

Industry Leader Interviews

Aerospace Manufacturing and Service

Docking Institute of Public Affairs

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Methods

Docking Institute of Public Affairs personnel interviewed leaders from aerospace manufacturing and service companies in the State of Kansas from June 3 to June 19, 2008. Aerospace manufacturing and service companies were identified using North American Industrial Classification System (NAICS). The list of aerospace manufacturers and service providers to contact for interviewing was obtained from the Kansas Department of Labor. Ten industry leaders were interviewed. The sample was not randomly drawn. Rather, the employers with the largest workforces were targeted for interviewing. The responses shown in this report are suggestive and not inferential – similar to that of a focus group.

With input from Wichita State University's Center for Economic and Business Research, the Docking Institute designed an interview schedule to assess industry leaders' perceptions of strengths and weaknesses of their cluster's workforce quality and supply in Kansas, types of training on basic and industry-specific skills most needed among new hires, and anticipated growth in cluster workforce needs over the next 10-15 years.

Findings

The first few questions of the interview ask the respondent to estimate the number of workers that fall into each of these categories:

- Clerical workers and office support staff
- White-collar professionals like executives and sales (but not engineers, designers, etc...)
- Engineers, designers, and similar positions that require advanced degrees as entry level requirements
- High-skilled blue-collar workers that are specially trained or learned their current jobs through years of on-the-job-training
- Low-skilled and semi-skilled blue-collar workers

The percentages provided by each employer for each category were collected. Figure 1 shows the aggregation of the percentages for each job category. The figure shows that more than a third 38% of the employees of the aerospace manufacturing and service companies interviewed are low- and semi-skilled blue-collar workers, and more than a quarter (27%) area also high-skilled blue-collar workers. Clerical workers, white-collar professionals, and engineers/designers make up 17%, 9%, and 9% of the workers, respectively.

Figure 1: Aggregation of Percentages of Workers

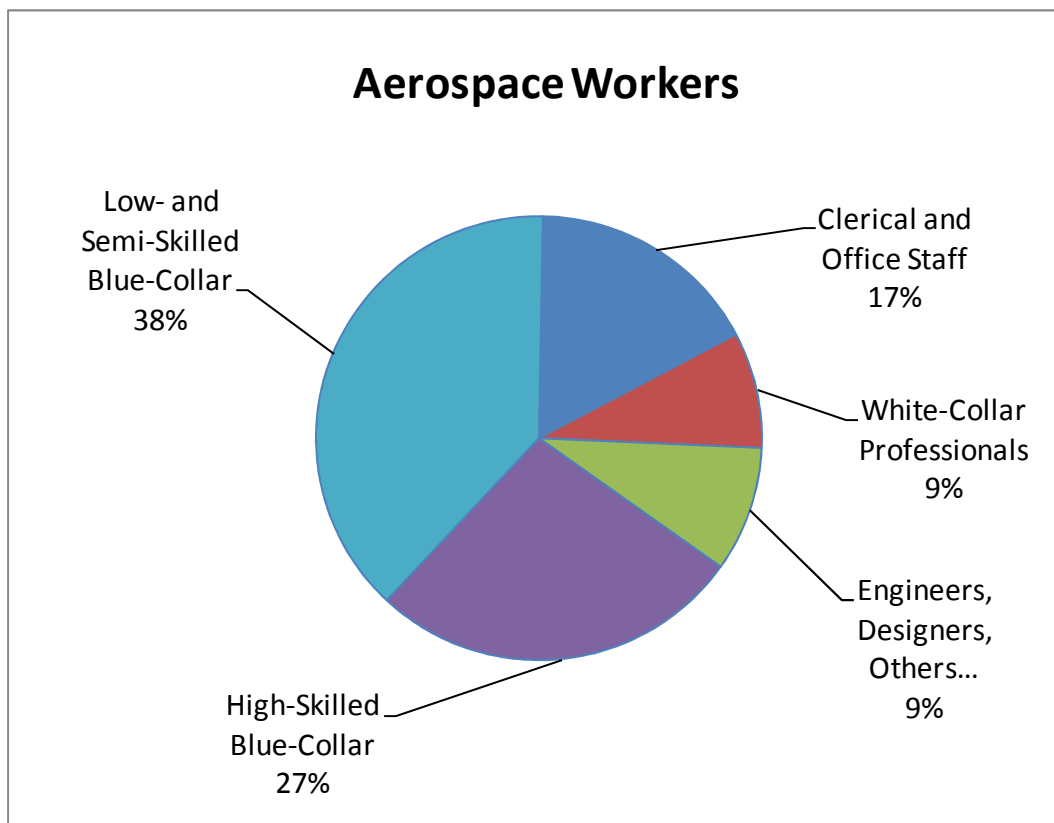


Figure 2 shows the responses to questions addressing the supply of workers available for hire. The answer options are shown in the legend in the right of the figure. The figure shows that, of the employers interviewed, eight suggest that there is generally an adequate supply of low- and semi-skilled blue collar workers. None suggest that there is a large shortage of these types of workers.

Five employers suggest that there is large shortage of high-skilled blue-collar workers. Four employers suggest that there is a small shortage of these types of worker and one suggests that there is adequate supply. No employers suggest that there is an abundant supply of high-skilled blue-collar aerospace workers.

Six employers suggest that there is a small shortage of engineers and designers.

Five respondents suggest that there is a small shortage of white-collar professions, while two indicate that the there is adequate supply of these workers.

Finally, five employers suggest that there is an adequate supply of clerical and office staff, while three suggest there is an abundant supply of these types of workers.

Figure 2: Supply of Workers

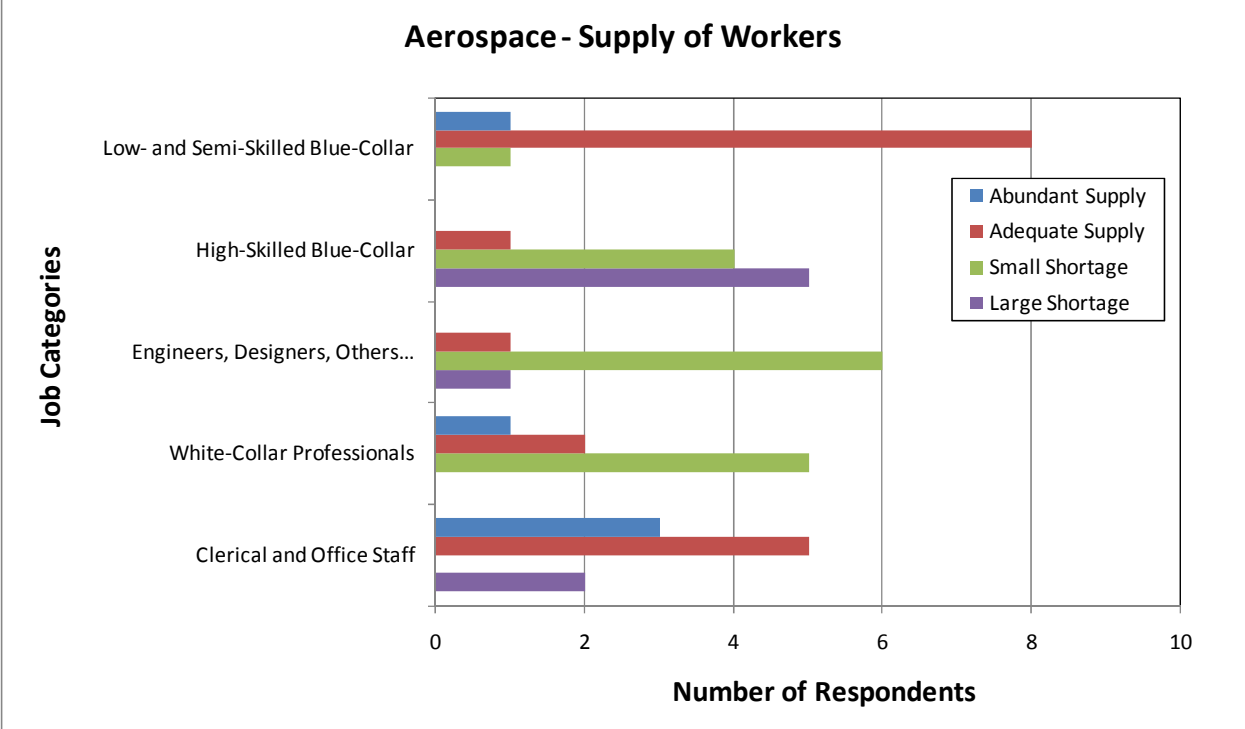


Figure 3 shows responses to questions addressing the ease of hiring workers today compared to five years ago. The figure suggests that employers generally perceive that it is more difficult to hire new high-skilled blue-collar workers, and engineers and designers. Regarding low- and semi-skilled blue-collar workers and white-collar professionals, respondents suggest that the ease in hiring these types of workers is about the same as it was five years ago. Employers suggest that it is about the same or more difficult to hire clerical and office staff when compared to five years ago.

Figure 3: Ease of Hiring New Workers

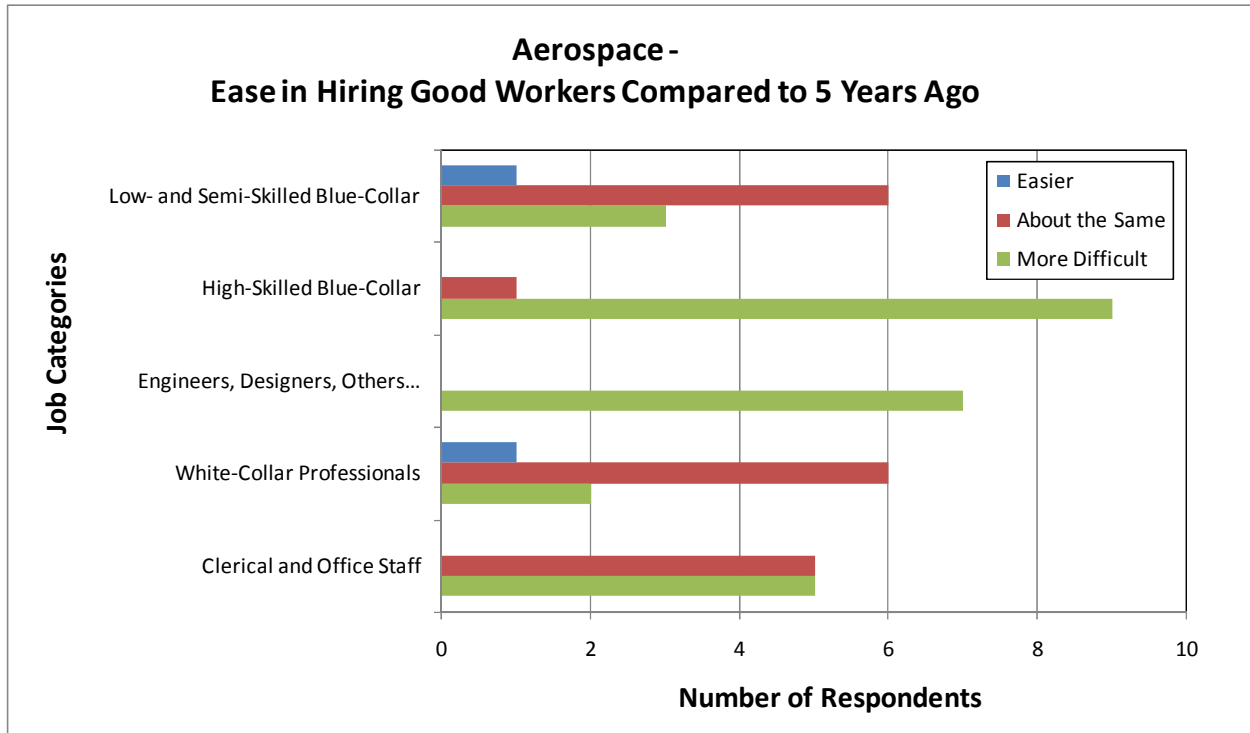


Figure 4 shows the responses to questions addressing the preparation of new hires that have recently graduated from high school, community college or tech school, or college. The figure also shows the preparedness level of employers with advanced degrees.

The figure shows that eight employers each find employees with advanced degrees as very prepared for the workplace, and two employers find college graduates and community college/tech school graduates as very prepared, each.

Eight employers find community college/technical graduates somewhat prepared for the workplace, and six find high school graduates as somewhat prepared. Five find college graduates as somewhat prepared for the workplace.

Figure 4: Preparation for New Hire



Tables 1 thru 3 provide responses from “open-ended” questions. Each table includes the question(s) asked of respondents as well as the responses grouped into themes. The answers are ordered by most prevalent first.

Table 1 shows that communication skills is mentioned as an area needing improvement among high school and community college/technical school graduates. Math skills is an area needing improvement among all three types of graduates. Employers suggest that college need improvement in the areas of social interaction and small group interaction.

Table 1: Skills and Skill Sets Lacking or Needing Improvement

Thinking of skills or skill sets needed at the workplace, are there certain skills that _____ seem to lack or that could be improved upon?		
High School Graduates	Community College or Technical School Graduates	Four Year, Advanced, and Specialized Degree Holders
1. Written Communications Skills	1. Communications Skills	1. Math Skills
2. Verbal Communications Skills/English Skills	2. Math Skills	2. Science Skills/Understanding of Basic Science
3. Basic Math Skills	3. General Understanding of Manufacturing/Production	3. Hands-On Experience/Real World Experience
4. Hands-On Mechanical Experience	4. Hands-On Experience	4. Social Interaction Skills/Understanding of Small Group Interaction and Processes
5. Computer Operation Skills		

Table 2 shows responses to a question asking about needed training for current and future workers that the public education system might appropriately address. Computer operation skills and computer programming skills are two areas that are mentioned by employers as areas that the public school system might address. Work ethics/punctuality and social interaction skills area also areas mentioned by employers.

Table 2: Training Needs that Public Education Might Address

When thinking about new AND current workers, do you have industry-specific training needs that the public education system might appropriately address?
1. Computer Operation Skills
2. Computer Programming Skills
3. Work Ethics/Puncuality
4. Social Interaction Skills/Understanding of Human Behaviors

Table 3 shows the response to a question about training needs 10-15 years in the future. The table shows that employers suggest that employees will need training in science and the scientific process, general and advanced math skills, computer skills, and written communications. Employers also mention social interaction skills and knowledge about human interaction and behavior as areas in which employees will need training in the future.

Table 3: Training Needs in 10-15 Years

Thinking about your industry in the next 10-15 years, in what areas do you think future employees will need additional training or improvement?
1. More Training in Science/Scientific Process
2. General and Advanced Math Skills
3. Computer Operations Skills
4. Written Communications Skills
6. Social Interaction Skills/Human Behaviors Knowledge

Finally, Table 4 shows some quotations from the interviews.

Table 4: Quotes from Interview Respondents

Additional comments regarding workforce training.
"We need employees able to read invoices."
"College students need hands-on educations like at trade schools."
"We can train them for specific tasks, but they need to be motivated and to be able to read and write.... and to listen."