

SARASOTA-MANATEE MANUFACTURING SURVEY RESULTS



August 2012

BACKGROUND



Two Phase Study Methodology



**Phase One (March 2012):
Depth Interviews with
CEOs/HR
leaders/community
partners**



**Phase Two (Now):
Online/Telephone Survey
with CEOs/HR leaders**



Specific Objectives

Phase One

- To understand, directionally, a possible perceived manufacturing skills gap:
 - Do manufacturers and community partners think it exists?
 - What does it consist of?
 - Why does it exist?
 - What can we do to improve it?

Phase Two

- To quantify the manufacturing skills gap in Sarasota and Manatee counties:
 - How many jobs?
 - What kinds of jobs?
 - What are the current satisfaction levels with community support?
 - How can the community better serve workforce needs together?

Two Phase Study Methodology



**Phase One: Depth Interviews with
CEOs/HR leaders/community
partners**



National Reasons For The Gap

- Customized training in house is needed and education model as it exists does not support this
 - ❖ Manufacturers cannot afford to take people off the floor
 - ❖ Government focuses on broad brush working for everyone and it doesn't
- Education not keeping pace with rapid changes happening in manufacturing educating to old model, not new; need manufacturers to educate the educators
- Parents don't understand the manufacturing worker of today
- Private enterprise model conflicts with government and educational model, "no meeting of the minds"

Local Reasons For The Gap

- Because we have highly specialized manufacturers, i.e. no auto industry or medical device industry focus for example, there are issues with providing centralized training programs
- Hard to build a labor pool that can work across many manufacturers without a manufacturing critical mass or focus for region
- Difficult dynamics; community partners not working cooperatively
- Students not being looked at as part of the workforce plan

Bi-County Manufacturing Trends

- Automation/robotics in manufacturing appears to be a common key trend that our schools should be preparing for
- Skilled production is another, although this is more difficult with the specialized kinds of diverse manufacturing being done in the region
- Another trend is supervision of production
 - ❖ Need training to lead and train front line workers
- Rapidly changing from manufacturing companies to tech companies
 - ❖ Fewer, higher skilled jobs; manufacturing worker of past does not cut it
 - ❖ Educators not keeping pace, limiting them in an already limited environment with a thin pool

Two Phase Study Methodology



Phase Two: Online/Telephone Survey with CEOs/HR leaders



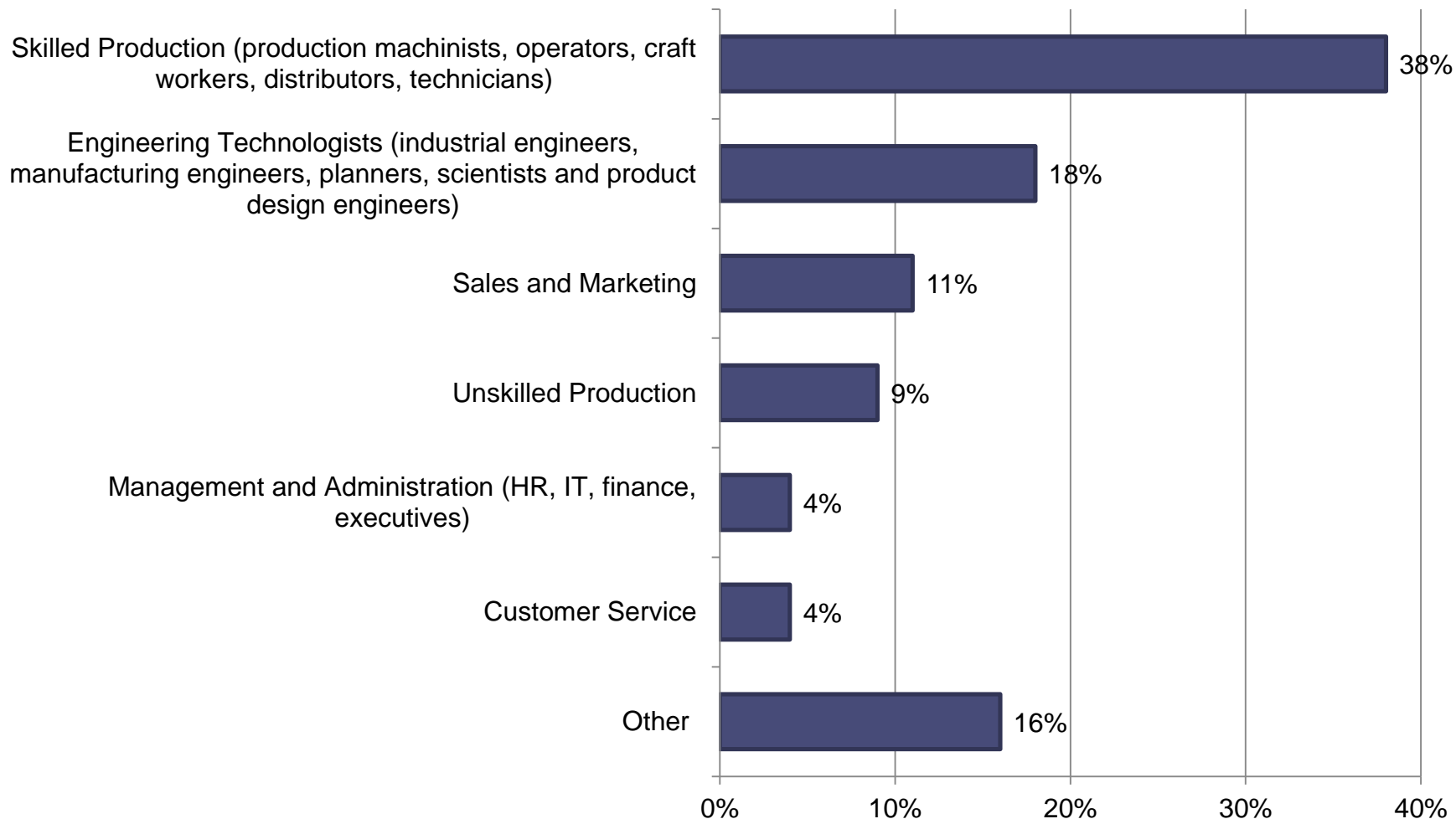
Methodology

- Combined online (N = 95) and telephone survey (N = 30)
- Study fielded 5/23/12 – 7/27/12
- N = 125
- Worst case 90% confidence interval margin of error of 7%
 - Note: Because results are rounded to the nearest whole number - for ease of interpretation - percentages in charts may not equal 100%.
 - Some partial responses were included.

WORKER SHORTAGES

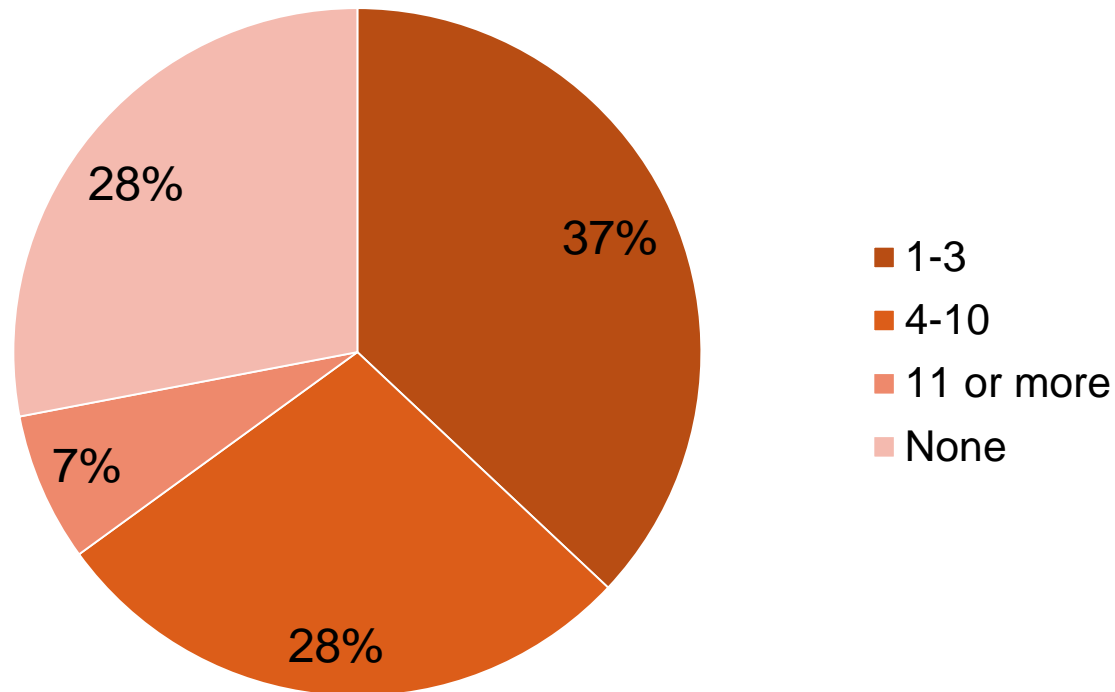


Worker Shortages Today



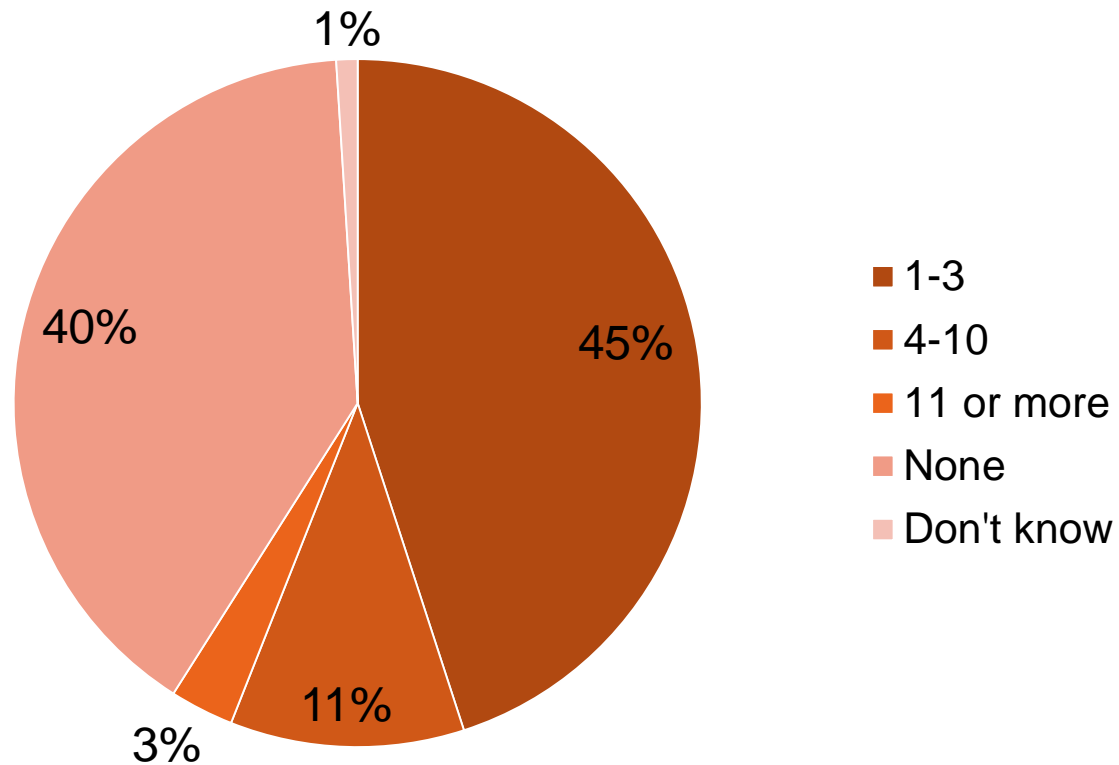
Where are you experiencing worker shortages today? Check all that apply.
(Total Responses = 168)

Jobs Open Now



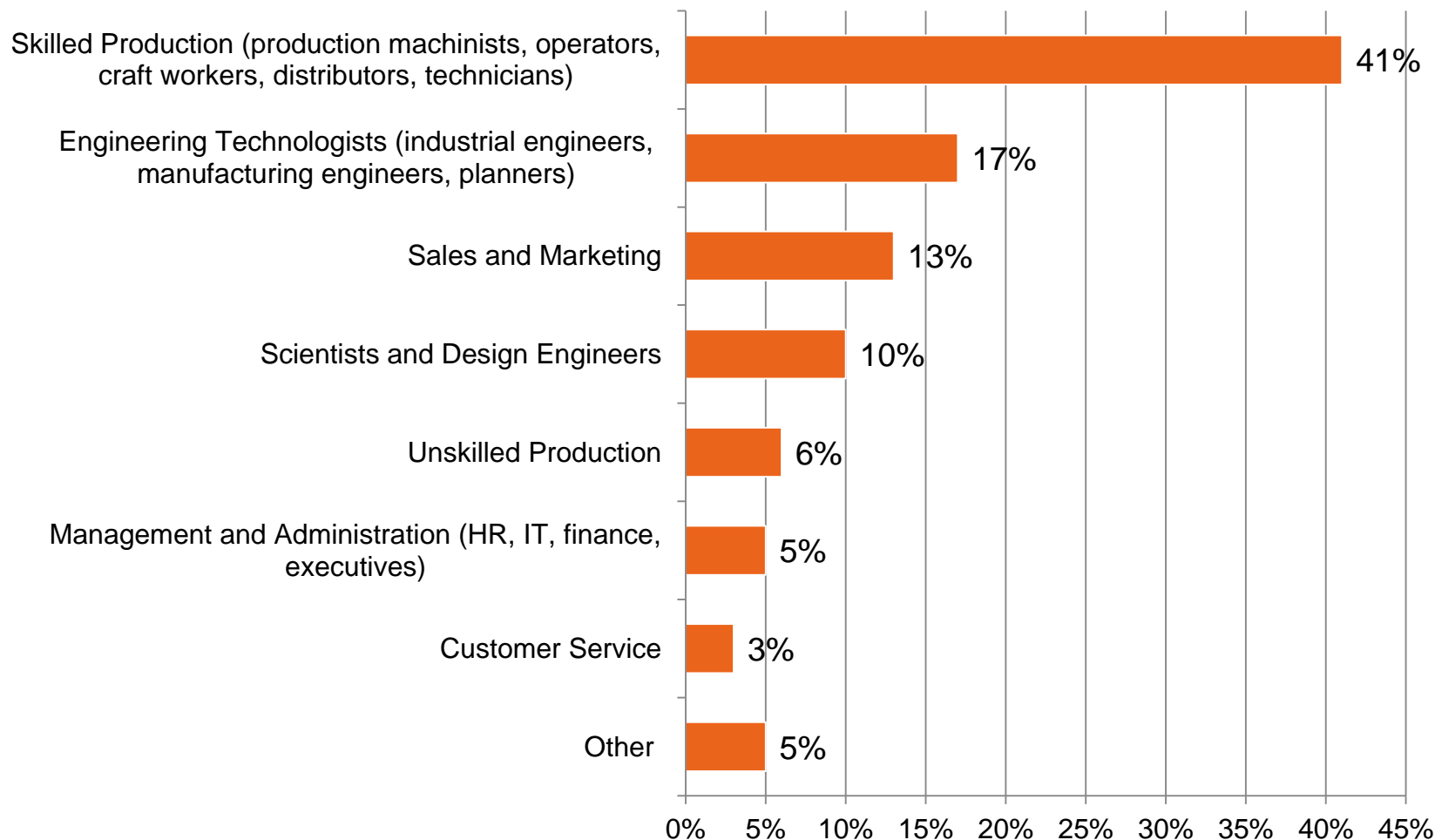
Approximately how many jobs are open in your company right now? (Total Responses = 105)

Jobs Unfilled



Approximately how many jobs have recently gone unfilled for 3 months or more? (Total Responses = 105)

Types of Jobs Unfilled

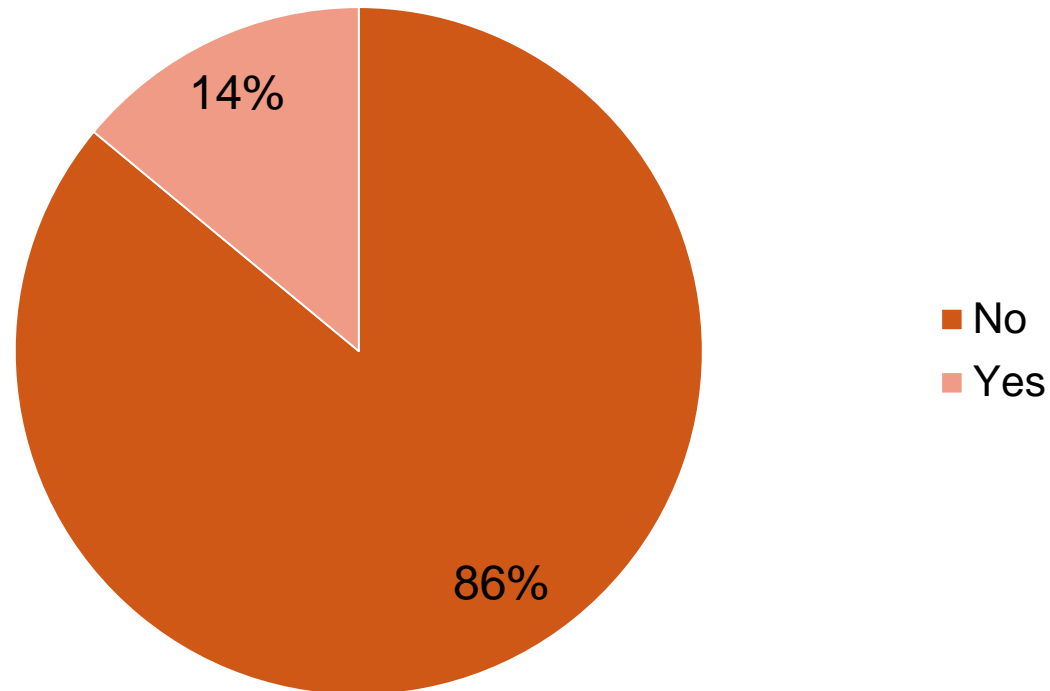


What types of jobs have recently gone unfilled for 3 months or more? Check all that apply. (Total Responses = 100)

HIRING NEEDS

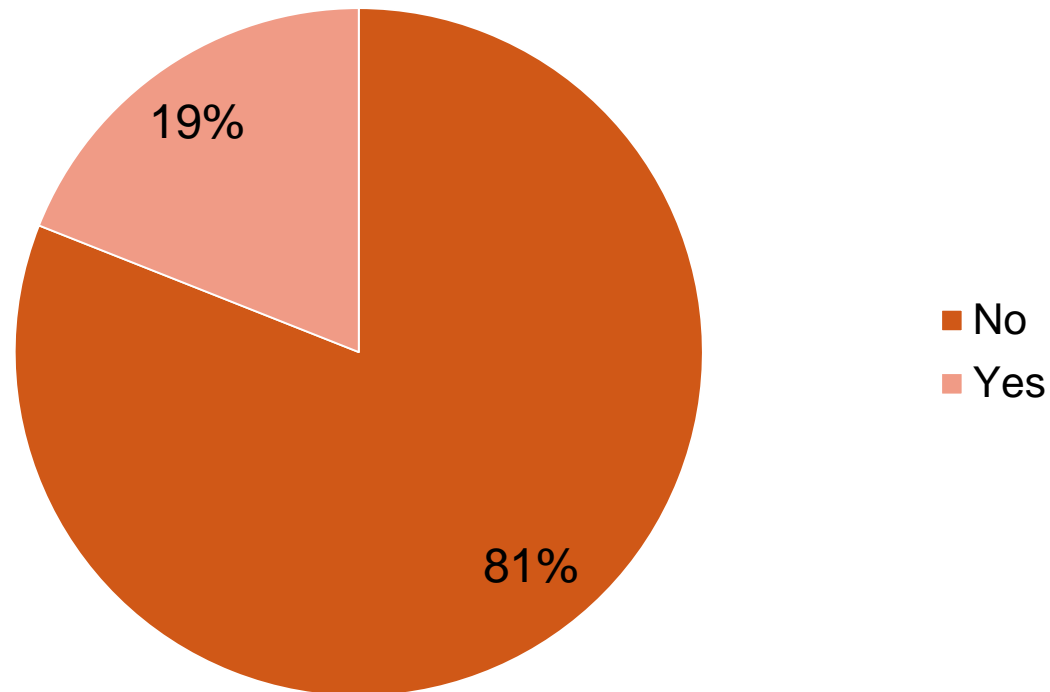


14% Need Automation and Robotics Skilled Workers



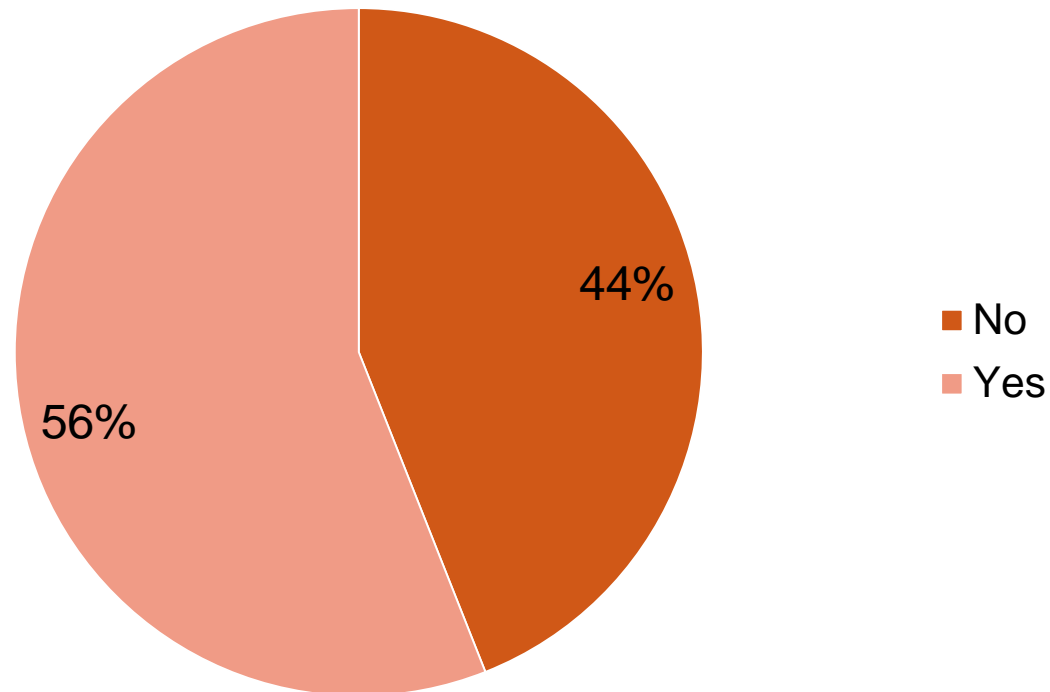
Do you currently need to hire workers who have skills in automation and robotics? (Total Responses = 103)

19% Need Workers To Supervise Production



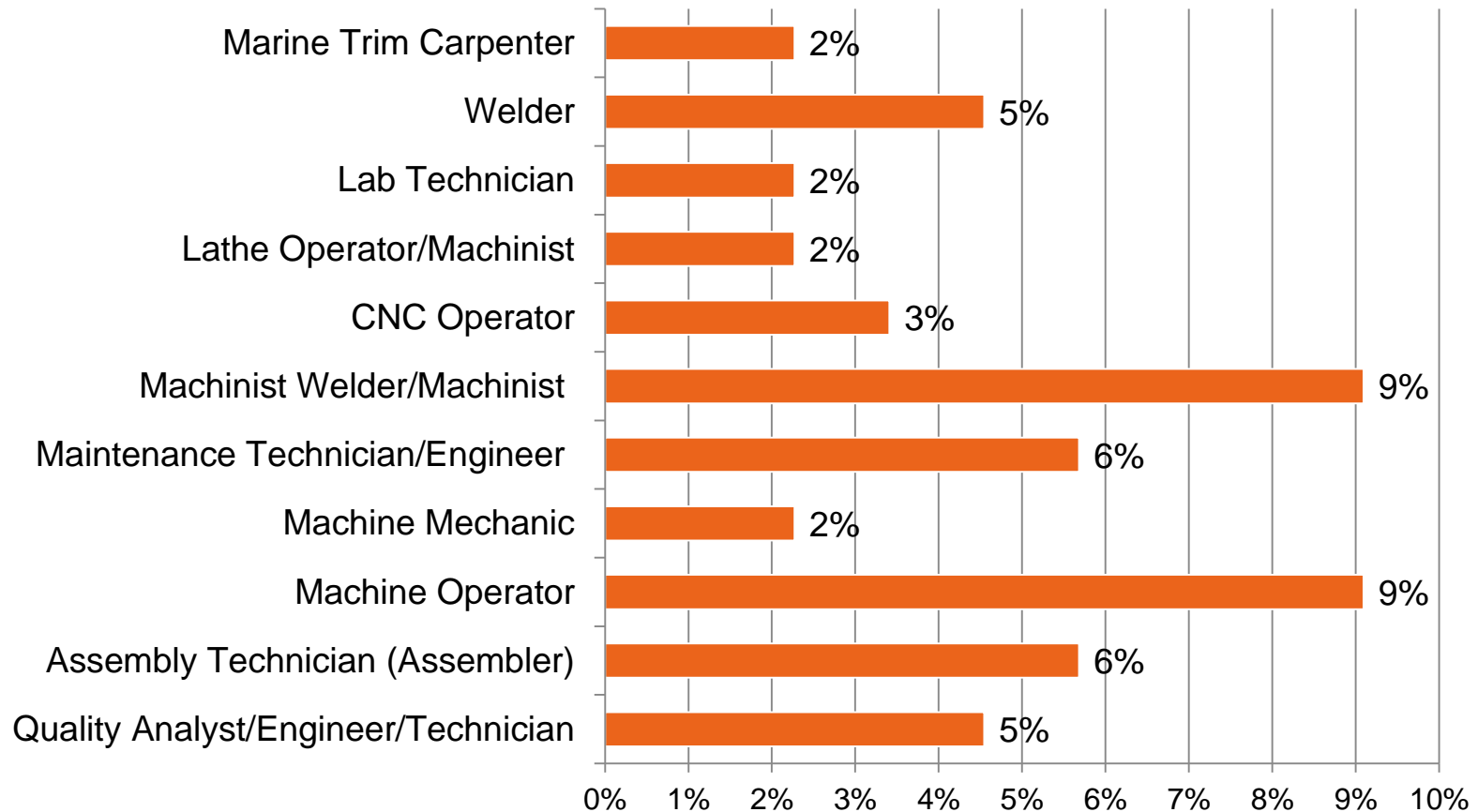
Do you currently need to hire workers who are responsible for supervision of production? (Total Responses = 103)

56% Need Skilled Production Workers



Do you currently need to hire workers who are responsible for skilled production? (Total Responses = 103)

Skilled Production – Job Titles (Multiple Mentions)



What are the specific job titles associated with skilled production jobs at your company? (Total Responses = 58 (88 with multiple entries))

20

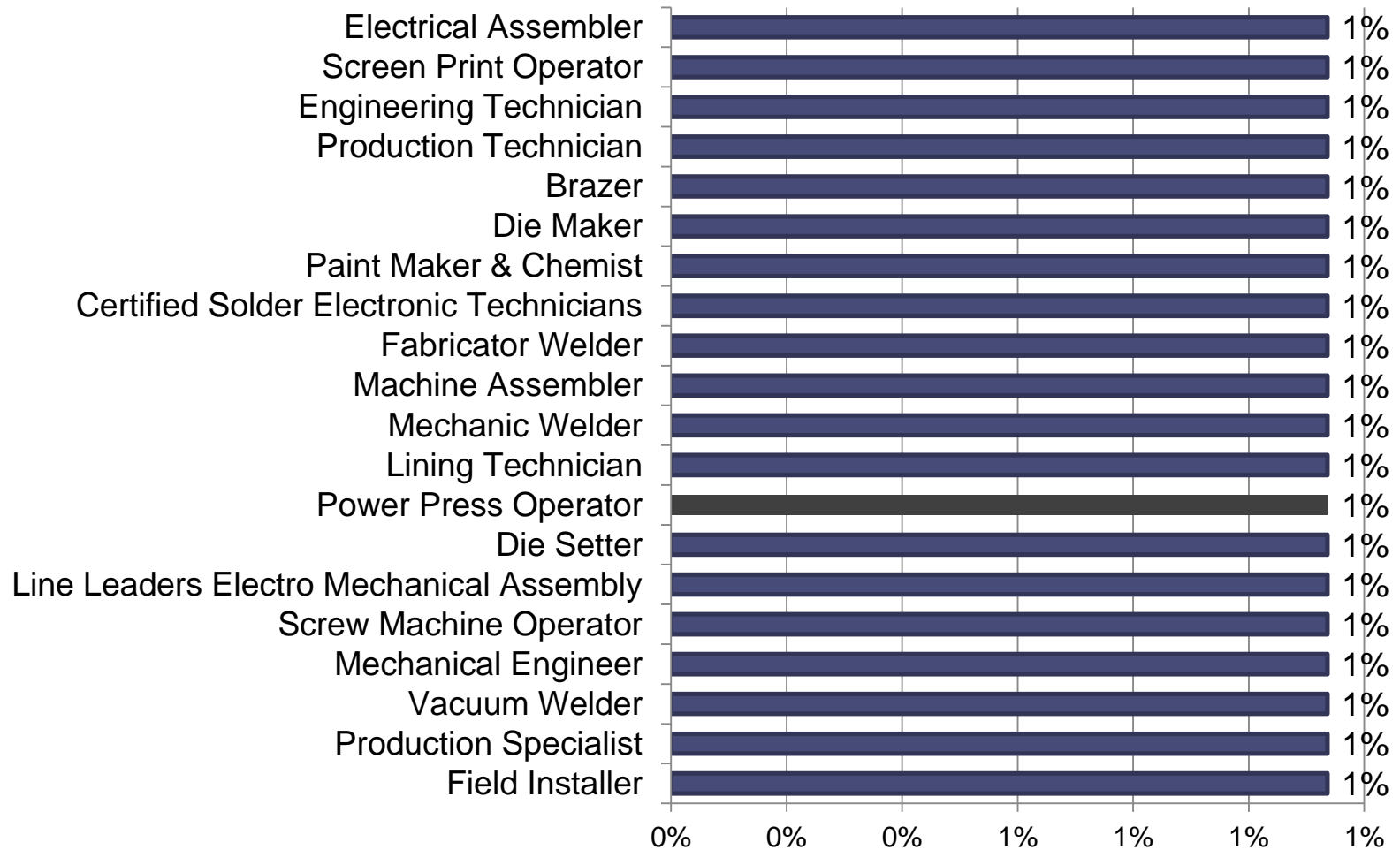


Marketing Research Association

K E M P T O N

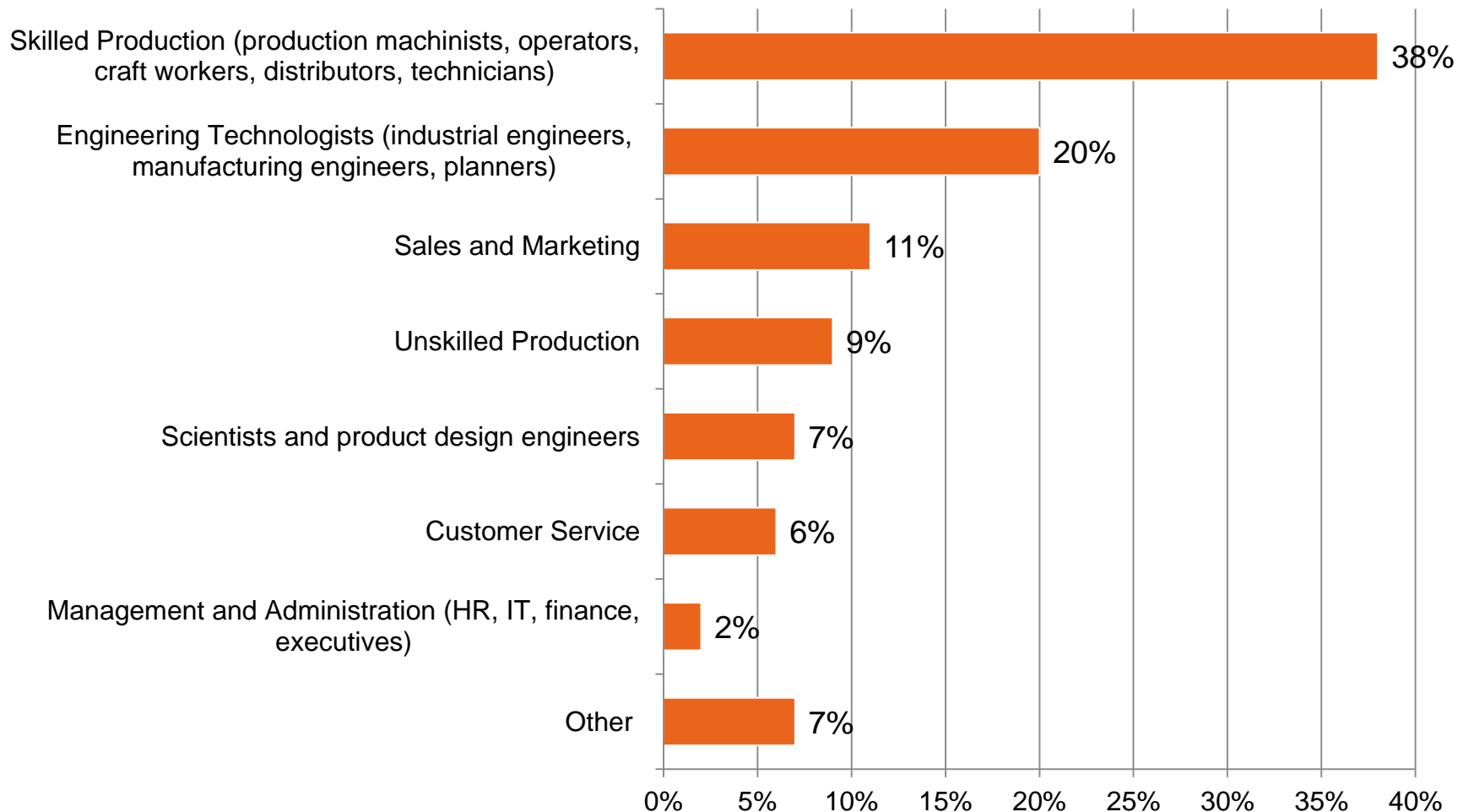
RESEARCH AND PLANNING

Skilled Production – Job Titles (Single Mention)



What are the specific job titles associated with skilled production jobs at your company? (Total Responses = 58 (88 with multiple entries))

Greatest Hiring Challenges Next 3-5 Years



In which workforce segments do you anticipate the greatest hiring challenges during the next 3-5 years? Check all that apply.

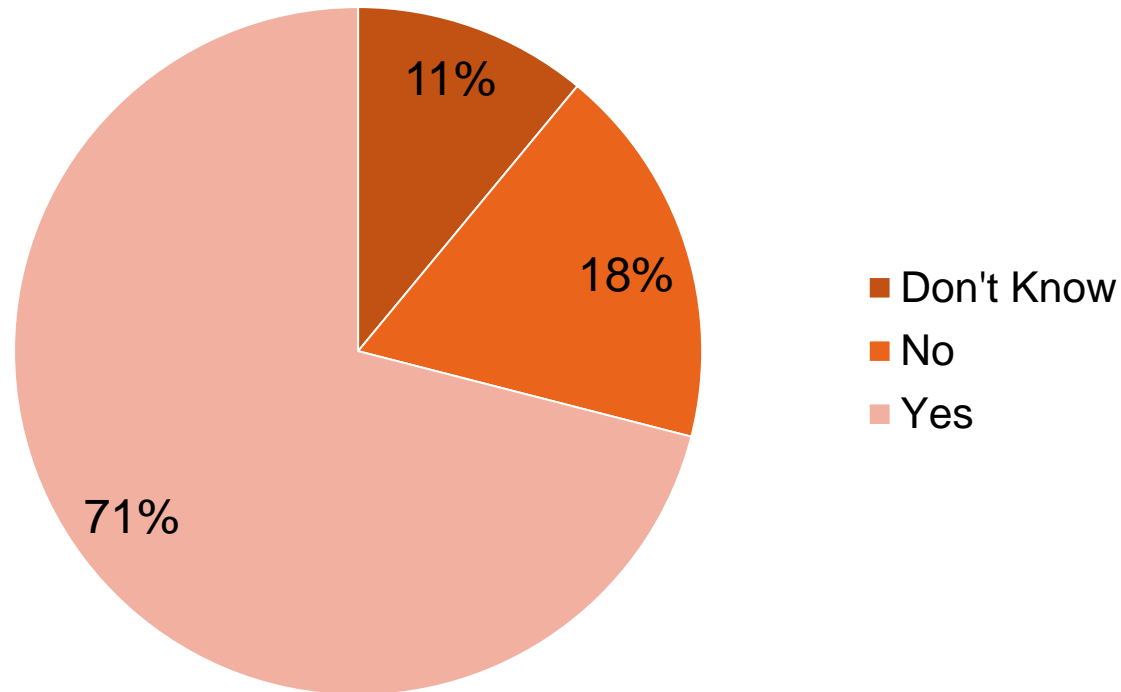
(Total Responses = 176)

22

SKILLS GAP?

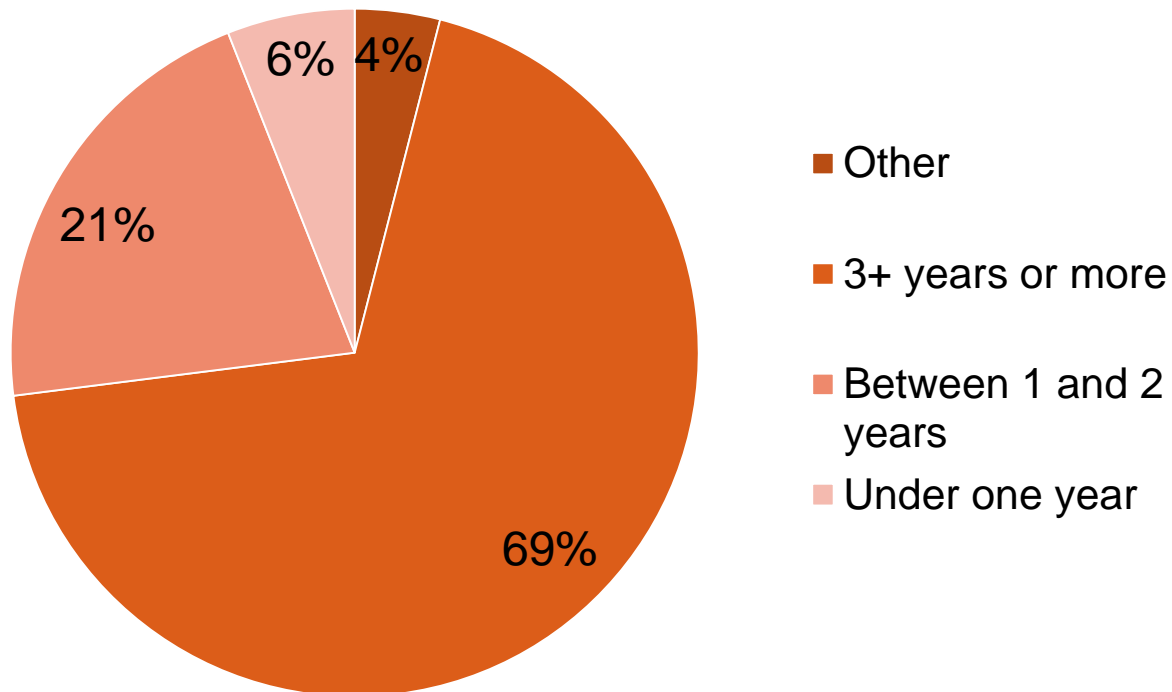


Skills Gap? 71% Say Yes



Do you believe there is currently a skills gap in terms of workers you need and those you can find in Sarasota and Manatee Counties to fill jobs? (Total Responses = 103)

Skills Gap For How Long? 69% Say 3+ Years

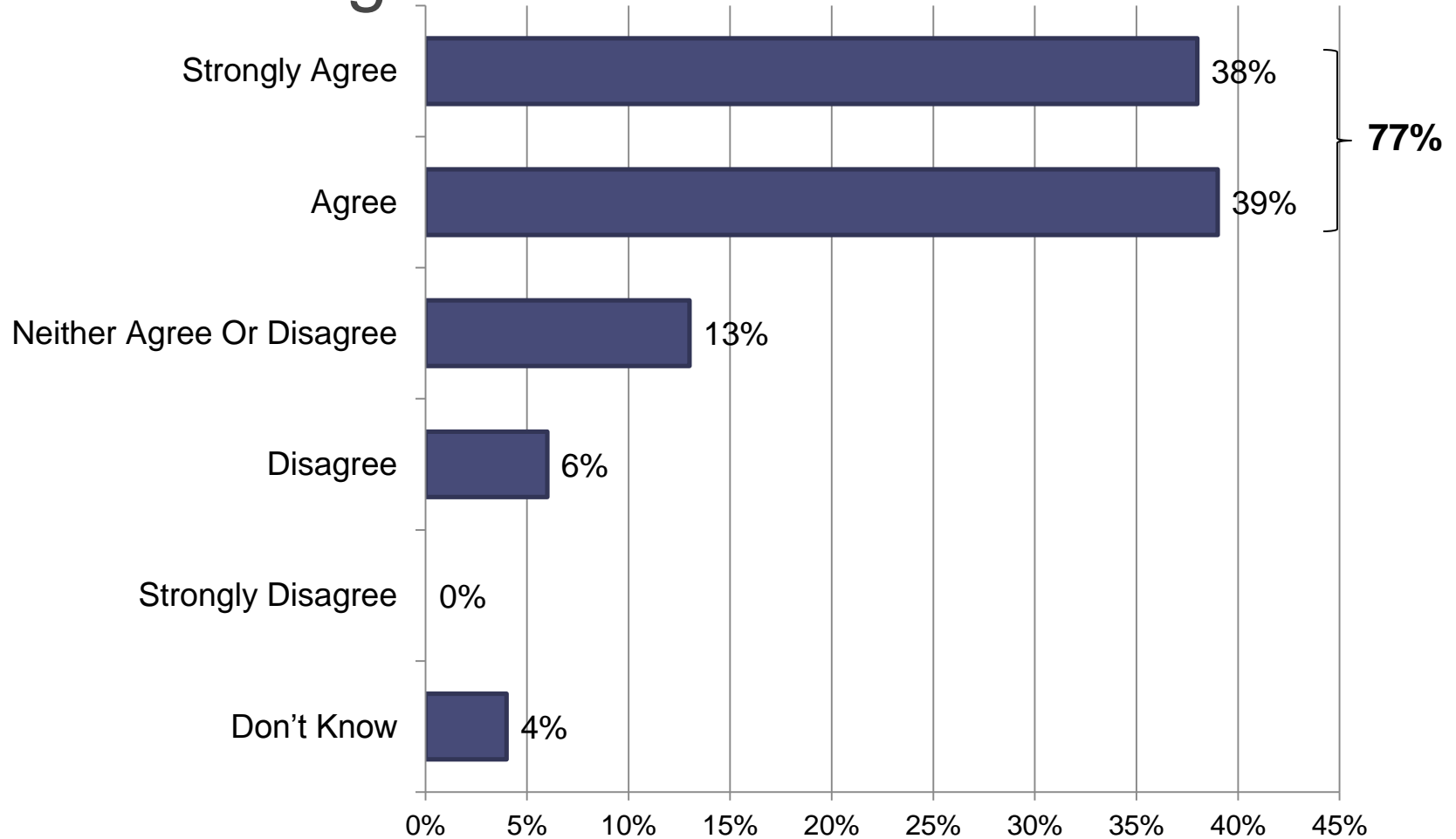


How long do you think the local skills gap has been going on in your company?
(Total Responses = 85)

REASONS FOR SKILLS GAP

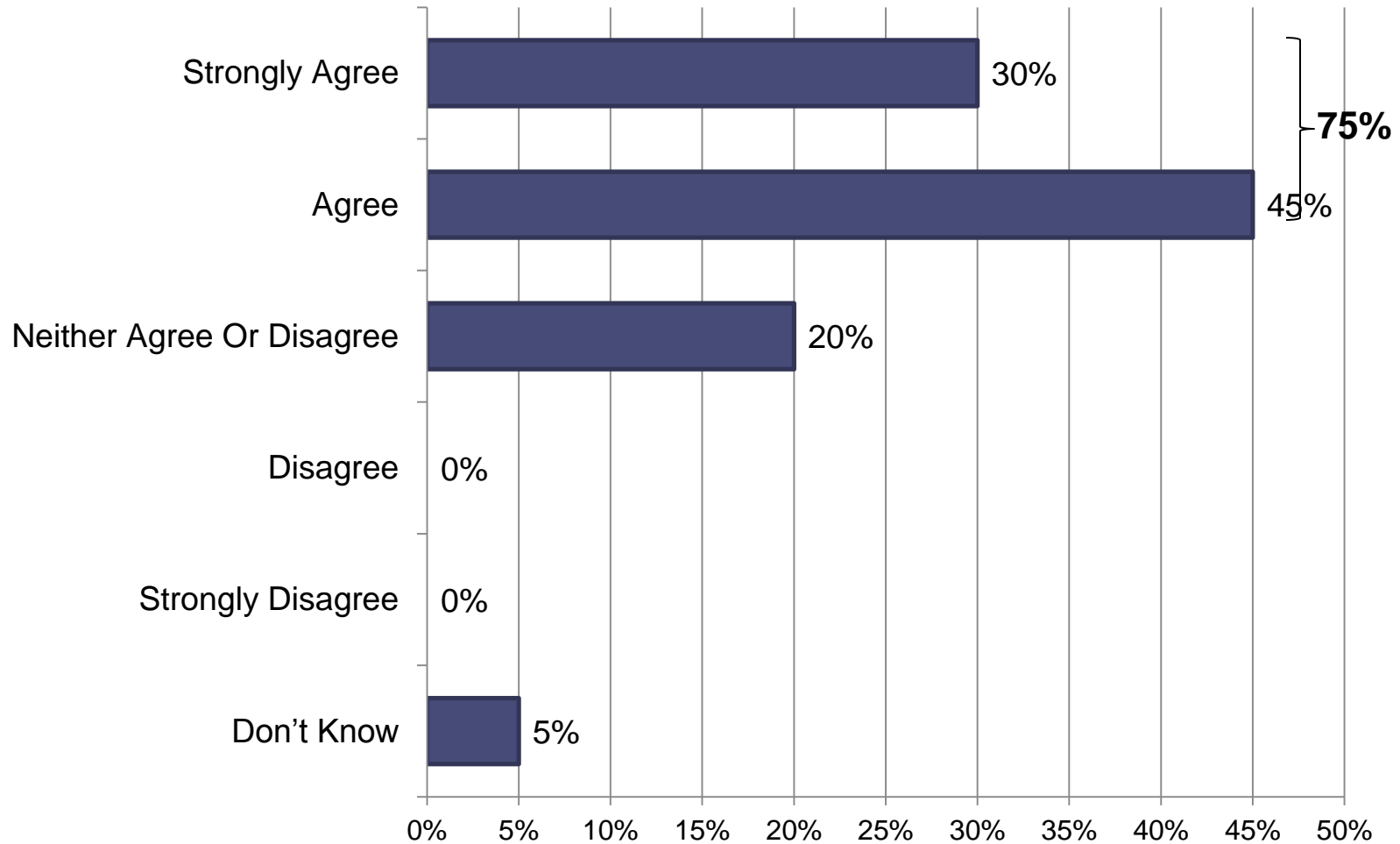


Gap: Local Students Are Not Choosing Manufacturing Jobs As Career



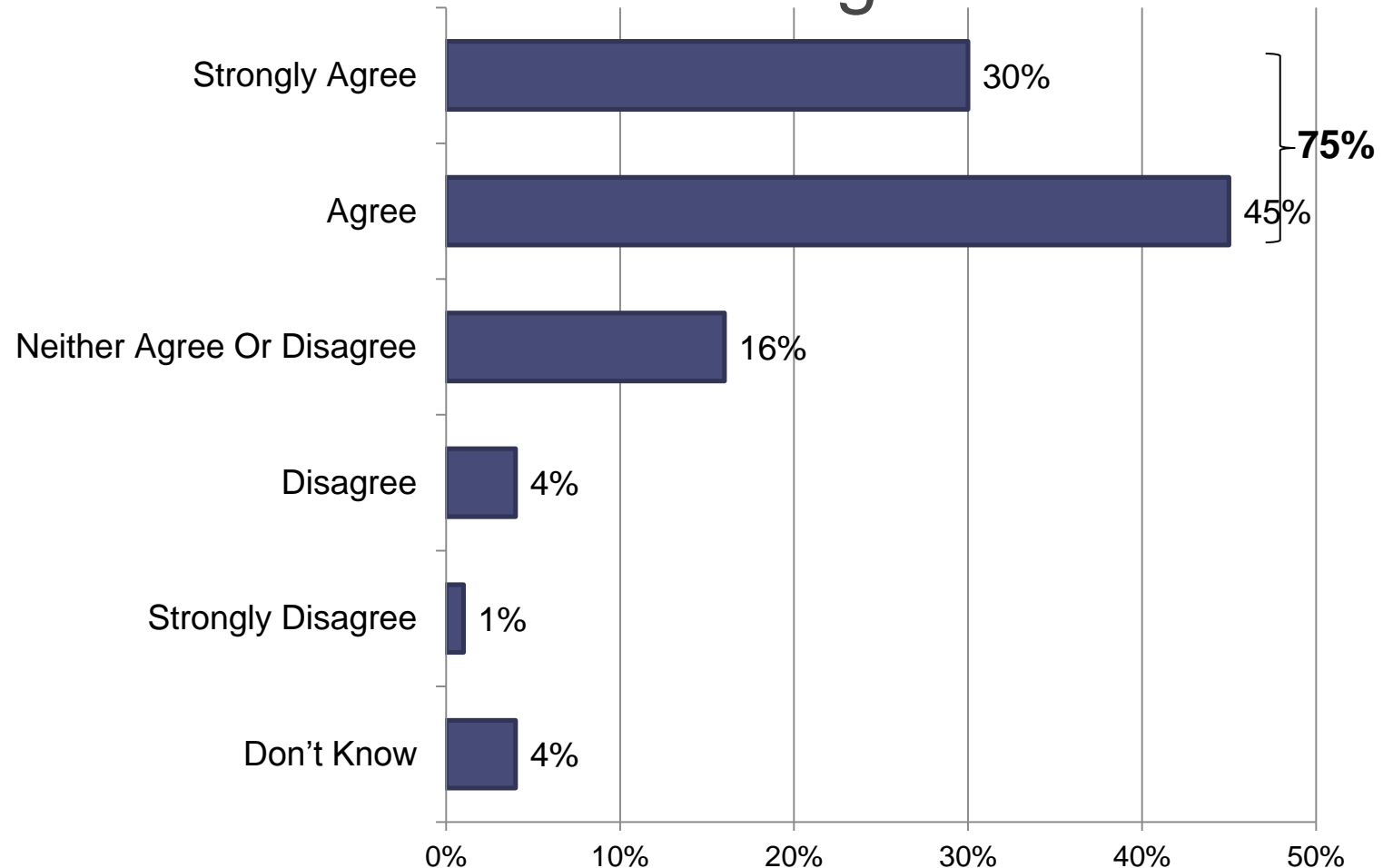
How strongly do you agree with the following possible reasons for a local skills gap? Local students are not choosing manufacturing jobs as a career. (Total Responses = 84) 27

Gap: High Technology or Production Skilled Workers Not Available



How strongly do you agree with the following possible reasons for a local skills gap? Workers with high technology or advanced production skills needed are not available to hire locally.²⁸ (Total Responses = 84)

Gap: Local Schools Not Preparing Workers with Skills Needed in Manufacturing

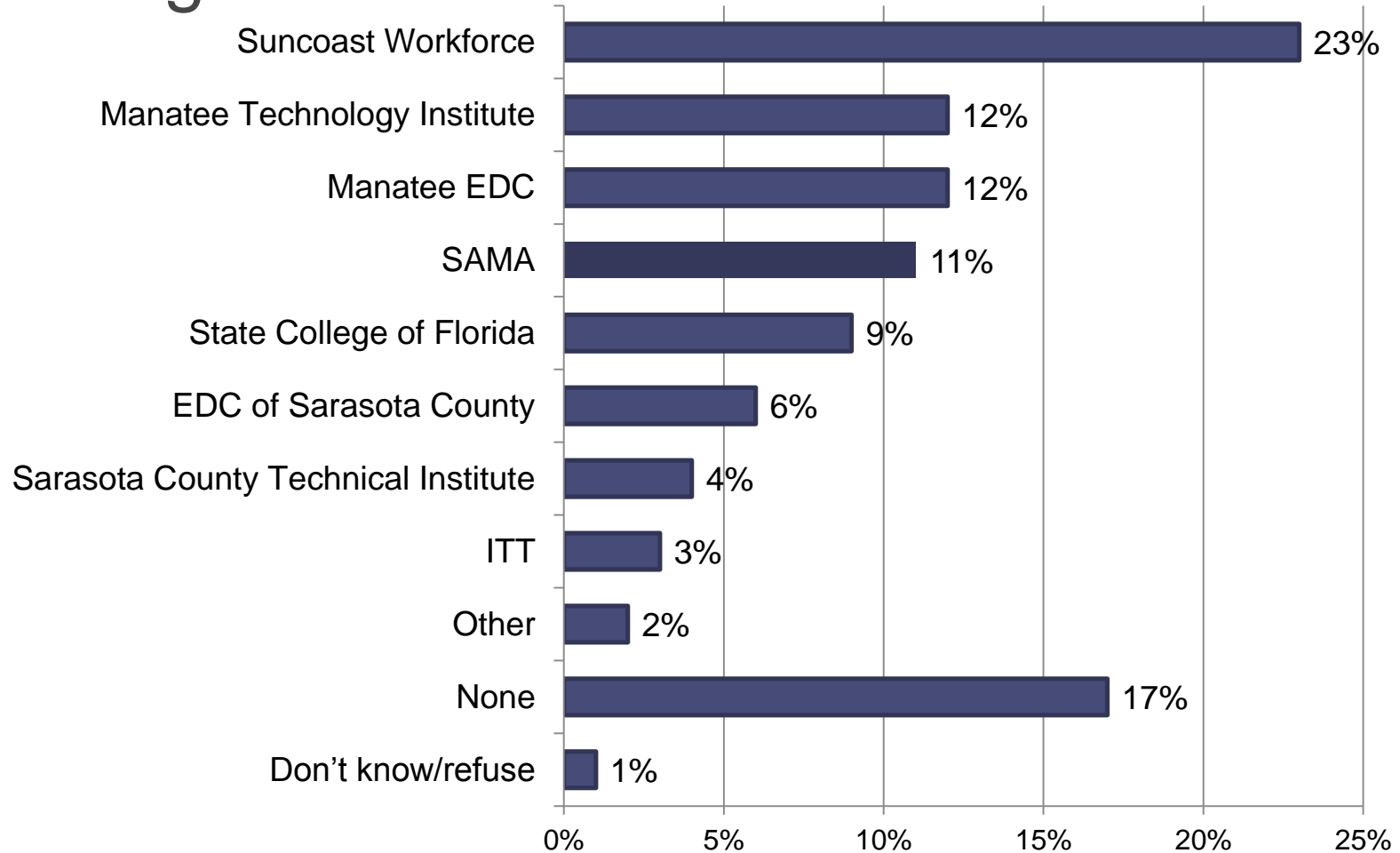


How strongly do you agree with the following possible reasons for a local skills gap? Local schools are not preparing workers with the advanced skills needed to succeed in manufacturing today (Total Responses = 84)



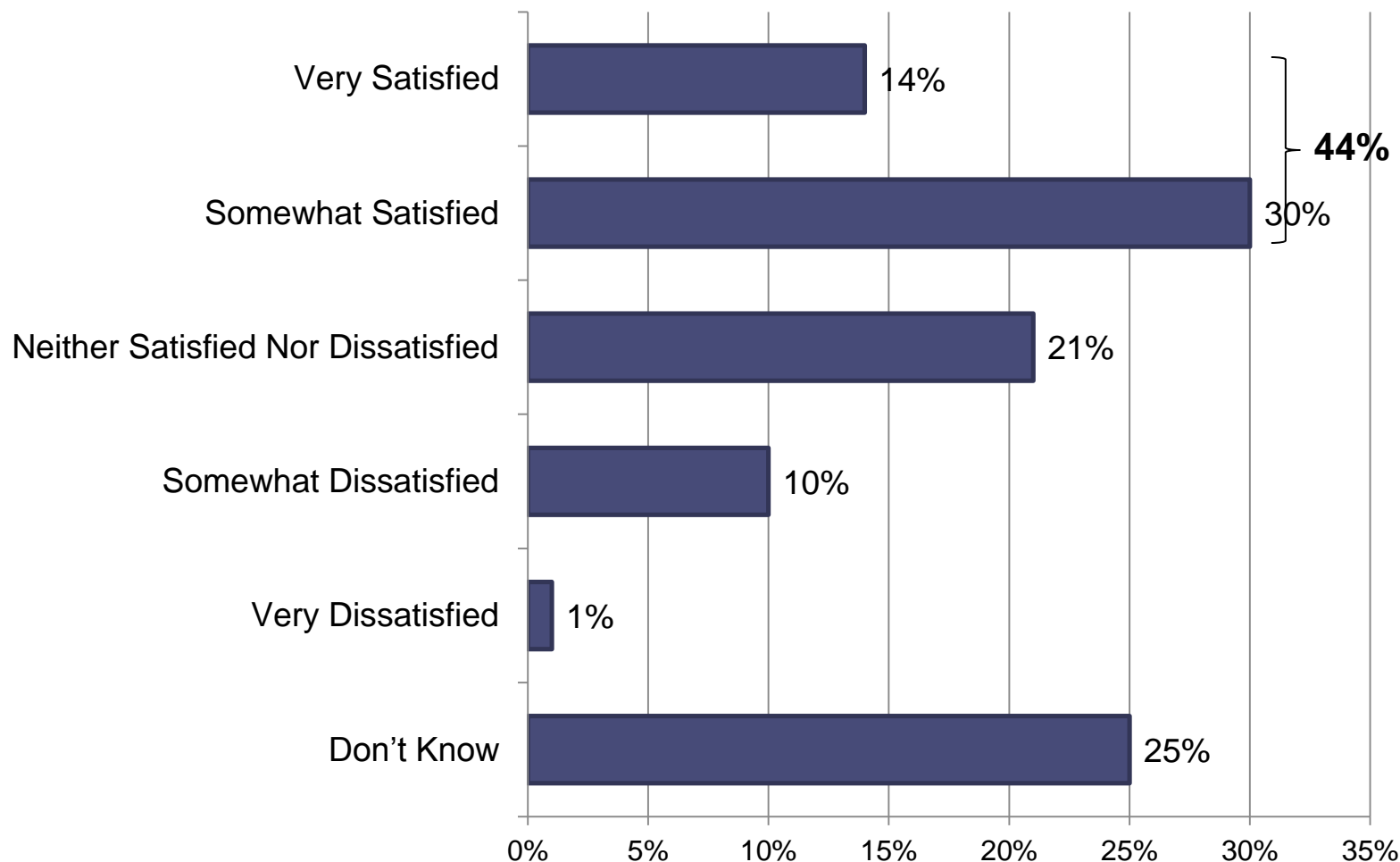
AWARENESS OF MANUFACTURING COMMUNITY SUPPORT

Partners For Hiring and Training – Who Working With



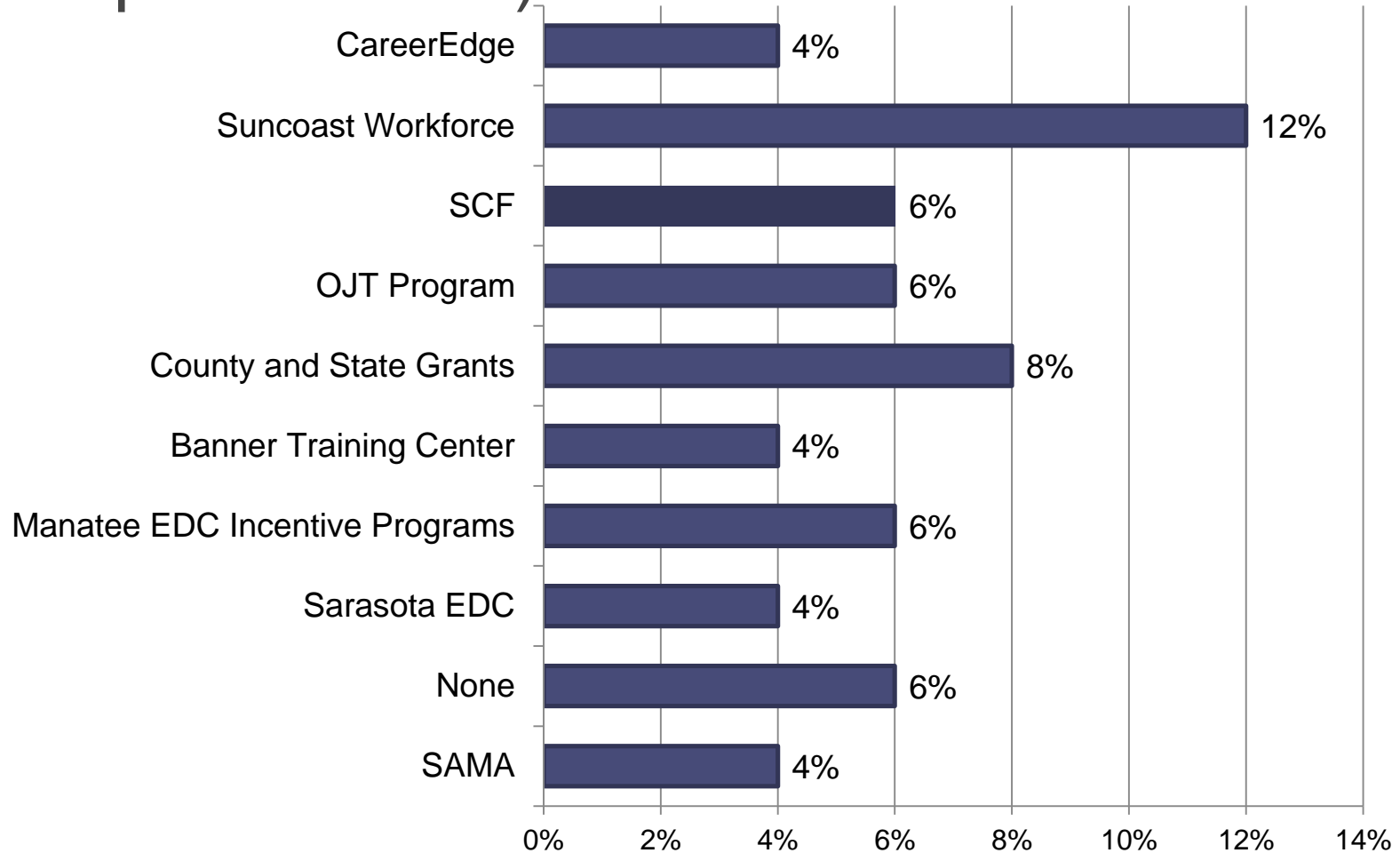
Which community partners, if any, are you currently working with for your hiring and training needs? Check all that apply. Total Responses = 208)

Satisfaction with Community Partners



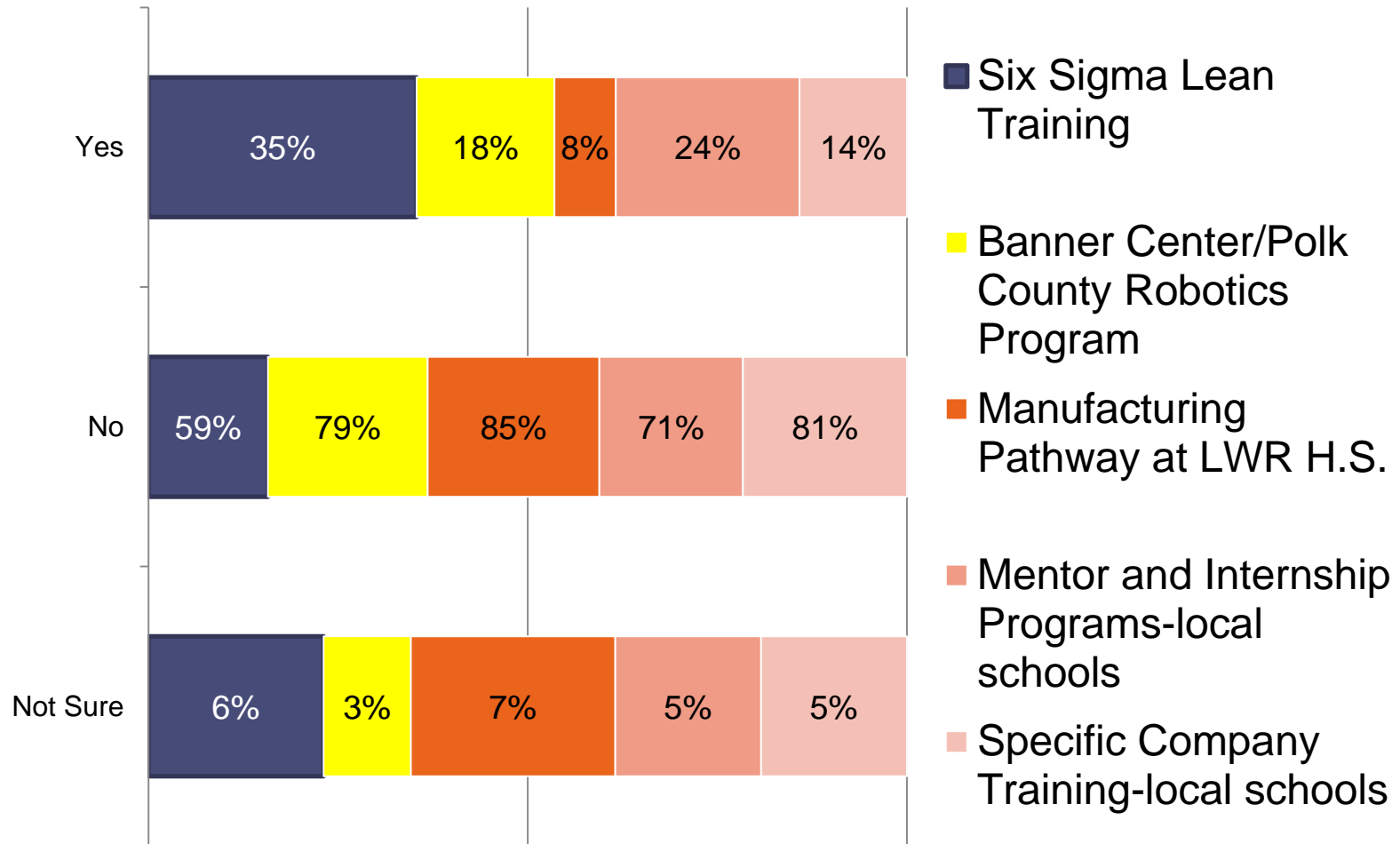
How would you rate your overall satisfaction with community partners such as those in the prior list for serving the needs of manufacturing for hiring and training? Would you say you are ... (Total Responses = 102)

Manufacturing Workforce Efforts Aware of (Multiple Mentions)



What community efforts to help the manufacturing workforce are you aware of?
(Total Mentions =41 (50 = multiple entries))

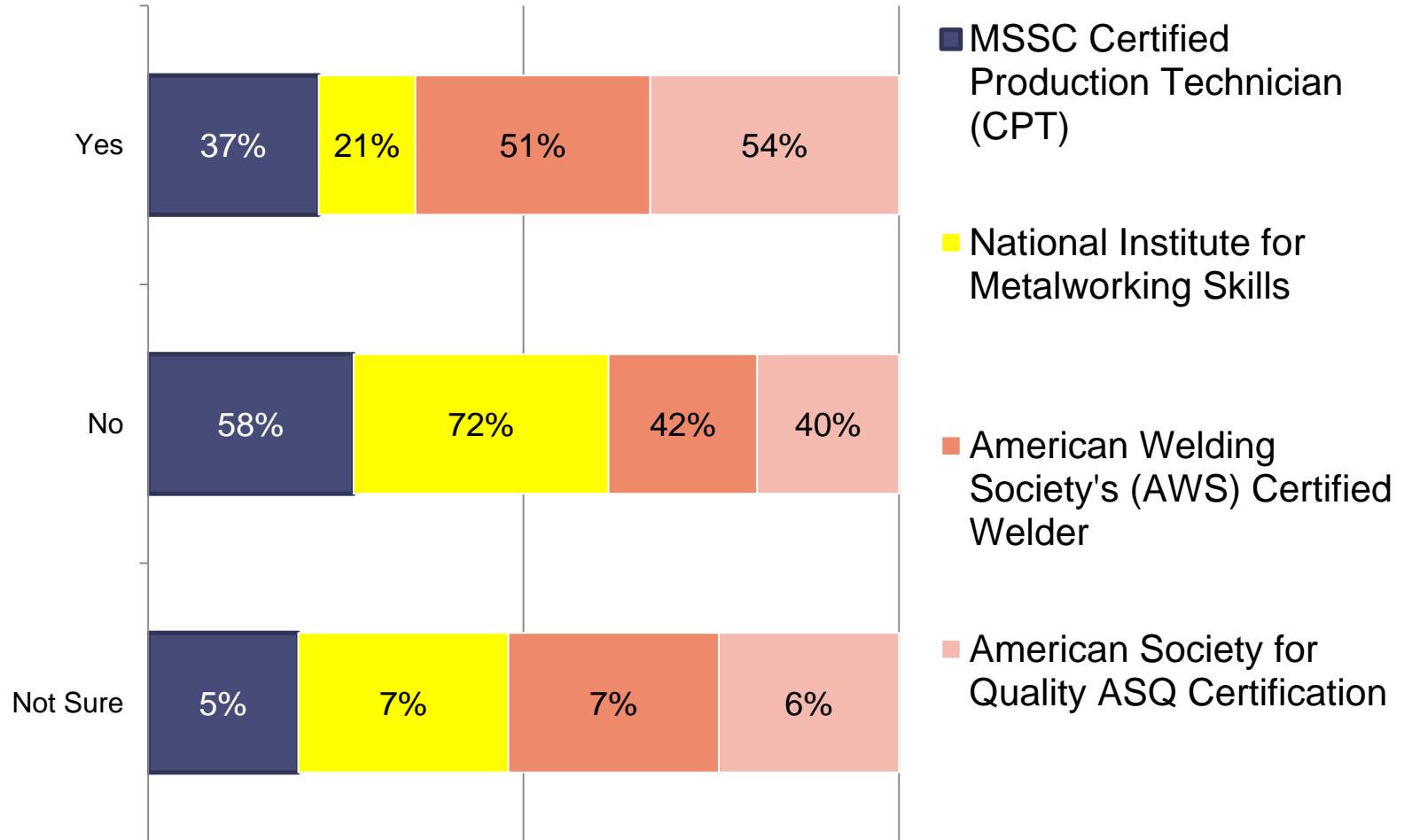
Heard of Community Manufacturing Programs



Have you heard of the following community efforts currently underway to help manufacturing with hiring and training?(Total Responses = 102)

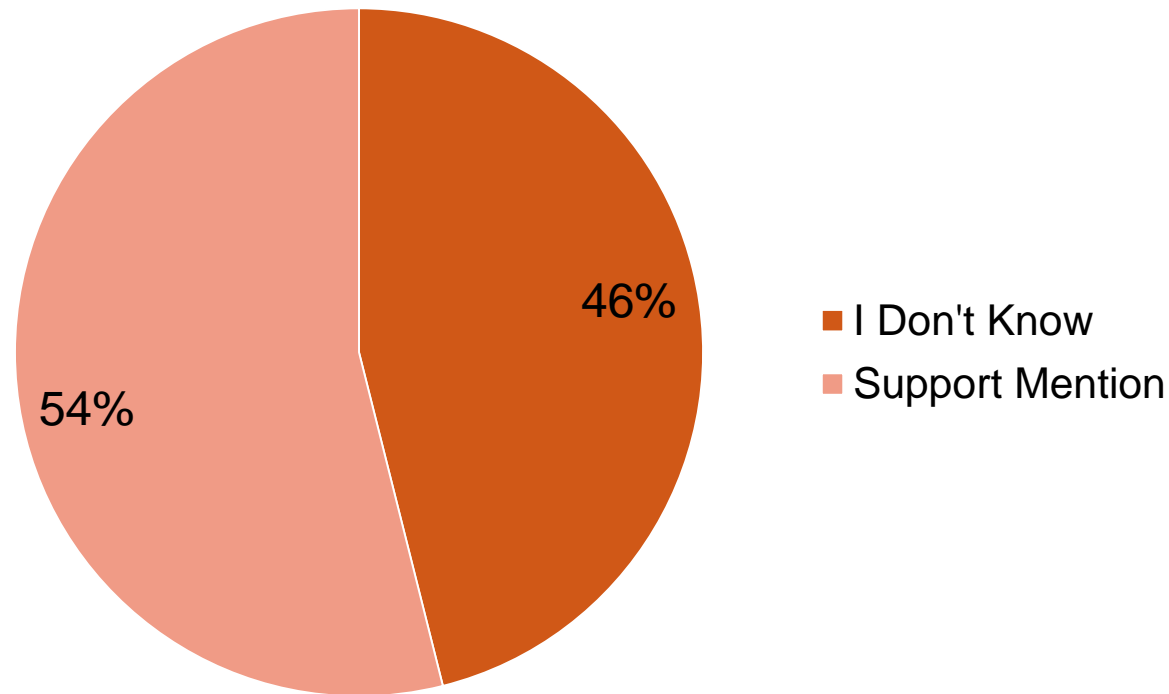
34

Heard of Manufacturing Certifications



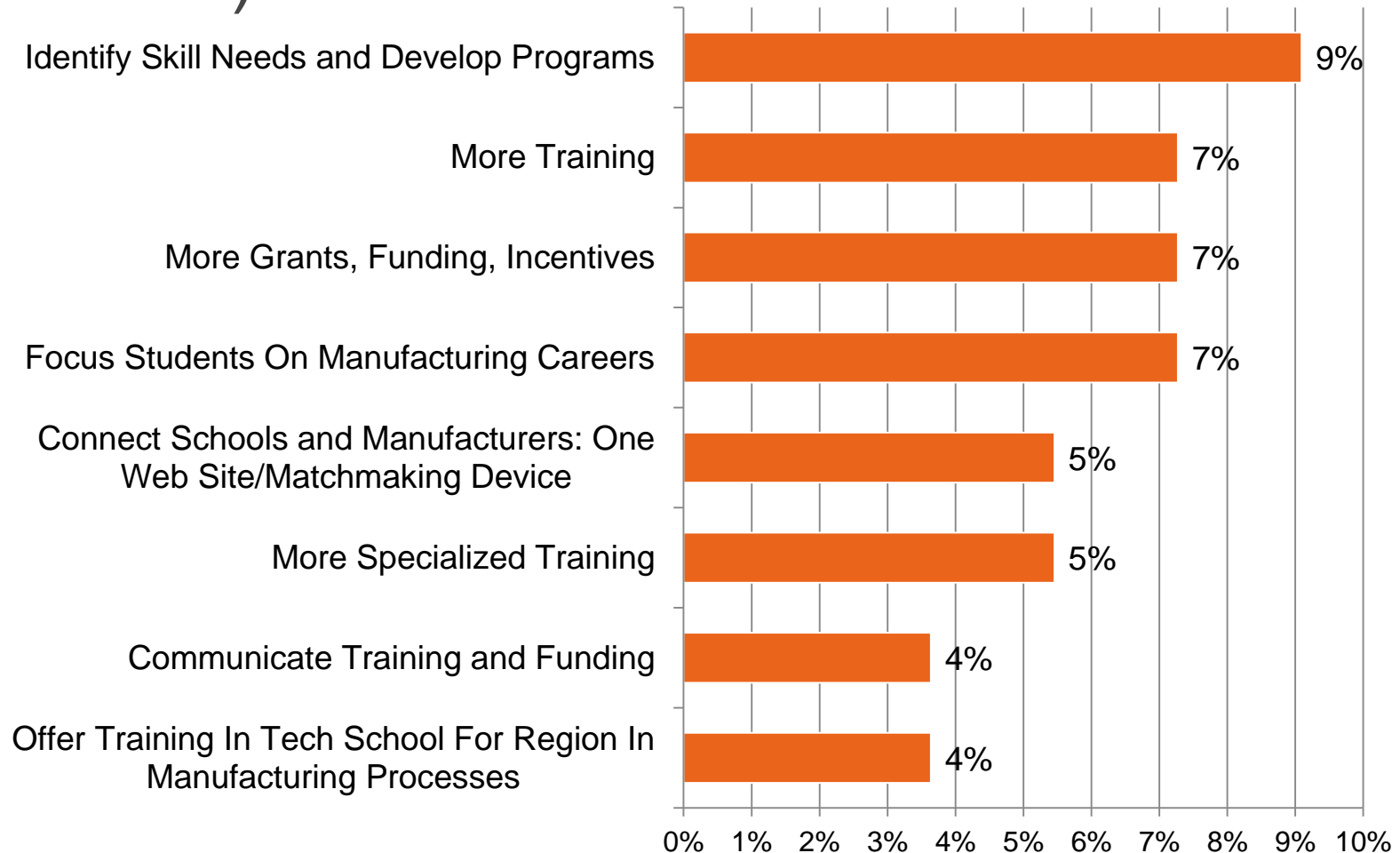
Have you heard of the following manufacturing certifications? Total Responses = 102)

What do you think community partners should be doing to support manufacturing?



What do you think community partners such as government, associations or educational institutions should be doing to help support manufacturing hiring and training needs? (Total Responses = 102; Total Mentions= 55)

What Community Partners Should Do (Multiple Mentions)

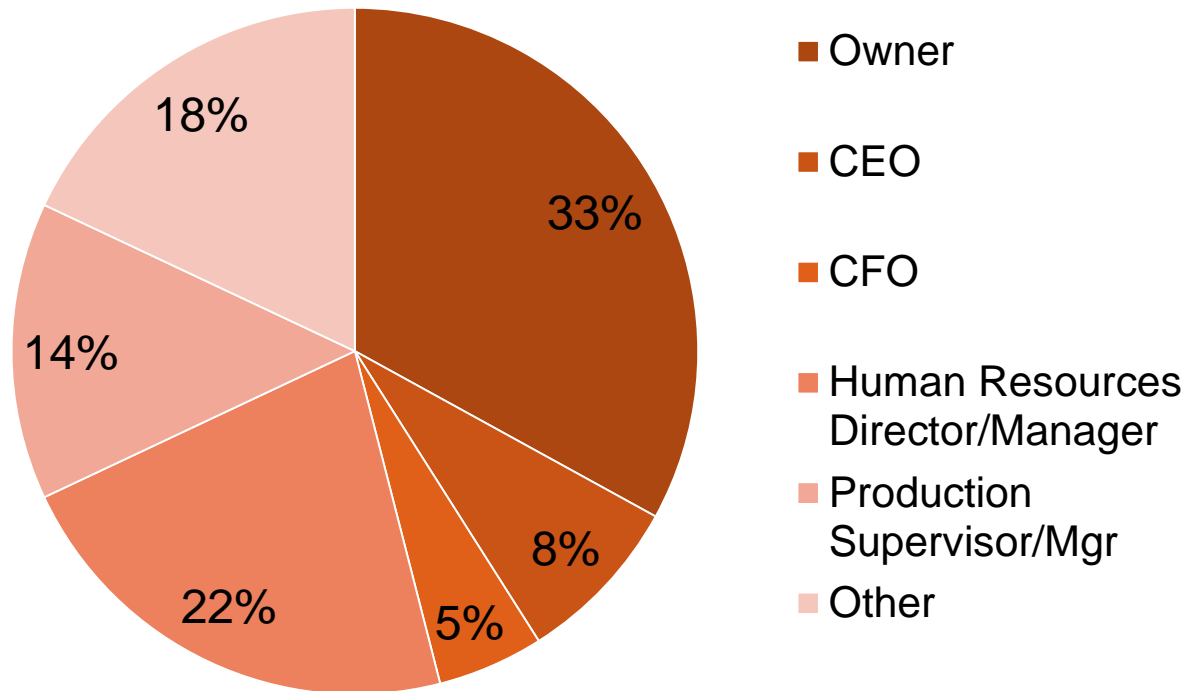


What do you think community partners such as government, associations or educational institutions should be doing to help support manufacturing hiring and training needs? (Total Mentions =55)

RESPONDENT DEMOGRAPHICS

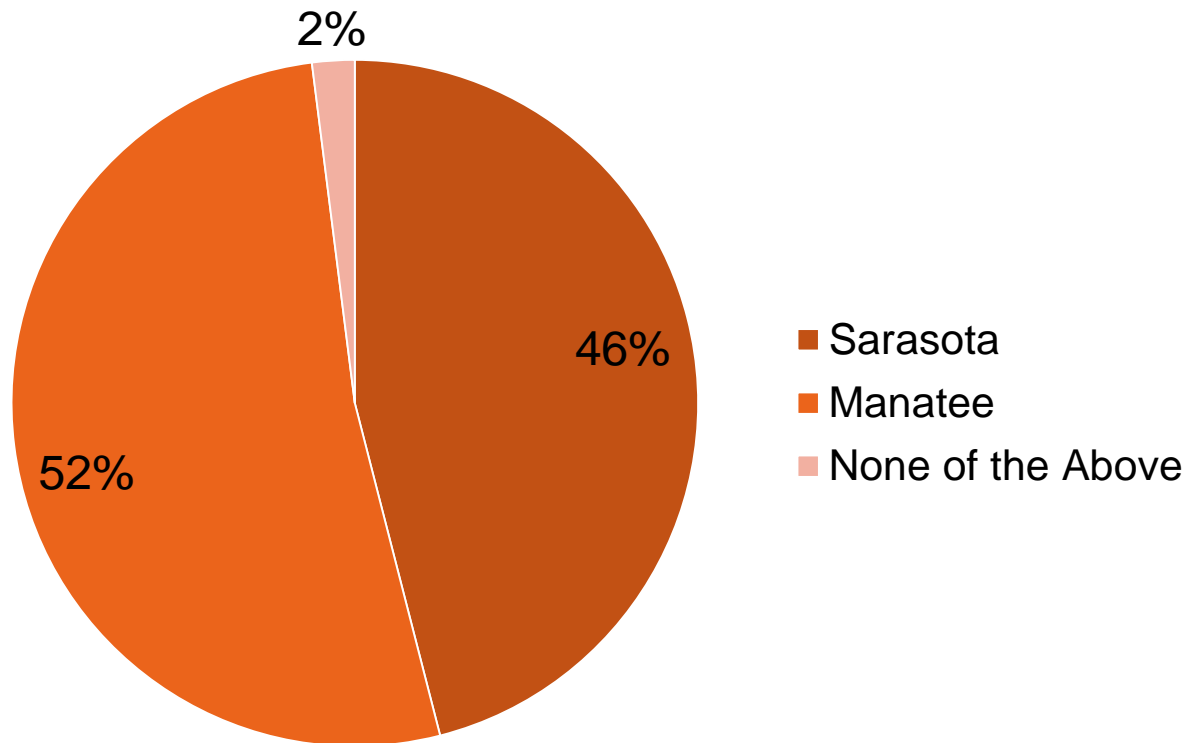


Respondent Job Title



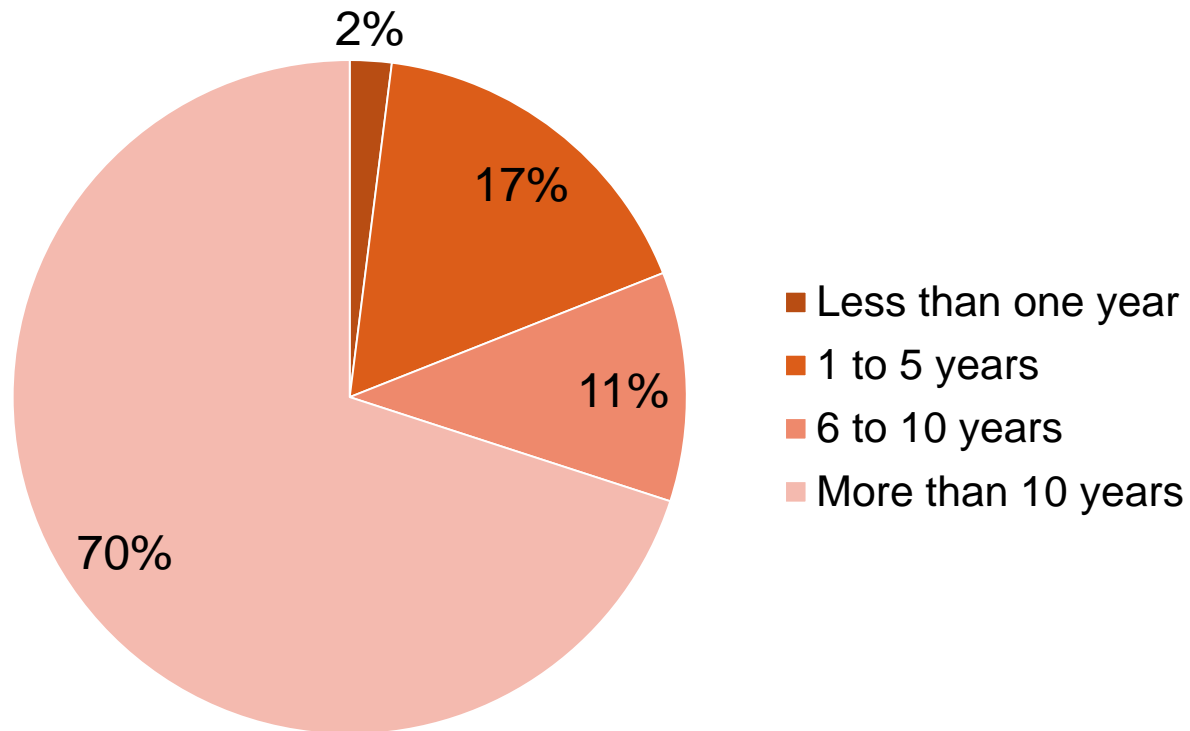
Which of the following titles best represents your position in the company?
(Total Respondents = 112)

Headquartered in County



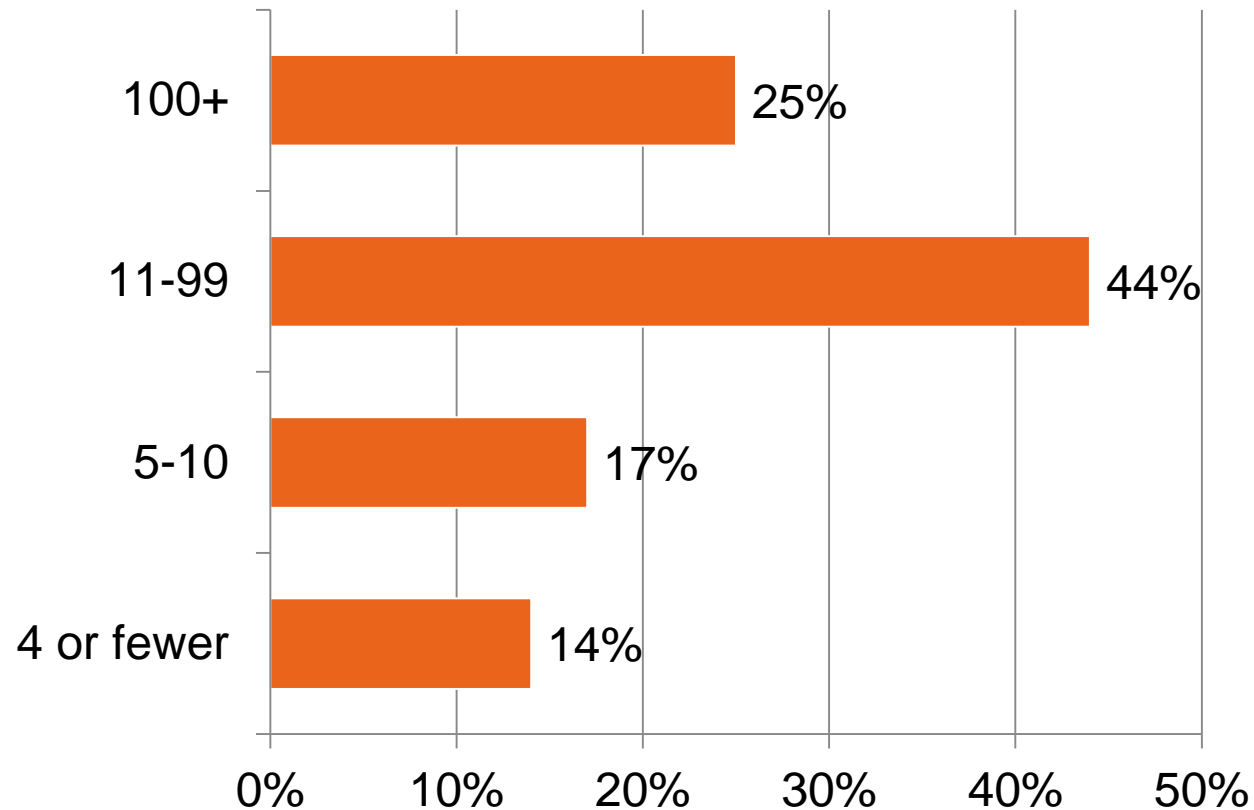
What county is your manufacturing operation headquartered in?
(Total Respondents = 110)

Years In Operation



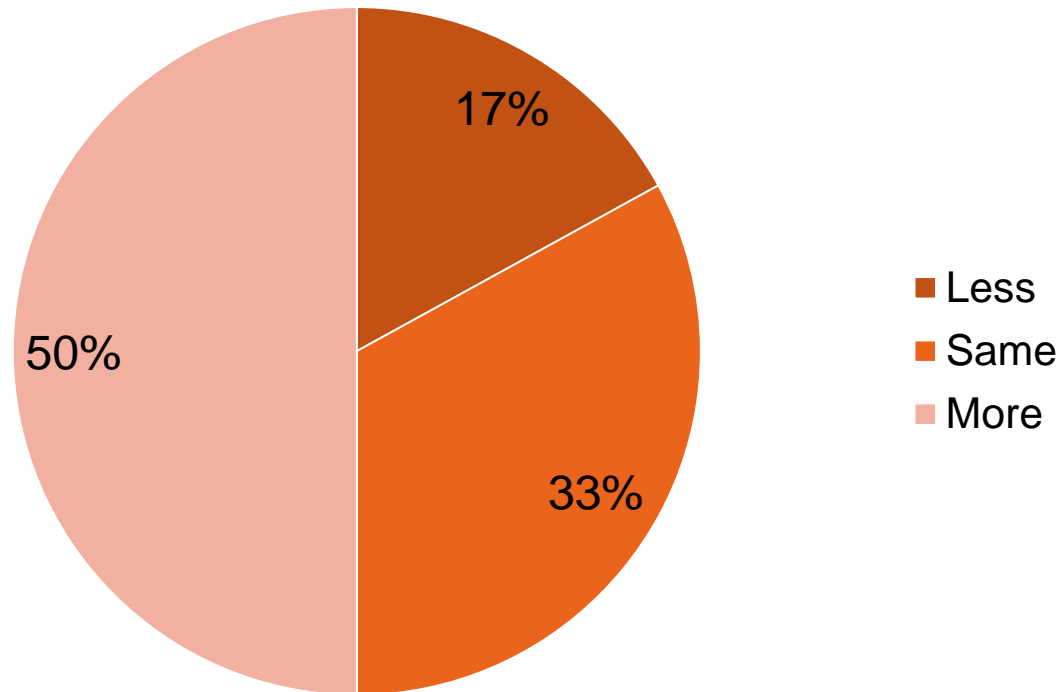
How many years has your business been in operation in Sarasota or Manatee County? (Total Responses = 101)

Number of Employees



How many employees does your company have?
(Total Responses = 107)

50% Have More FT Employees Than Last Year



Is the number of full-time employees more, the same or less than you had at this time last year? (Total Responses = 100)

RECOMMENDATIONS/NEXT STEPS



Skilled Production Workers Are Top Need For Region at 56%

- Not having skilled production workers is one of top reasons for the skills gap at 75%
- 41% of jobs have gone unfilled for skilled production
- 38% have worker shortages in skilled production
- Skilled production workers were identified as greatest hiring challenge in next 3-5 years at 38%

Skilled Production – Possible Next Steps

- Skilled production job title fragmentation suggests apprenticeship training or other flexible training models where workers are not taken off the floor
 - ❖ More specialized training is one of the top ways to support manufacturing at 5% of mentions
 - ❖ Most jobs unfilled fall into the 1-3 range at 45%
 - ❖ Job titles should be further analyzed by an industry expert to determine if a core set of skills can be established for local education partners
- Consider on the job training programs to prepare workers for supervision positions (19% need supervision of production workers)

Automation and Robotics Smaller Need at 14%

- But:
 - Jobs unfilled for engineering technologists, scientists and product design engineers were at 27%
 - Next highest worker shortage now is for these job titles at 18%
 - Greatest hiring challenge in 3-5 years is 27% for this group

Automation and Robotics – Possible Next Steps

- Consider identifying some of the companies who have this need and work with them directly for specialized training (could these be larger more advanced employers?)
 - ❖ Only 14% had heard of specific company training through local schools
 - ❖ Only 18% had heard of the Polk County Banner Center Robotics program

Possible Emerging Worker Shortages/Needs?

- Sales and marketing led unskilled production at an 11% shortage today and 13% for jobs unfilled
 - ❖ Unskilled production was 9% shortage and 6% jobs unfilled
 - ❖ Future retirement of many experience workers

60% Are Unsure of Any Efforts To Support Manufacturing

- 46% don't know what community partners should do to help manufacturing
- 59% or more had not heard of any community efforts to support manufacturing
 - ❖ When asked if aware of specific community efforts to support manufacturing, the highest percentage had heard of Six Sigma Training at 35%
 - ❖ More had heard of manufacturing certifications than local efforts but the highest was American Society for Quality Certification at 54%
- 44% are somewhat to very satisfied with community partner support for manufacturing hiring and training needs
 - ❖ 25% didn't know how to answer

Manufacturers Are Hiring!

- 50% have more full time employees than last year
 - ❖ 37% have 1-3 jobs open now
 - ❖ 28% have 4-10 jobs open now
 - ❖ 45% have had 1-3 jobs go unfilled for three months or more
 - ❖ 11% have had 4-10 jobs go unfilled for three months or more
 - ❖ 41% of unfilled jobs are in skilled production

Feedback from Manufacturer's Focus Group

- Core training applies to skilled production jobs despite the fragmentation of job titles; best people to decipher this list down to some core areas are front line people from manufacturers and NOT admin or executive directors; first area of focus seems to be machinists since we had a high number of jobs mentioned in that area; Sun Hydraulics thinks our area could become a focus for machining for the state
- Six Sigma is not a high priority for this region because it really only applies when high numbers of products are being produced—this does not fit our manufacturing type in the area; this program has been miscommunicated to employers
- The unemployed are not getting MSSC to apply for jobs (they are not coming to the jobs with the certification)
- It is important for kids in middle school to see the career pathway, group seemed to think Tech Schools are the place to do it, with complementary offerings and transportation from one county to another MTI and SCTI

Focus Group Cont.

- Skilled production job titles should be narrowed to 2-3 core skill sets for a base level skilled employee; these skills should include basic math—the student then can receive apprenticeship training
- Current machining program is not serving needs; they are not working with manufacturers; there needs to be better collaboration with manufacturers to develop curriculum
- The idea of an advisory council which works with all the local school advisory councils seemed to be a good idea; this group should meet quarterly and drive overall needs for the region
- Need recent equipment in the schools at one central location such as CNC machines or consider multiple institutions with base level equipment; MTI seems to be the machining resource but they say they can't get students



Focus Group Cont.

- Need to tap into and utilize the Florida manufacturing effort across the state
- Specific to school recommendation feedback:
- Need to identify each of the high school and tech advisory boards, then have meetings with them to understand pathways (overall manufacturing advisory council responsibility)
- Guidance counselors or the department which talks to kids about college within the high schools needs to start early to communicate the manufacturing careers available locally
- Overall PR/marketing needs to be done on manufacturing careers with high employment potential locally, include PSAs on TV and social media as part of the effort; consider USF MBA students to do case study for free to develop
- Send employer HR professionals to schools and math and science teachers to work with manufacturers

Focus Group Cont.

- Specific to how Career Edge should invest:
- Talk about internships rather than apprenticeships to resonate with kids that would consider other pathways
- Establish a broad base of skilled production core skills, but then focus small to start and have some successes first, like focusing on the machinist welder need which seems to be highest; kids should get core skills in high school but then do internships/apprenticeships without any job expectation from the outset (like other professions like medicine and business)



Where Should CareerEdge Invest?

- Develop and lead a new regional coalition or alliance of manufacturers, educators and partners to provide one regional point of contact for manufacturing support
 - ❖ The alliance should develop a workforce plan for manufacturing for the region
- Work with local schools and manufacturers to bring awareness to skilled production manufacturing jobs
- Fund and provide apprenticeship and work experience programs for manufacturers for skilled production jobs

One Regional Coalition for Manufacturing

- Establish a regional coalition or alliance of manufacturers, educators and government
 - ❖ One point of contact where community partners can communicate plans and resources to manufacturers—and manufacturers can provide their needs to partners in an immediate, actionable way
 - ❖ 60% of manufacturers don't know what community partners are doing now; top support community partners can give manufacturing is one web site to connect manufacturers and schools at 5% of mentions and communicate training and funding at 4%; totaling 9% of mentions
 - ❖ Manufacturers are tired of providing their input to many different entities with no actionable results; this would show we are working together as a community to respond

Manufacturing Education and Awareness In Local Schools

- Start educating/training earlier in middle and high schools for core production skills and build awareness of manufacturing careers as an option
- Develop and implement a marketing plan for students and parents to increase awareness
 - ❖ Top two reasons for skills gap include Local Students Are Not Choosing Manufacturing Jobs As Career at 77% and Local Schools Not Preparing Workers with Skills Needed in Manufacturing at 75%
 - ❖ Top way to support manufacturing is focus students on manufacturing careers at 7% of mentions and offer training in local tech school for region at 4%; total of 11%
 - ❖ Only 24% had heard of mentor or internship programs with local schools
 - ❖ Only 8% had heard of the manufacturing pathway at Lakewood Ranch High School

Apprenticeship Training and Work Experience Programs

- Manufacturers need to open doors to apprenticeship training and work experience programs to involve students/potential employees earlier in learning skilled production
- Educators need to help manufacturers by promoting awareness within schools and helping them gain access to interested students
- A similar model is in healthcare, where students do clinical rotations

Let's Get to Work

- Commitment by manufacturers to help develop curriculum for manufacturing training programs
- Commitment by manufacturers to hire newly graduated students from local machining programs
- Willingness by local governments and educators to collaborate and develop the training programs needed by manufacturers
- Build awareness of manufacturing careers locally
- Educators to prepare local students and current workers to succeed in manufacturing jobs of the future