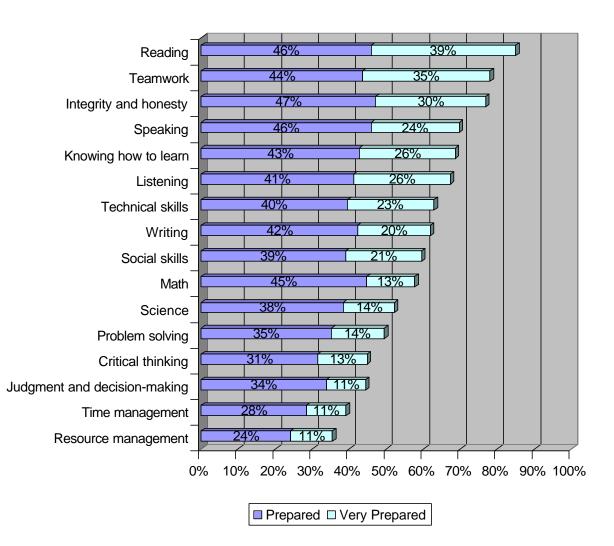
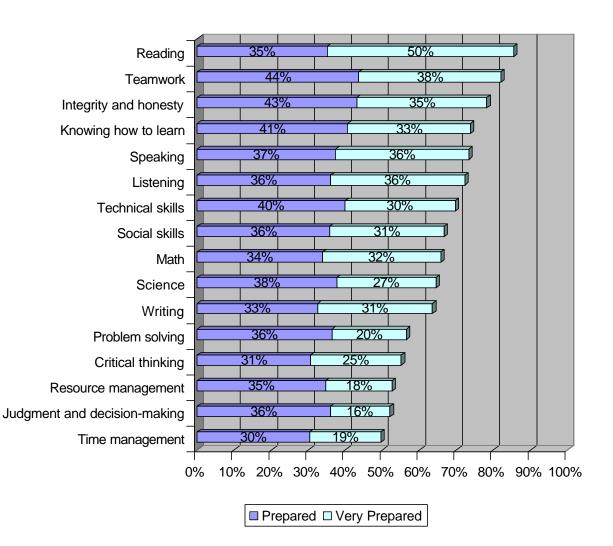


Fig. 5. Level of Preparedness for Work of Bachelor's Degree Graduates, By Skill Area For Those Employers Who Believe The Skill Is Important



A strong majority of employers believe that recent graduates are prepared in the area of communication skills, including reading, writing, listening and speaking. In addition, a strong majority of employers believe that recent graduates are prepared in the area of soft skills such as teamwork, integrity and honesty and knowing how to learn.

Smaller percentages of employers believe that recent graduates are prepared in the areas of analytic skills such as critical thinking, judgment and decision-making, and problem solving. In addition, smaller percentages of employer report that recent graduates are prepared in the area of management skills, including resource management and time management.

IV. Higher Education and Employment

Employers are divided on what is the most important function of higher education. When asked the most important function of a two-year college, one in three say it is to prepare students for specific careers and to provide students with general knowledge and learning skills (36% and 34%, respectively). One in four (25%) say it is to prepare students for work in general.

In contrast, more than half (52%) of New Jersey's employers say that the most important function of a four-year college or university is to prepare students for specific careers. One in four (25%) say it is to provide students with general knowledge and learning skills while only 21% say the most important function is to prepare students for work in general (see Fig. 6).

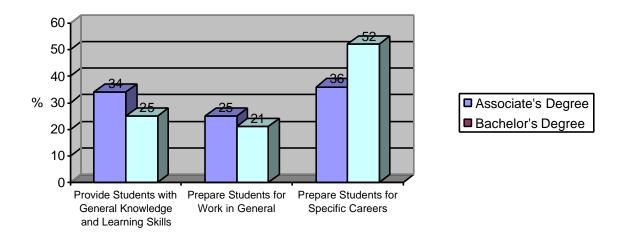


Fig. 6: Most Important Function of Higher Education

Employers offer support for a number of initiatives to prepare students for work. For example, the majority (69%) of employers say that having colleges and universities incorporate more experience-based learning such as internships would greatly improve the way students are prepared for work. One in two (51%) employers say that having colleges and universities solicit and implement ideas from business to improve the curriculum would also greatly improve higher

education in New Jersey. One in three (35%) say that having colleges and universities establish a faculty loan program so that schools can become more familiar with a company's skill needs would greatly improve student preparation for work (see Fig. 7). Most (65%) employers believe that there are specific skills, abilities, attitudes and behaviors that should be emphasized in the curriculum of New Jersey colleges and universities. These include social skills, critical thinking, problem solving, teamwork, integrity and honesty and a strong work ethic.

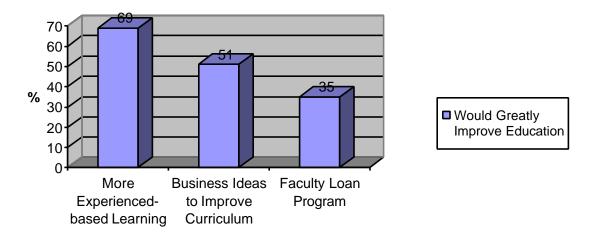


Fig. 7: Employer Support for Methods to Improve Higher Education

Overall, employers at large companies are more likely than employers at small companies to support these initiatives. For example, 37% of employers with twenty-five or more workers say that a faculty loan program would greatly improve education, compared to 31% of employers with fewer workers. Similarly, more than half (54%) of employers with twenty-five or more workers believes that having colleges and universities solicit and implement ideas from business to improve the curriculum would greatly improve higher education in New Jersey, compared to 46% of employers with fewer workers.

Appendix A

Survey Methodology

Braun Research Incorporated completed 402 interviews by telephone with New Jersey employers who have hired one or more graduates of New Jersey's two- and four-year colleges and universities in the past three years from October 12 through November 12, 2004. Businesses were selected randomly from a database of all businesses throughout New Jersey. Businesses with fewer than five employees were left off the sample. For profit, nonprofit and government employers were included in the sample, while colleges and universities were ineligible to participate.

The eligible respondent was the personnel director, human resources director or other person in charge of hiring for their respective company. The average length of the survey was nine minutes. The sample error is +/-4.38% at the 95% confidence level.

The sampling frame used in this report yields a representative sample of the state's employers. Consistent with common practice in survey research of employers, the sample frame excludes firms with fewer than five employees. In addition to being difficult to contact, employers with fewer than five employees are often self-employed individuals and consultants and are not representative of employers that hire full-time workers or make policies affecting an actual workplace.

Appendix B

Survey of Employers to Assess Satisfaction with the Ability of Higher Education Institutions to Prepare Students for Employment

Survey Instrument

Section I: Screening Questions

INT1. Hello, my name is ______ and I'm calling from Braun Research, Inc. on behalf of the New Jersey Commission on Higher Education. We are conducting a brief survey of New Jersey employers regarding higher education in the state.

The results of this survey will be used to assist New Jersey's colleges and universities to better prepare students for jobs. Your responses will be anonymous and confidential.

S1. Does your company or organization employ at least five people?

S2. Can I speak with someone responsible for hiring decisions?

S3. In the past three years, has your company or organization hired an individual who was a recent associate's or bachelor's degree graduate of a New Jersey two-year or four-year college or university. (A recent graduate is someone who earned a degree in the three years before being hired).

Yes (skip to Q1 and begin survey) No DK / ref

Thank you for your time. (Terminate telephone call)

Section II: Primary Survey Questions

Q1. Are these individuals recent associate's degree graduates of two-year colleges, bachelor's graduates of four-year colleges or universities or both?

| | N=402 |
|-------------------------------------|-------|
| Two-year colleges | 15% |
| Four-year colleges and universities | 50% |
| Both | 34% |
| DK/ref | 2% |

A. Questions for Employers that have hired Graduates of Two-Year Colleges in New Jersey

I am going to ask you a series of questions about recent associate's degree graduates of two-year colleges in New Jersey.

Q2A. During the past three years, how many recent associate's degree graduates of a New Jersey two-year college has your company or organization hired?

| | N=202 | |
|--------------|-------|-----|
| One | | 21% |
| Two to Five | | 46% |
| Six to 10 | | 5% |
| More than 10 | | 17% |
| DK/Ref | | 11% |
| | | |

Q2B. First, I am going to read you a list. Please tell me what is the most important function of a two-year, community college? Is it to:

| N=202 | |
|---|-----|
| Provide students with general knowledge | |
| and learning skills | 34% |
| Prepare students for work in general | 25% |
| Prepare students for specific careers | 36% |
| DK/Ref | 5% |

Q3. Overall, how prepared are students graduating with an associate's degree from New Jersey's two-year, community colleges for jobs in your company or organization?

| | N=202 | |
|---------------------|-------|-----|
| Very prepared | | 31% |
| Somewhat prepared | | 55% |
| Not very prepared | | 10% |
| Not at all prepared | | 1% |
| DK/ref | | 4% |
| | | |

Q4. Over the past three years, would you say that the overall quality of job applicants from New Jersey's two-year, community colleges has gotten better or worse or stayed about the same?

| | N=202 | |
|-----------------------|-------|-----|
| Better | | 32% |
| Worse | | 7% |
| Stayed about the same | | 51% |
| DK/ref | | 11% |

Now think about the employees whom your company has recently hired with an associate's degree from New Jersey's two-year colleges.

In general, how well are these employees prepared in the following 16 skill areas? Please tell me if they are very prepared, prepared, only somewhat prepared, or not at all prepared. If you are unable to answer the question because the skill is not important to the success of recent associate's degree graduates at your company or organization, please tell me that.

| Q5a. | Reading | N=202 | |
|------|--|-------|-------------------------|
| | Skill is not important Skills is important DK/ref | | 3% 95% 2% |
| | If skill is important, graduates are Very prepared Prepared Only somewhat prepared Not at all prepared | | 39% 46% 14% 1% |
| Q5b. | Listening | N=202 | |
| | Skill is not important | | 0% |

| 0% |
|-----|
| 99% |
| 1% |
| |
| |
| 26% |
| |

| Very prepared | 26% |
|------------------------|-----|
| Prepared | 41% |
| Only somewhat prepared | 29% |
| Not at all prepared | 4% |

| Q5c. | Writing | |
|------|--------------------------------------|-----|
| | N=202 | |
| | Skill is not important | 3% |
| | Skills is important | 96% |
| | DK/ref | 1% |
| | If skill is important, graduates are | |
| | Very prepared | 20% |
| | Prepared | 42% |
| | Only somewhat prepared | 32% |
| | Not at all prepared | 6% |
| | | |
| Q5d. | Speaking | |
| | N=202 | |
| | Skill is not important | 0% |
| | Skills is important | 98% |
| | DK/ref | 1% |
| | If skill is important, graduates are | |
| | Very prepared | 24% |
| | Prepared | 46% |
| | Only somewhat prepared | 27% |
| | Not at all prepared | 3% |
| 05 | | |
| Q5e. | Math N=202 | |
| | Skill is not important | 12% |
| | Skills is important | 84% |
| | DK/ref | 3% |
| | If skill is important, graduates are | |
| | Very prepared | 13% |
| | Prepared | 45% |
| | Only somewhat prepared | 37% |
| | Not at all prepared | 5% |
| | | |

| Q5f. | Science N=202 | |
|------|--|-------------------------|
| | | |
| | Skill is not important Skills is important DK/ref | 50% 47% 4% |
| | If skill is important, graduates are Very prepared Prepared Only somewhat prepared Not at all prepared | 14% 38% 39% 9% |
| Q5g. | Critical thinking N=202 | 2 |
| | Skill is not important Skills is important DK/ref | 3% 96% 1% |
| | If skill is important, graduates are Very prepared Prepared Only somewhat prepared Not at all prepared | 13% 31% 46% 9% |
| Q5h. | Knowing how to learn N=202 | 2 |
| | Skill is not important Skills is important DK/ref | 0% 98% 2% |
| | If skill is important, graduates are Very prepared Prepared Only somewhat prepared Not at all prepared | 26% 43% 28% 4% |

| Q5i. | Social skills, such as persuasion and being service oriented N=202 | | | |
|---------------------------|--|-----|--|--|
| Skill is not important 0% | | | | |
| | Skills is important | 99% | | |
| | DK/ref | 1% | | |
| | If skill is important, graduates are | | | |
| | Very prepared | 21% | | |
| | Prepared | 39% | | |
| | Only somewhat prepared | 33% | | |
| | Not at all prepared | 8% | | |
| | noi ai an preparea | | | |
| Q5j. | Problem solving | | | |
| | N=202 | | | |
| | Skill is not important | 1% | | |
| | Skills is important | 97% | | |
| | DK/ref | 1% | | |
| | | 170 | | |
| | If skill is important, graduates are | | | |
| | Very prepared | 14% | | |
| | Prepared | 35% | | |
| | Only somewhat prepared | 44% | | |
| | Not at all prepared | 6% | | |
| | | | | |
| Q5k. | Technical skills | | | |
| | N=202 | | | |
| | Skill is not important | 14% | | |
| | Skills is important | 83% | | |
| | DK/ref | 3% | | |
| | If skill is important, graduates are | | | |
| | Very prepared | 23% | | |
| | Prepared | 40% | | |
| | Only somewhat prepared | 36% | | |
| | Not at all prepared | 1% | | |
| | | | | |

| Q51. | Judgment and decision-making N=202 | | |
|------|--|--|--|
| | Skill is not important | 0% | |
| | Skills is important | 98% | |
| | DK/ref | 1% | |
| | If skill is important, graduates are | | |
| | Very prepared | 11% | |
| | Prepared | 34% | |
| | Only somewhat prepared | 49% | |
| | Not at all prepared | 7% | |
| Q5m. | Time management N=202 | 2 | |
| | Skill is not important | 0% | |
| | Skills is important | 98% | |
| | DK/ref | 2% | |
| | If skill is important, graduates are | | |
| | Very prepared | 11% | |
| | Prepared | 28% | |
| | Only somewhat prepared | 48% | |
| | Not at all prepared | 13% | |
| Q5n. | Resource management (inclu N=202 | ding financial, material and personnel) 2 | |

| Skill is not important | 19% |
|------------------------|-----|
| Skills is important | 78% |
| DK/ref | 3% |

| If skill is important, graduates are | |
|--------------------------------------|-----|
| Very prepared | 11% |
| Prepared | 24% |
| Only somewhat prepared | 51% |
| Not at all prepared | 14% |

Q50. Integrity and honesty

| Skill is not important | 1% |
|------------------------|-----|
| Skills is important | 94% |
| DK/ref | 5% |

N=202

If skill is important, graduates are....

| Very prepared | 30% |
|------------------------|-----|
| Prepared | 47% |
| Only somewhat prepared | 20% |
| Not at all prepared | 3% |

| Q5p. | Ability to work with others, teamwork |
|------|---------------------------------------|
| | N=202 |

| Skill is not important | 0% |
|------------------------|-----|
| Skills is important | 99% |
| DK/ref | 1% |

If skill is important, graduates are....

| Very prepared | 35% |
|------------------------|-----|
| Prepared | 44% |
| Only somewhat prepared | 20% |
| Not at all prepared | 3% |

Q6. Of these 16 skill areas, which are the most important to success in your company or organization for recent associate's degree graduates? (Record up to three responses)

| N= | 202 |
|--|-----|
| Ability to work with others, teamwork | 48% |
| Integrity and honesty | 45% |
| Social skills, such as persuasion and bein | Ig |
| service oriented | 32% |
| Critical thinking | 27% |
| Problem solving | 22% |
| Judgment and decision-making | 20% |
| Listening | 19% |
| Time management | 18% |
| Reading | 14% |
| Knowing how to learn | 12% |
| | |

| Speaking Math | 12% 10% |
|---------------------|------------|
| Technical skills | 9% |
| Resource management | 2% |
| Science | 1% |

Q7. Overall, what grade would you give New Jersey two-year colleges on how well they are preparing graduates with the skills and attitudes necessary to succeed in the workplace?

| | N=202 | |
|--------|-------|-----|
| А | | 13% |
| В | | 55% |
| С | | 27% |
| D | | 3% |
| F | | 1% |
| DK/ref | | 2% |
| | | |

Q8. Thinking about all new employees with recent associate's degrees who your company has hired in the past three years, about what percentage of those hired are:

N=202

From public colleges in New Jersey From private colleges in New Jersey From American colleges outside of New Jersey From international colleges DK/ref

(If all graduates are from colleges in New Jersey, Skip to Q10)

Q9. Would you say that the overall quality of job applicants with associate's degrees from New Jersey two-year colleges was better, worse, or about the same as the overall quality of job applicants coming from colleges outside of New Jersey?

| 83 |
|-----|
| 19% |
| 6% |
| 70% |
| 5% |
| |

Q10. How difficult is it for your company to find well-prepared job candidates with associate degrees from two-year colleges?

| | N=202 | |
|----------------------|-------|-----|
| Very difficult | | 18% |
| Somewhat difficult | | 33% |
| Not too difficult | | 24% |
| Not at all difficult | | 20% |
| DK/ref | | 5% |

Q11A. How difficult is it for your company to find well-prepared job candidates with associate's degrees from New Jersey **public** two-year, community colleges?

| | N=202 | |
|----------------------|-------|-----|
| Very difficult | | 17% |
| Somewhat difficult | | 35% |
| Not too difficult | | 25% |
| Not at all difficult | | 18% |
| DK/ref | | 5% |

Q11B. How difficult is it for your company to find well-prepared job candidates with associate's degrees from New Jersey **private** two-year colleges?

| N=202 |
|-------|
| 23% |
| 28% |
| 18% |
| 15% |
| 16% |
| |

B. Questions for Employers that have hired Bachelor's Degree Graduates of Four-Year Colleges and Universities in New Jersey

I am going to ask you a series of questions about recent bachelor's degree graduates of four-year college or universities in New Jersey.

Q12A. During the past three years, how many recent bachelor's degree graduates of a New Jersey four-year college or university has your company or organization hired?

| | N=342 | |
|--------------|-------|-----|
| One | | 23% |
| Two to Five | | 46% |
| Six to 10 | | 9% |
| More than 10 | | 14% |
| DK/Ref | | 9% |

Q12B. First, I am going to read you a list. Please tell me what is the most important function of a four-year college or university? Is it to:

| N=342 | |
|---|-----|
| Provide students with general knowledge | |
| and learning skills | 25% |
| Prepare students for work in general | 21% |
| Prepare students for specific careers | 52% |
| DK/Ref | 2% |

Q13. Overall, how prepared are students graduating with a bachelor's degree from New Jersey's four-year colleges or universities for jobs in your company or organization?

| | N=343 | |
|---------------------|-------|-----|
| Very prepared | | 36% |
| Somewhat prepared | | 53% |
| Not very prepared | | 7% |
| Not at all prepared | | 2% |
| DK/ref | | 2% |
| | | |

Q14. Over the past three years, would you say that the overall quality of job applicants with bachelor's degrees from New Jersey's four-year colleges and universities has gotten better or worse or stayed about the same?

| | N=342 | |
|-----------------------|-------|-----|
| Better | | 31% |
| Worse | | 6% |
| Stayed about the same | | 55% |
| DK/ref | | 8% |

Now think about the employees whom your company has recently hired with bachelor's degrees from New Jersey's four-year colleges and universities.

In general, how well are these employees prepared in the following 16 skill areas? Please tell me if they are very prepared, prepared, only somewhat prepared, or not at all prepared. If you are unable to answer the question because the skill is not important to the success of recent bachelor's degree graduates at your company or organization, please tell me that.

| Q15a. | Reading | |
|-------|--------------------------------------|-----|
| | N=34 | -2 |
| | Skill is not important | 1% |
| | Skills is important | 98% |
| | DK/ref | 1% |
| | If skill is important, graduates are | |
| | Very prepared | 50% |
| | Prepared | 35% |
| | Only somewhat prepared | 14% |
| | Not at all prepared | 1% |
| Q15b. | Listening N=34 | 2 |
| | Skill is not important | 0% |
| | Skills is important | 99% |
| | DK/ref | 1% |
| | If skill is important, graduates are | |
| | Very prepared | 36% |
| | Prepared | 36% |
| | Only somewhat prepared | 26% |
| | Not at all prepared | 2% |
| | | |

| Q15c. | Writing N=342 | |
|-------|--|-------------------------|
| | Skill is not important Skills is important DK/ref | 3% 96% 1% |
| | If skill is important, graduates are Very prepared Prepared Only somewhat prepared Not at all prepared | 31% 33% 32% 5% |
| Q15d. | Speaking N=342 | 2 |
| | Skill is not important Skills is important DK/ref | 0% 99% 1% |
| | If skill is important, graduates are Very prepared Prepared Only somewhat prepared Not at all prepared | 36% 37% 25% 2% |
| Q15e. | Math N=342 | 2 |
| | Skill is not important Skills is important DK/ref | 12% 85% 2% |
| | If skill is important, graduates are | |

| f skill is important, graduates are | |
|-------------------------------------|-----|
| Very prepared | 32% |
| Prepared | 34% |
| Only somewhat prepared | 30% |
| Not at all prepared | 4% |

| Q15f. | Science N=342 | | |
|-------|---------------------------------------|-------|--|
| | | | |
| | Skill is not important | 41% | |
| | Skills is important | 57% | |
| | DK/ref | 2% | |
| | | | |
| | If skill is important, graduates are | | |
| | Very prepared | 27% | |
| | Prepared | 38% | |
| | Only somewhat prepared | 33% | |
| | Not at all prepared | 3% | |
| | r r r r r r r r r r r r r r r r r r r | | |
| | | | |
| | | | |
| Q15g. | Critical thinking | | |
| | N=342 | | |
| | | | |
| | Skill is not important | 1% | |
| | Skills is important | 98% | |
| | DK/ref | 1% | |
| | | 170 | |
| | If skill is important, graduates are | | |
| | Very prepared | 25% | |
| | Prepared | 31% | |
| | Only somewhat prepared | 41% | |
| | Not at all prepared | 4% | |
| | Noi ai ali preparea | 470 | |
| | | | |
| | | | |
| 0151 | | | |
| Q15h. | Knowing how to learn | | |
| | N=342 | | |
| | CI 11 | 10/ | |
| | Skill is not important | 1% | |
| | Skills is important | 98% | |
| | DK/ref | 1% | |
| | | | |
| | If skill is important, graduates are | 220 (| |
| | Very prepared | 33% | |
| | Prepared | 41% | |
| | Only somewhat prepared | 25% | |
| | Not at all prepared | 1% | |
| | | | |

| Q15i. | Social skills, such as persuasion and being service oriented N=342 | | | | |
|-------|--|------|--|--|--|
| | Skill is not important 0% | | | | |
| | Skills is important | 98% | | | |
| | DK/ref | 2% | | | |
| | If skill is important, graduates are | | | | |
| | Very prepared | 31% | | | |
| | Prepared | 36% | | | |
| | Only somewhat prepared | 29% | | | |
| | Not at all prepared | 4% | | | |
| | | | | | |
| Q15j. | Problem solving | | | | |
| | N=342 | | | | |
| | Skill is not important | 0% | | | |
| | Skills is important | 99% | | | |
| | DK/ref | 1% | | | |
| | | 1 /0 | | | |
| | If skill is important, graduates are | | | | |
| | Very prepared | 20% | | | |
| | Prepared | 36% | | | |
| | Only somewhat prepared | 41% | | | |
| | Not at all prepared | 3% | | | |
| | | | | | |
| Q15k. | Technical skills | | | | |
| | N=342 | | | | |
| | Skill is not important | 10% | | | |
| | Skills is important | 88% | | | |
| | DK/ref | 3% | | | |
| | If skill is important, graduates are | | | | |
| | Very prepared | 30% | | | |
| | Prepared | 40% | | | |
| | Only somewhat prepared | 28% | | | |
| | Not at all prepared | 2% | | | |
| | | | | | |

| Q151. | Judgment and decision-making N=342 | |
|-------|---|----------------|
| | Skill is not important Skills is important | 0% 98% |
| | DK/ref | 2% |
| | If skill is important, graduates are | |
| | Very prepared | 16% |
| | Prepared | 36% |
| | Only somewhat prepared | 43% |
| | Not at all prepared | 4% |
| Q15m. | Time management N=342 | |
| | Skill is not important | 1% |
| | Skills is important | 97% |
| | DK/ref | 1% |
| | If skill is important, graduates are | |
| | Very prepared | 19% |
| | Prepared | 30% |
| | Only somewhat prepared | 40% |
| | Not at all prepared | 11% |
| O15n. | Resource management (includ | ling financial |

Q15n. Resource management (including financial, material and personnel) N=342

| Skill is not important | 13% |
|------------------------|-----|
| Skills is important | 85% |
| DK/ref | 2% |

If skill is important, graduates are....Very prepared18%Prepared35%35%Only somewhat prepared40%Not at all prepared8%

| Q150. | Integrity and honesty |
|-------|-----------------------|
|-------|-----------------------|

N=342

| Skill is not important | 1% |
|------------------------|-----|
| Skills is important | 96% |
| DK/ref | 3% |

If skill is important, graduates are....

| Very prepared | 35% |
|------------------------|-----|
| Prepared | 43% |
| Only somewhat prepared | 20% |
| Not at all prepared | 2% |

| Q15p. | Ability to work with others, teamwork |
|-------|---------------------------------------|
| | N=342 |

| Skill is not important | 0% |
|------------------------|-----|
| Skills is important | 99% |
| DK/ref | 1% |

If skill is important, graduates are....

| Very prepared | 38% |
|------------------------|-----|
| Prepared | 44% |
| Only somewhat prepared | 16% |
| Not at all prepared | 2% |

Q16. Of these 16 skill areas, which are the most important to success in your company or organization for recent bachelor's degree graduates? (Record up to three responses)

| N=342 |
|-------|
| N=342 |

| Ability to work with others, teamwork | 46% |
|---------------------------------------|-----|
| Social skills | 32% |
| Critical thinking | 32% |
| Integrity and honesty | 30% |
| Problem solving | 25% |
| Judgment and decision-making | 18% |
| Time management | 17% |
| Listening | 16% |
| Technical skills | 14% |
| Knowing how to learn | 12% |
| Reading | 11% |
| Writing | 10% |
| | |

| Speaking | 10% |
|---------------------|-----|
| Math | 9% |
| Resource management | 6% |
| Science | 3% |

Q17. Overall, what grade would you give New Jersey four-year colleges and universities on how well they are preparing graduates with the skills and attitudes necessary to succeed in the workplace?

| N=342 | |
|-------|-------|
| | 18% |
| | 58% |
| | 22% |
| | 1% |
| | 0% |
| | 1% |
| | N=342 |

Q18. Thinking about all new employees with bachelor's degrees who your company has hired in the past three years, about what percentage of those hired are:

N=342

From public colleges or universities in New Jersey From private colleges or universities in New Jersey From American colleges or universities outside of New Jersey From international colleges or universities DK/ref

(If all graduates are from colleges or universities in New Jersey, Skip to Q20)

Q19. Would you say that the overall quality of job applicants with bachelor's degrees from New Jersey four-year colleges and universities was better, worse, or about the same as the quality of job applicants coming from colleges and universities outside of New Jersey?

| % |
|----|
| 6 |
| 3% |
| 6 |
| |

Q20. How difficult is it for your company to find well-prepared job candidates with bachelor's degrees?

| | N=342 | |
|----------------------|-------|-----|
| Very difficult | | 20% |
| Somewhat difficult | | 37% |
| Not too difficult | | 23% |
| Not at all difficult | | 18% |
| DK/ref | | 2% |

Q21A. How difficult is it for your company to find well-prepared job candidates with bachelor's degrees from New Jersey **public** four-year colleges and universities?

| | N=342 | |
|----------------------|-------|-----|
| Very difficult | | 16% |
| Somewhat difficult | | 41% |
| Not too difficult | | 25% |
| Not at all difficult | | 16% |
| DK/ref | | 3% |

Q21B. How difficult is it for your company to find well-prepared job candidates with bachelor's degrees from New Jersey **private** four-year colleges and universities?

| N=342 |
|-------|
| 18% |
| 40% |
| 18% |
| 16% |
| 8% |
| |

C. Policy Response / Suggestions

The following are some suggestions for how New Jersey two-year and four-year colleges and universities might better prepare students for jobs. For each, please indicate whether it would greatly improve, somewhat improve, slightly improve or not improve.

Q22. Having colleges/universities incorporate more experienced-based learning such as internships

| | N=402 | |
|------------------|-------|-----|
| Greatly improve | | 69% |
| Somewhat improve | | 21% |
| Slightly improve | | 6% |
| Not improve | | 3% |
| DK/ref | | 2% |
| | | |

Q23. Having colleges/universities establish a faculty loan program so that they can become more familiar with your company's skill needs

| | N=402 | |
|------------------|-------|-----|
| Greatly improve | | 35% |
| Somewhat improve | | 38% |
| Slightly improve | | 13% |
| Not improve | | 9% |
| DK/ref | | 5% |
| | | |

Q24. Having colleges/universities solicit and implement ideas from business to improve the curriculum

| | N=402 | |
|------------------|-------|-----|
| Greatly improve | | 51% |
| Somewhat improve | | 36% |
| Slightly improve | | 8% |
| Not improve | | 3% |
| DK/ref | | 2% |

Q25. What other steps could New Jersey colleges and universities take to better prepare students for jobs?

DK/ref

Q26. Are there specific skills, abilities, attitudes and behaviors that you believe should be emphasized in the curricula of New Jersey colleges and universities?

| | N=402 | |
|-----------------|-------|-----|
| Yes | | 65% |
| No (skip to D1) | | 28% |
| DK/ref | | 6% |

Q27. What skills, abilities, attitudes and behaviors should be emphasized? (Record up to three responses)

DK/ref

Section III: Demographics

Now, I just have a few questions for classification purposes.

D1. Which best describes your business or organization? Is it a...(Read choices 1-4)

| N=402 | |
|--|-----|
| Private, for profit business | 72% |
| A non-profit organization (Skip to D3) | 16% |
| Government (Skip to D3) | 9% |
| Other (specify) | 3% |
| DK/ref | 0% |

D2. I am going to read you a list of general activities undertaken by firms, please tell me the one that most closely corresponds to the primary work done by your business. (Read choices 1-11.)

| N=303 | |
|--|-----|
| Agriculture, Forestry, Fishing, Mining | 0% |
| Construction | 6% |
| Manufacturing | 8% |
| Transportation, Communications, Electric, Gas, | |
| and Sanitary Services | 5% |
| Wholesale Trade | 6% |
| Retail trade | 22% |
| Finance, Insurance, and Real Estate | 15% |
| Healthcare | 14% |
| Hospitality Services | 6% |
| Other (specify) | 7% |

D3. How many people does your organization or company employ? (Read choices)

| | N=402 |
|--------------------|-------|
| 5 to 24 people | 36% |
| 25 to 99 people | 29% |
| 100 to 249 people | 12% |
| 250 to 499 | 9% |
| 500 or more people | 14% |
| DK/ref | 1% |

D4. For how long has your company or organization been in business in New Jersey? N_{-402}

| | N=402 | |
|-------------|-------|-----|
| 0-5 years | | 9% |
| 6-10 years | | 12% |
| 11-15 years | | 10% |
| 16-20 years | | 9% |
| 20+ years | | 59% |
| DK/refused | | 2% |
| | | |

D5. What is your official position or title at your company?

| | N=402 | |
|-----------------|-------|-----|
| Owner | | 6% |
| President/CEO | | 10% |
| Vice President | | 5% |
| Manager | | 28% |
| Human Resources | | 22% |
| Administrative | | 5% |
| Controller | | 2% |
| Director | | 12% |
| Principal | | 2% |
| Other | | 6% |

Thank you, that is all the questions I have.

Interviewer: record Gender (Do not ask)

| | N=402 | |
|--------|-------|-----|
| Male | | 35% |
| Female | | 65% |