

# Analysis of the Agribusiness Labor Market:

## Perspectives from Life Science Companies on the Demand for College-Educated Workers

Conducted by  
the Center for Agribusiness and Economic Development  
the University of Georgia



# Broad Description of Companies Surveyed

- Total Number of Responses: 199 (response rate of 11%)
- Of those: 19 fall within the narrow definition of life sciences (primarily in NAICS 311 and 322)
- Respondents included among Agricultural chemical manufacturing, farm supplies, pulp and paper manufacturing, support activities for agricultural production, and professional/technical/scientific services (need to honor confidentiality)
- 2 of those 19 are within the Innovation Crescent Region

# Company Demographics

Statistics	Life Science	Non Life Science
Median Georgia Workforce	28	22
% of FT Positions Requiring a College Degree in Georgia	47.11%	17.61%
Median U. S. Workforce	110	31
% of FT Positions Requiring a College Degree in U.S.	44.17%	19.64%

**Bottom Line: Compared to other survey respondents, Life Science Companies have larger workforces and greater proportion of positions that require a college-education.**

## Need for College Educated Workers – By Specific Subject Matter

Do your entry-level positions require that applicants hold a college degree in a specific subject?	Life Science	Non Life Science
Yes – All Positions	15.8%	0.6%
Yes – Most Positions	21.1%	9.1%
Yes – Some Positions	36.8%	30.7%
No	26.4%	59.7%

**Bottom Line: Entry-level positions in Life Science Companies are more likely to require a specific subject matter college degree (73.7%) as compared to non life science companies (40.4%).**

## Need for College Educated Workers – By Company Growth Expectations

Workforce	Increase 6% or More	Increase 3 - 5%	Increase 2% or Less	Decrease
<b>General Workforce Needs</b>	29.4%	17.6%	52.9%	0.0%
<b>College-educated Workforce Needs</b>	62.5%	0.0%	37.5%	0.0%

**Bottom Line: Life Science Companies expected their college-educated workforce needs to increase faster than for their workforce in general.**

**No respondents expected their workforce needs to decrease.**

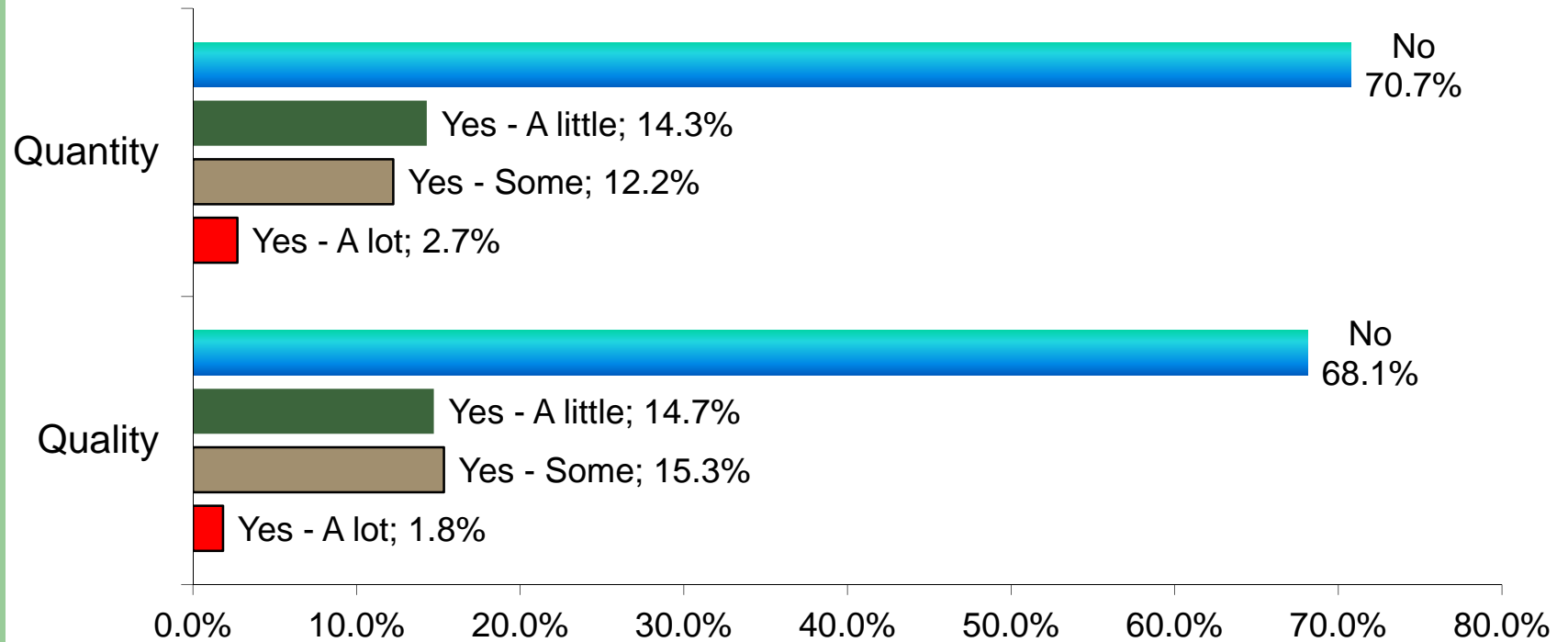
## Need for College Educated Workers – By Future Trends

Answer Options	Very Important	Somewhat Important	Not Important
In the next 2-5 years	62.5%	25.0%	12.5%
In the next 6-10 years	73.3%	20.0%	6.7%

**Bottom Line: Life Science Companies expect the demand for college-educated workers to increase over the next 2 – 10 years.**

**Almost  $\frac{3}{4}$  of respondents felt that a college degree would be a very important requirement for new employees in the next 6-10 years.**

# Impact of Supply of College Educated Workers On Company Growth



**Bottom Line; Generally, company expansion not impacted by the quality or quantity of a college-educated workforce.**

## Need for College Educated Workers – By Soft Skills

Soft Skills for Which Required + Preferred = 100%		
	Required	Preferred
Business ethics	63.2%	36.8%
Critical thinking/problem solving	73.7%	26.3%
Customer relations skills	52.6%	47.4%
Oral communication skills	63.2%	36.8%
Office software/computer competency	73.7%	26.3%
Prior work experience	15.8%	84.2%

**Bottom Line: Life Science Companies desire that college-educated applicants demonstrate soft skills/attributes.**



## Need for College Educated Workers – By Innovation Prospects

Answer Options	Response Percent
Yes - A significant number	12.5%
Yes - A moderate amount	50.0%
Yes - A few	18.8%
No	18.8%

**Bottom Line: Life Science Companies anticipate that future innovations and technology in their industries will have some impact on their demand for new skills or training.**

# Subset of Likely Innovations

- Safety and Quality Foods (SQF)
- ASQ Auditing
- Total Quality and Performance Skills
- Statistical Process Control
- Bio-technology
- Genetics
- Entomology and Plant Pathology

# Industry Comments on Higher Education Degree and Curriculum Programs

- “In Georgia today there is a need for students in ag. to be better educated in both the retail farm supply business, and the wholesale aspects of agribusiness.”
- There is a “false expectation as to the value of holding a degree - it is like a sticker on a suit case in that it tells me where you have been, but not where you are going.”
- “Governmental regulation is a must for the food industry.”

## Industry Comments on Higher Education Degree and Curriculum Programs – Part 2

- “As a consultant we come in contact with many jobs which need college graduates with defined skills in actual processing applications but little or no training is available for students to receive this type of skill.”
- “Undergraduates need some industry experience during their educational program either part-time job or internships. Communication and computer skills are a must.”

# Summary Recommendations from Life Science Companies to Higher Education

- Need degrees in food technology and food laws/regulations.
- Expand hands-on training and experience – e.g., through on-farm training at top facilities in Georgia or visits to model farms.
- Focus on expanding communication skills.
- Expanding opportunities for students wanting to earn ag. degrees – e.g., 4 year programs at ABAC and Tifton.

# Potential Actions From Higher Education

- Creating an interdisciplinary research program that connects faculty, students, and industry leaders to identify/explore issues & concerns and interact on relevant industry needs.
- Incorporating business/management concepts into existing production/technical courses to merge technical knowledge with management.
- Introduce a course that merges soft skills with the technical knowledge.

# Conclusions

- Challenge that must be faced is filling the gap between the skills needed and the curriculum content of major degree programs.
- Beyond the technical knowledge, need for workers who can think, problem solve, communicate, provide quality customer service, and take initiative.
- Higher education must respond to graduate preparedness issues with creative solutions.
- *“New candidates need more education directed at preparing them for the business world.”* (quote from a survey respondent)

# Contact Information

- For additional/specific details:

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