**Executive Summary**

The State Center Adult Education Consortium commissioned BW Research Partnership, Inc. to provide research to support the AB 86 adult education planning effort. BW Research focused its efforts on developing a demographic profile of Fresno and Madera Counties and better understanding employer needs and the regional labor market, particularly in the context of opportunities for adult education, employment and economic self-sufficiency. This report details the initial findings of the demographic analysis of Fresno and Madera County and an employer survey research effort in the 2 county region.

As part of the analysis, BW Research completed 150 employer surveys in Fresno and Madera Counties. The businesses that participated in the telephone surveys were categorized by size and industry to ensure a diverse sample among both dimensions. The margin of error for the following survey results is +/- 7.9% for those questions answered by all 150 participants, representing Fresno and Madera County businesses.

**Key Findings & Conclusions**

The following key findings and conclusions are based upon the employer survey and analysis provided by BW Research for the State Center Adult Educational Consortium;

**1. Communication skills are critical:** More than 436,900 individuals, from Fresno & Madera Counties, spoke a language other than English at home, of which 44 percent spoke English less than “very well”. Additionally, just under three quarters (73.4%) of regional employers said the ability to speak and

communicate with customers and colleagues was extremely important and more than half of them (52.9%) indicated that their job applicants or recently hired workers were often or sometimes deficient in this area. In regards to adult education, there are two recommendations that are highlighted:

• Adult education courses should emphasize communication skills, both written and spoken, across the curriculum.

• Classes and courses for immigrants should focus on developing English language skills in the workplace, including writing and speaking skills.

**2. There is a surplus of awards for healthcare occupations:** The healthcare

industry is the largest employer in the region (using traditional 2-digit NAICS) for jobs that require some college, an associate’s degree, or a postsecondary non- degree award. Additionally, six of the top 15 occupations by annual job openings

are healthcare occupations, including Registered Nurses, Nursing Assistants, Medical Assistants, Licensed Practical and Vocational Nurses, Psychiatric Technicians, and Dental Assistants. However, there is a surplus of regional award completions in all six of these occupations, and there is not a need, at this time, to expand the capacity for educating and training in these occupations, unless you plan to export these individuals to other regions. These healthcare occupations should be monitored in the future, as a large proportion of baby boomers, could retire from healthcare in the next two to three years and change the current analysis of surplus awards.

**3. Technical training in information and communications technologies (ICT) or management occupations is suggested**: More than half of regional employers (53.9%) reported having some or great difficulty finding qualified job applicants for occupations that required less than a 4-year college degree. Some of the key skills that employers indicated were important among current applicants and new hires, for those positions that require less than a 4-year college degree as their expected level of education include;

• At least one year of industry related work experience

• Ability to write and document complex information

• Technical training and expertise specific to the position they are applying for

These results demonstrate the important role Career and Technical Education (CTE) programs can play in the region and highlight the technical programs that are needed based on the occupational profile of the region.

**4. Enhancing student’s skills in all program areas is needed:** Of the eight evaluated training, education, skills and experience attributes, the ones that were above average in deficiency included;

• Ability to speak and communicate with customers and colleagues

• Ability to write and document complex information

• Ability to use technology and learn new technology tools and applications

• Ability to work with others and contribute as part of a team

These deficiencies that were above average did not pertain to experience, training, or degrees. It is recommended that theses deficient skills be

incorporated into all adult education program areas, better preparing students for expanded employment opportunities.

**Regional Demographic Profile**

Fresno County is home to approximately 939,600 people and Madera County accounts for about 151,400 residents. The region has experienced a six percent growth in population since 2008, a similar rate to the growth in all of California. The following section highlights the different demographic characteristics of the Fresno and Madera County region.

The figure below displays the proportional composition of the region’s population by age. Over half (55%) of the region’s inhabitants were 34 years of age or younger in 2013. This is larger than the proportion of those that are 34 years of age and younger in California (50%) and for the nation as a whole (47%).

**Figure 1: Age (2013)1**

1 American Community Survey (ACS) 2013 five year estimates

**100%**

**80%**

**10.6% 11.8% 13.4%**

**9.9% 11.1% 12.1%**

**60%**

**24.5%**

**27.6% 27.4%**

**40%**

**22.5%**

**21.9% 20.5%**

**20%**

**32.6% 27.5% 26.6%**

**0%**

**Fresno & Madera California Nation**

**19 years old and younger 20 to 34 years old 35 to 54 years old**

**55 to 64 years old 65+ years old**

Approximately 245,697 people living in Fresno and Madera in 2013 were born outside the United States (foreign born). Furthermore, more than 436,958 individuals spoke a language other than English at home, of which 44 percent spoke English less than “very well”.

Those who spoke English less than “very well” were:

• 153,616 Spanish speakers

• 25,299 Asian and Pacific Islander language speakers

• 11,519 other Indo-European language speakers

• 1,903 other language speakers

Spanish is the most widely utilized language other than English, with approximately

343,266 residents in 2013 that spoke the language at home (either exclusively or mixed with English or another language).

**Figure 2: Language Other than English Spoken at Home (2013)2**

**Spanish**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | | |
|  | **44.8%** | | | **55.2%** |
|  |  | | | |
|  |
|  | **44.3%** | | | **55.7%** |
|  |  | | | |
|  |
|  | **37.2%** | | **62.8%** | |
|  |  | | | |
|  |
|  | **34.2%** | **65.8%** | | |
|  |  | | | |
|  |  | | | |

**Asian and Pacific Islander languages**

**Other Indo-European languages**

**Other languages**

**0% 20% 40% 60% 80% 100%**

**Speak English less than "very well" Speak English "very well"**

2 American Community Survey (ACS) 2013 five year estimates

Twenty-seven percent of residents 25 years or older in Fresno and Madera Counties (171,108 residents) had completed at least an associate’s degree or more in 2013, compared to 38 percent in California overall. Nineteen percent (121,142 residents) possessed a bachelor’s degree or a graduate or professional degree, compared to 31 percent in California. Meanwhile, 28 percent of residents 25 years or older (178,273 residents) had completed less than a high school degree or its equivalent, compared to

19 percent in California in 2013.

**Figure 3: Educational Attainment (2013)3**

**100%**

**6.1% 11.2% 10.8%**

**12.6%**

**80%**

**60%**

**40%**

**20%**

**7.8%**

**23.3%**

**22.7%**

**11.2%**

**19.4% 18.0%**

**7.8% 7.8%**

**22.1% 21.2%**

**20.7% 28.1%**

**8.5%**

**8.0%**

**16.4% 10.2% 5.9%**

**0%**

**Fresno & Madera California Nation**

**Graduate or professional degree Bachelor's degree Associate's degree Some college, no degree High school graduate (includes equivalency) 9th to 12th grade**

**Less than 9th grade**

3 American Community Survey (ACS) 2013 five year estimates

In 2013, the median household income for residents in Fresno County was $45,563 and

$45,625 for residents in Madera County. This compares to $61,094 for California and

$53,046 for the United States as a whole. The proportion of people whose income in the past 12 months was below the poverty level in 2013 was 26 percent in Fresno County and 23 percent in Madera County. This compares to 16 percent in California and 15 percent in the United States.

**Figure 4: Income and Benefits (in 2013 Inflation-Adjusted Dollars) 4**

**20%**

**18%**

**16%**

**14%**

**12%**

**10%**

**8%**

**6%**

**4%**

**2%**

**0%**

**7.8%**

**6.8%**

**13.4%**

**11.8%**

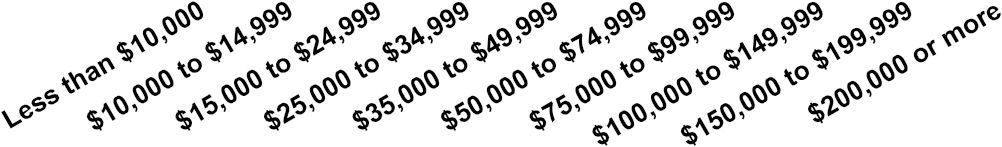
**14.0%**

**17.7%**

**10.8% 11.0%**

**3.9%**

**2.9%**



A majority (60%) of the region’s housing was owner-occupied in 2013, while 40 percent of all housing was renter occupied.

4 American Community Survey (ACS) 2013 five year estimates

**Figure 5: Housing Tenure (2013)5**

**Owner- occupied**

**59.8%**

**Renter- occupied**

**40.2%**

A majority of residents in Fresno and Madera Counties used a car, truck or van as a means of transportation to work in 2013, while less than 11 percent used public transportation, walked, used a taxicab, motorcycle, or other means, or worked at home.

**Figure 6: Means of Transportation to Work (2013) 6**

**Madera**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | | | | |
|  | **89.7%** |  |  | **6%** | |
|  |  | | | | |
|  |
|  | **89.1%** |  |  |  |  |
|  |  | | | | |
|  |  | | | | |

**Fresno**

**0% 20% 40% 60% 80% 100%**

**Car, truck, or van Public transportation (excluding taxicab) Walked Bicycle**

**Taxicab, motorcycle, or other means Worked at home**

5 American Community Survey (ACS) 2013 five year estimates

6 American Community Survey (ACS) 2013 five year estimates

**Regional Employer Profile7**

In 2014, there were approximately 63,795 jobs in Fresno, Madera, Kings and Tulare Counties that required some college, an associate’s degree, or a postsecondary non- degree award. These jobs were highlighted because of their relevance to adult education providers. From 2008 to 2014, job growth for this cohort was eight percent, or an additional 4,575 jobs. Including replacement jobs, the total average annual openings for occupations that required some college, associate’s degrees or postsecondary non-degree awards was approximately 2,806 jobs from 2008 to 2014 for the four-county region.

The proportion of jobs that had lower education requirements (72.6%) was larger in the four county region when compared to California (66.0%). The percentage of jobs that had medium education requirements was the same as California (10.4%), and the proportion of jobs that had high education requirements was lower than the figure for California overall (23.6%).

**Table 1: Job Growth by Education Level**

|  |  |  |
| --- | --- | --- |
| **Education Level** | **2014** | **Proportion of**  **Jobs** |
| **High: Bachelors, masters, doctoral or professional degree** | **105,170** | **17.1%** |
| **Medium: Associates degree, postsecondary non-degree**  **award, or some college, no degree** | **63,795** | **10.4%** |
| **Low: High school diploma or equivalent, or less than high**  **school** | **447,204** | **72.6%** |

7 All data included in the employer and occupational analysis is from EMSI’s 2014.3 QCEW and non-QCEW

datasets.

The largest employers in the region (using traditional 2-digit NAICS) for these jobs include;

• **Health Care and Social Assistance** (25,818 jobs in 2014, 40.5% of all regional employment for jobs that require some college, an associate’s degree or a postsecondary non-degree award), for which General Medical and Surgical Hospitals (8,437 jobs in 2014), Offices of Physicians (3,925 jobs in 2014) and Nursing Care Facilities (Skilled Nursing Facilities) (3,376 jobs in 2014) make up the majority of total employment in the broader industry.

• **Government** (16,184 jobs in 2014, 25.4% of all regional employment for jobs that require some college, an associate’s degree or a postsecondary non-degree award), for which Education (Local Government) (6,947 jobs in 2014), Local Government, Excluding Education and Hospitals (2,980 jobs in 2014), and Hospitals (Local Government) (2,456 total jobs in 2014) represent the majority of employment within the wider industry.

• **Transportation and Warehousing** (5,792 jobs in 2014, 9.1% of all regional employment for jobs that require some college, an associate’s degree or a postsecondary non-degree award), for which General Freight Trucking, Long Distance (1,594 jobs in 2014), Specialized Freight (except Used Goods) Trucking, Local (1,460 jobs in 2014), and General Freight Trucking, Local (1,327 jobs in

2014) account for the majority of total jobs in the broader industry.

• **Manufacturing** (2,985 jobs in 2014, 4.7% of all regional employment for jobs that require some college, an associate’s degree or a postsecondary non-degree award), for which Dairy Product (except Frozen) Manufacturing (445 jobs in

2014), Animal Slaughtering and Processing (280 jobs in 2014), and Fruit and

Vegetable Canning, Pickling, and Drying (201 jobs in 2014) represent nearly a third of overall employment in the broader industry.

The figure below offers an illustration of the aforementioned industries by relative employment size (size of the sphere – employment for occupations that require some college, an associate’s degree, or postsecondary non-degree award), state location quotient (LQ)8, and growth from 2008 to 2014. Health Care and Social Assistance experienced the highest growth at 40 percent, while Transportation and Warehousing grew by eighteen percent. Government employment declined from 2008 to 2014 (-6%) and Manufacturing declined by 11 percent. In 2014, all industries except for Manufacturing had slightly higher employment concentration in comparison to California’s economy.

8 A location quotient (LQ) of 1.0 indicates that a region has the average employment for a given industry cluster in comparison to the State economy. An LQ of 2.0 indicates the region has twice the average employment for a given industry cluster in comparison to the State economy.

**Figure 7: Key Industries by Concentration and Employment Growth from 2008 to 2014**

**1.6**

**1.4**

**(2)**

**1.2**

**1.0**

**2014 LQ**

**(3)**

**(1)**

**(4)**

**0.8**

**0.6**

**0.4**

**-15% 0% 15% 30% 45% 60%**

**2008-2014 % Employment Growth**

(1) Health Care and Social Assistance

(2) Government

(3) Transportation and Warehousing

(4) Manufacturing

**Regional Occupational Openings**

In the four-county region, Registered Nurses and Heavy and Tractor-Trailer Truck Drivers each accounted for 15 percent of all annual openings for jobs that require some college, an associate’s degree, or a postsecondary non-degree award. Teacher Assistants (248 annual openings), Nursing Assistants (223 annual openings), and Medical Assistants (219 annual openings) accounted for a quarter of all annual openings. Nearly three-quarters (73.3%) of the occupations in Table 2 had a typical education requirement of a postsecondary non-degree award.

**Table 2: Top 15 Occupations by Annual Openings (2013)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Occupation** | **2013**  **Jobs** | **Annual**  **Openings** | **Regional**  **Completions**  **(2013)** | **Median**  **Hourly**  **Earnings** | **Education Level** |
| **Registered Nurses** | 10,005 | 426 | 1,177 | $37.25 | Associate's degree |
| **Heavy and Tractor-Trailer Truck Drivers** | 9,184 | 411 | 343 | $17.05 | Postsecondary non-  degree award |
| **Teacher Assistants** | 7,026 | 248 | 18 | $13.49 | Some college, no  degree |
| **Nursing Assistants** | 4,603 | 223 | 253 | $11.57 | Postsecondary non-  degree award |
| **Medical Assistants** | 3,857 | 219 | 2,594 | $13.66 | Postsecondary non-  degree award |
| **Licensed Practical and Licensed Vocational**  **Nurses** | 2,524 | 140 | 458 | $22.85 | Postsecondary non-  degree award |
| **Preschool Teachers, Except Special**  **Education** | 2,094 | 115 | 241 | $12.97 | Associate's degree |
| **Psychiatric Technicians** | 1,308 | 78 | 334 | $26.13 | Postsecondary non-  degree award |
| **Heating, Air Conditioning, and Refrigeration**  **Mechanics and Installers** | 1,025 | 59 | 389 | $19.57 | Postsecondary non-  degree award |
| **Computer User Support Specialists** | 1,257 | 55 | 182 | $22.52 | Some college, no  degree |

|  |
| --- |
| Postsecondary non-  **Dental Assistants** 1,558 54 585 $15.22  degree award |
| **Telecommunications Equipment Installers** Postsecondary non-  619 51 0 $29.00  **and Repairers, Except Line Installers** degree award |
| Postsecondary non-  **Aircraft Mechanics and Service Technicians** 627 51 140 $24.29  degree award |
| **First-Line Supervisors of Production and** Postsecondary non-  2,119 49 0 $24.88  **Operating Workers** degree award |
| Postsecondary non-  **Library Technicians** 656 43 21 $17.31  degree award |

**Training Gap & Surplus**

This section highlights the top five occupations by annual openings in the four-county region and identifies associated training completions at educational institutions and training providers within the region. The remaining occupations and their associated educational programs are analyzed by the gap or surplus in training that existed in 2013.

Registered Nurses

California State University-Fresno had 384 bachelor’s degree completions and 48 master’s degree completions. College of the Sequoias had 124 associate’s degree completions, Fresno City College had 367 associate’s degree completions, and Porterville College had 18 associate’s degree completions. Fresno Pacific University had

33 bachelor’s degree completions and the University of Phoenix-Central Valley Campus

had 12 bachelor’s degree completions. Reedley College had 17 associate’s degree completions and five awards of less than one academic year. San Joaquin Valley College- Visalia had 71 associate’s degree completions and one award of at least one but less than two academic years. West Hills College-Coalinga had 12 associate’s degree completions, and West Hills College-Lemoore had 85 associate’s degree completions. Registered Nurses were produced at a surplus in the region in 2013 with 426 annual openings and 1,177 completions.

Heavy and Tractor-Trailer Truck Drivers

Advanced Career Institute had 343 awards of less than one academic year earned in

2013. There was a deficit among total completions for Heavy and Tractor-Trailer Truck

Drivers with 411 annual openings and 343 completions.

Teacher Assistants

There were eight associate’s degrees and 10 awards of less than one academic year received at Fresno City College in 2013. There was a deficit among total occupational awards for Teacher Assistants with 248 annual openings and 18 completions.

Nursing Assistants

There were 228 bachelor’s degrees earned at California State University-Fresno, 11 master’s degrees earned at California State University-Fresno, and 14 awards of less than one academic year earned at College of the Sequoias. Nursing Assistants were produced at a surplus in 2013 with 253 total completions and 223 annual openings.

Medical Assistants

There were 613 associates degrees earned at the following institutions: Fresno City College (13), Heald College- Fresno (185), San Joaquin Valley College-Fresno (174), San Joaquin Valley College-Visalia (186), West Hills College-Coalinga (12), and West Hills College-Lemoore (43).

There were 1,461 awards of at least one but less than two academic years earned at the following institutions: Clovis Adult Education (21), Fresno City College (3), Heald College- Fresno (13), Institute of Technology Inc. (524), Kaplan College-Fresno (216), San Joaquin Valley College-Fresno (23), San Joaquin Valley College-Visalia (303), and UEI College- Fresno (358).

There were 281 awards of less than one academic year earned at the following institutions: Clovis Adult Education (33), Fresno City College (14), Milan Institute-Clovis (27), Milan Institute-Visalia (165), and Reedley College (42).

There were also 228 bachelor’s degrees and 11 master’s degrees earned at California

State University-Fresno.

Medical Assistants were produced at a surplus in 2013 with 2,594 total completions and

219 annual openings.

Additional Surplus Occupations

Within the region, the following additional occupations exist in surplus to openings among occupational categories that require some college, an associate’s degree, or postsecondary non-degree award (of the top 15 occupations by annual openings).

• **Licensed Practical and Licensed Vocational Nurses** – 140 annual openings and

458 regional completions in 2013.

• **Preschool Teachers, Except Special Education** – 115 annual openings and 241 regional completions in 2013.

• **Psychiatric Technicians** – 78 annual openings and 334 regional completions in

2013.

• **Heating, Air Conditioning, and Refrigeration Mechanics and Installers** – 59 annual openings and 389 regional completions in 2013.

• **Computer User Support Specialists** – 55 annual openings and 182 regional completions in 2013.

• **Dental Assistants** – 54 annual openings and 585 regional completions in 2013.

• **Aircraft Mechanics and Service Technicians** – 51 annual openings and 140 regional completions in 2013.

***Additional Gap Occupations***

Within the region, the following additional occupations exist in deficit in training for openings among occupational categories that require some college, an associate’s degree, or postsecondary non-degree award (of the top 15 occupations by annual openings).

• **Telecommunications Equipment Installers and Repairers, Except Line Installers**

– 51 annual openings and 0 regional completions in 2013.

• **Library Technicians** – 43 annual openings and 21 regional completions in 2013.

One of the occupations with a deficit in training included in Table 2 had no educational completions due to the non-existence of related program types in the region.

• **First-Line Supervisors of Production and Operating Workers** – 49 annual openings in 2013.

**Business Survey Results**

The State Center Educational Consortium commissioned BW Research Partnership, Inc. to develop a profile of regional businesses to better understand adult education needs within the region. As part of the research, 150 businesses in Fresno and Madera Counties completed a survey.

**Business Profile**

A majority of businesses surveyed (71%) indicated they have one business location in Fresno or Madera County, while 15 percent have two to four locations and 12 percent have five or more locations in the counties.

**Figure 8: Business Locations in Fresno or Madera County**

**70.7%**

**14.7%**

**12.0%**

**2.7%**

**1 location in Fresno or Madera County**

**2 to 4 locations in Fresno or Madera County**

**5 or more locations in Fresno or Madera County**

**Don't know/ Refused**

More than three-quarters of businesses (78%) employ less than 25 full-time and part- time employees at their location. For this study9, small businesses were considered 1 to

10 employees (56% of respondents), medium sized businesses were considered 11 to 24 employees (22% of respondents), and large businesses were considered 25 or more employees (21% of respondents).

**Figure 9: Permanent and Temporary Employees**

**22.0%**

**21.3%**

**56.0%**

**0.7%**

**Small (1 to 10 employees) Medium (11 to 24 employees) Large (25 or more employees)**

**DK/NA**

9 It should be noted that self-employed individuals or firms with 0 employees, were not included in the sample.

Business respondents were more likely to identify with healthcare services, manufacturing, and retail industries while fewer participants identified with business support services, automotive services, finance, insurance and legal and other industries.

**Figure 10: Industries Businesses Most Closely Identified With**

**Healthcare services**

**20.0%**

**Manufacturing**

**16.0%**

**Retail**

**13.3%**

**Agriculture**

**Information and communications technologies (ICT)**

**Food and accommodation services**

**Building and design (includes construction, architecture and engineering)**

**Transportation and logistics (Railroad, trucking, etc.)**

**Professional, scientific and technical services**

**(including consulting)**

**Government**

**10.7%**

**10.0%**

**7.3%**

**6.7%**

**4.0%**

**3.3%**

**2.7%**

**Other services**

**Business support services (includes employment and management services)**

**Automotive services**

**2.7%**

**2.7%**

**2.0%**

**Finance, insurance and legal**

**1.3%**

**Other**

**2.7%**

**0% 5% 10% 15% 20% 25%**

**Hiring Expectations in the Next Year**

More than a third (39%) of businesses surveyed expected to add employees over the next 12 months, resulting in an anticipated growth rate of seven percent. Fifty-four percent of firms indicated that employment levels would not change over the next year and two percent said that they expect to have fewer employees by the next year.

**Figure 11: Hiring Expectations for the Next 12 Months**

**Same number**

**54.0%**

**38.7%**

**Fewer**

**2.0% DK/NA**

**5.3%**

• Employers who had “Great difficulty” finding qualified applicants that require less than a 4-year degree were more likely to report that they expect “More” workers 12 months from now (59%) when compared to employers who have “Little to no difficulty” (31%) or “Some difficulty” (40%).

**Entry-Level Hiring Challenges and Assessment**

Businesses were asked how many of their full-time and part-time employees that work at their location typically require less than a 4-year college degree as their expected level of education for employment. The majority of employers indicate lower educational requirements (69%), with 75 to 100 percent of their employees typically possessing less than a 4-year college degree.

**Figure 12: Employees that are Required to Have Less than a 4-Year College Degree10**

**69.1%**

**High (0% to 24%)**

**22.1%**

**8.7%**

**Medium (25% to 74%)**

**Low (75% to 100%)**

• Employers who have difficulty finding qualified applicants that require less than a 4-year degree were more likely to report that 75-100% of their employees require less than a

4-year degree (81% of respondents who answered “Some difficulty” and 76% of respondents who answered “Great difficulty”) when compared to employers who have “Little to no difficulty” (65%).

• Employers who are in the retail & food and accommodation services were more likely to report that 75-100% of their employees require less than a 4-year degree (89%) when compared to employers in information and communications technologies industry

(79%), manufacturing (77%), building and design & transportation and logistics (69%), healthcare services (57%), and agriculture industry (50%) .

11

10 DK/NA answers were omitted from this analysis

11 **Please note for all individual industry cluster survey response analyses throughout this report**: Although the survey sampling plan included a focus on firms in the six industry clusters, the sample sizes within four of the six

clusters were less than 25 respondents – which is the minimum for assuming a normal distribution. As such, caution should be utilized when generalizing the results for Manufacturing (n=22), Agriculture (n=16), Information and communications technologies (n=14) and Building and design & transportation and logistics (n=16).

Businesses were asked which primary occupations they employ that typically have less than a 4-year college degree as their expected level of education for employment. Technicians, assemblers, or machine operators, customer service and/or sales workers and administrative or clerical support workers and cleaners were the top three occupations that typically have less than a 4-year college degree as their expected level of education for employment.

**Figure 13: Primary Occupations or Positions that typically Require less than a 4-Year College**

**Degree12**

**Technicians, assemblers, or machine operators**

**42.0%**

**Customer service and/or sales workers**

**31.5%**

**Administrative or clerical support workers**

**29.4%**

**Cleaners, helpers or laborers**

**21.7%**

**Craft and related trades workers**

**14.7%**

**Managers or supervisors**

**14.0%**

**Other**

**4.2%**

**Depends on occupation**

**0.7%**

**Have not hired entry-level recently**

**0.7%**

**0% 20% 40% 60%**

12 Respondents were allowed to identify with more than one occupation, so results add up to more than 100 percent.

Firms that employ workers that require less than a 4-year degree were asked about

their difficulty finding qualified applicants who meet the organization’s hiring standards. The largest proportion of employers (45%) had little to no difficulty finding qualified applicants that require less than a 4-year degree, while 34 percent had “Some difficulty” and 21 percent had “Great difficulty” finding qualified applicants.

**Figure 14: Difficulty Finding Applicants that Require Less than a 4-Year Degree13**

**Some difficulty**

**34.5%**

**Little to no difficulty**

**44.6%**

**Great difficulty**

**20.9%**

• Employers in the manufacturing industry were more likely to report “Great difficulty” (45%) when compared to the agriculture industry (27%), building and design & transportation and logistics (21%), healthcare services (19%), retail & food and accommodation services (14%), and information and communications technologies industry (7%).

13 DK/NA answers were omitted from this analysis

**Importance of Education, Experience, Training, or Skills for Entry-Level**

**Applicants**

Employers were asked the importance of education, experience, training or skills when considering candidates for positions at their firm that do not require a 4-year college degree. For those items that an employer identified as “Important” or “Extremely important”, a follow-up question was asked to determine whether recent job candidates or newly hired individuals were deficient in that area.

Figure 16 displays the relationship between the importance of and deficiency in education, experience, training or skills. Items in the upper right hand quadrant indicate high importance and high deficiency while items in the lower left hand quadrant represent low importance and low deficiency.

Of the eight items that were evaluated, those with the higher importance ratings included;

• At least one year of industry related work experience

• Ability to write and document complex information

• Technical training and expertise specific to the position they are applying for

Of the eight items that were evaluated, those with higher deficiency ratings included;

• Ability to speak and communicate with customers and colleagues

• Ability to write and document complex information

• Ability to use technology and learn new technology tools and applications

• Ability to work with others and contribute as part of a team

Of the eight items that were evaluated, the one with the higher combined importance and deficiency rating was;

• Ability to write and document complex information

**Figure 15: Importance of and Deficiency in Education, Training, Skills and Experience in Entry-Level**

**Applicants14**

**2.00**



**(G)**

**(C)**

**1.50**

**(E)**

**Important**

**(F)**

**1.00**

**(H)**

**(A)**

**0.50**

**(B)**

**(D)**

**0.00**

**0.60 0.65 0.70 0.75 0.80 0.85 0.90 0.95**

**Deficient**

A. An industry recognized credential or certificate



B. At least one year of industry related work experience



C. Ability to speak and communicate with customers and colleagues



D. An associates degree



E. Ability to write and document complex information



F. Ability to use technology and learn new technology tools and applications



G. Ability to work with others and contribute as part of a team



H. Technical training and expertise specific to the position they are applying for



14 The size of the sphere represents the amount of employers who answered the item as “Very important”

or “Somewhat important”.

• Employers who are in the and building and design & transportation and logistics industry were more likely to report that an industry recognized credential or certificate is “Extremely important” (44%) when compared to employers in healthcare services (29%), retail & food and accommodation services (14%), information and communications technologies (14%), agriculture (13%), and manufacturing (0%).

• Employers who had “Great difficulty” finding qualified applicants that require less than a 4-year degree were more likely to report at least one year of industry related work experience is “Extremely important” (35%) when compared to employers who have “Little to no difficulty” (13%) or “Some difficulty” (29%).

• Employers who are in the healthcare industry and information and communications technologies (ICT) industry were more likely to report that at least one year of industry related work experience is “Extremely important” (36% healthcare and 43% ICT) when compared to employers in building and design & transportation and logistics (25%), manufacturing (20%), agriculture (13%), and retail & food and accommodation services (7%).

• Employers who are in the healthcare industry and information and communications technologies (ICT) industry were more likely to report that the ability to speak and communicate with customers is “Extremely important” (96% healthcare and 93% ICT) when compared to employers in retail & food and accommodation services (82%), agriculture (53%), building and design & transportation and logistics (50%) and manufacturing (45%).

• Medium-sized firms were more likely to report that an associate’s degree is “Important” (32%) when compared to small firms (18%) and large firms (13%).

• Employers who are in the healthcare industry were more likely to report that the ability to write and document complex information is “Extremely important” (68%) when compared to employers in information and communications technologies (36%), agriculture (33%), retail & food and accommodation services (32%), building and design

& transportation and logistics (25%), and manufacturing (25%).

• Employers who had “Great difficulty” finding qualified applicants that require less than a 4-year degree were more likely to report that the ability to work with others and contribute as part of a team is “Extremely important” (90%) when compared to employers who have “Little to no difficulty” (81%) or “Some difficulty” (71%).

• Employers who are in the healthcare industry were more likely to report that the ability to work with others and contribute as part of a team is “Extremely important” (96%) when compared to employers in information and communications technologies (86%), agriculture (80%), retail & food and accommodation services (75%), manufacturing (60%), and building and design & transportation and logistics (56%).

• Large firms were more likely to report that technical training and expertise specific to the position they are applying for is “Extremely important” (47%) when compared to small firms (25%) and medium firms (28%).

• Employers who are in the building and design & transportation and logistics industry were more likely to report that technical training and expertise specific to the position they are applying for is “Extremely important” (50%) when compared to employers in healthcare (39%), agriculture (27%), information and communications technologies (21%), manufacturing (20%), and retail & food and accommodation services (18%).

**Non-Entry Level Hiring Challenges and Assessment**

In addition to being asked the difficulty finding applicants that meet the organization’s hiring standards in positions where workers typically have less than a 4-year college degree, employers were asked about their difficulty finding applicants for positions that require a 4-year college degree or more.15

Difficulty finding applicants in positions where workers typically have less than a 4-year college degree was very similar with the difficulty of finding applicants in positions that require a 4-year college degree or more.

**Figure 16: Difficulty Hiring Applicants16**

**Positions that require a 4-year college degree or more (n=89)**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | | |
|  | **44.9%** | **33.7%** | **21.3%** |
|  |  | | |
|  |
|  | **44.6%** | **34.5%** | **20.9%** |
|  |  | | |
|  |  | | |

**Positions where workers typically have less than a 4-year college degree (n=139)**

**0% 20% 40% 60% 80% 100%**

**Little to no difficulty Some difficulty Great difficulty**

15 Employers that indicated 100% of their workforce requires less than a 4-year degree were removed.

16 DK/NA answers were omitted from this analysis

**Interest in Training or Educational Programs**

Surveyed business were presented with potential training and educational programs that could be developed and offered through a community college or local educational facility. More than half of businesses expressed interest (“Some interest” or “Great interest”) in two of the five programs: “A training program and coursework for management and supervisors, including performance management and coaching” and “A certificate program in specific occupational categories offered at a local educational facility”.

**Figure 17: Interest in Potential Training or Educational Programs**

**A training program and coursework for management and supervisors, including performance management and coaching**

**16.0%**

**36.0%**

**A certificate program in specific occupational categories offered at a local educational facility**

**13.3%**

**37.3%**

**A training program and coursework to develop digital literacy and the use of computer applications like Excel in the workplace**

**14.0%**

**30.7%**

**Customized "in-house" training for your current employees at your facility**

**12.0%**

**27.3%**

**A training program and coursework for business communications, including business writing and presentation skills**

**10.7%**

**25.3%**

**0% 20% 40% 60%**

**Great interest Some interest**

• Employers who are in the retail & food and accommodation services industry were more likely to report “Great interest” in customized ‘in-house” training for their current employees at their facility (21%) when compared to employers in healthcare services (17%), information and communications technologies (14%), agriculture (13%), building and design & transportation and logistics (6%), and manufacturing (0%).

• Firms that had “Great difficulty” or “Some difficulty” finding qualified applicants that require less than a 4-year degree were more likely to report “Great interest” in a certificate program in specific occupational categories offered at a local educational facility (17% of firms with “Great difficulty” and 19% of firms with “Some difficulty”) when compared to firms with “Little to no difficulty” (10%).

• Large firms were more likely to report “Great interest” in a training program and coursework for management and supervisors including performance management and coaching (34%) when compared to small firms (9%) and medium firms (15%).

• Employers who are in the healthcare industry and agriculture industry were more likely to report “Great interest” in a training program and coursework to develop digital literacy and the use of computer applications like Excel in the workplace (23% of healthcare firms and 19% of agriculture firms) when compared to employers in retail & food and accommodation services (14%), information and communications technologies (7%), manufacturing (5%), and building and design & transportation and logistics (0%).

**Appendix A.1: Employer Survey Toplines**

**`**



**Adult Education AB 86**

**Employers (n=150) January 2015**

**Version 1.0**

**Fresno State Center**

**Employer Survey**

`````````````````````````````````````````````````````````````````````````````````````````````````````````````````````

**Introduction:**

Hello, my name is . May I please speak to someone involved with planning or staffing at

[organization]?

[IF NEITHER A PLANNER OR SOMEONE WITH STAFFING IS AVAILABLE] Can I speak to a decision maker at your location?

Hello, my name is and I’m calling on behalf of the Regional Adult Education Consortium. The Adult Education Consortium needs your input in a short interview that will be used to develop a stronger response to supporting employers in the region.

**(If needed):** The interview is being conducted by BW Research, an independent research organization, and should take approximately ten minutes of your time.

**(If needed):** Your individual responses will **not** be published; only aggregate information will be used in the reporting of the survey results.

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**Screener Questions**

A. Are you involved in staffing or hiring decisions at your firm or organization?

**100.0% Yes**

|  |  |
| --- | --- |
| **0.0%** | **No [TERMINATE]** |
| **0.0%** | **Not sure [TERMINATE]** |

B. Does your company or organization have one or more locations in Fresno or Madera County? [IF YES) How many locations?

|  |  |
| --- | --- |
| **70.7%** | **1 location in Fresno or Madera County** |
| **14.7%** | **2 to 4 locations in Fresno or Madera County** |
| **12.0%** | **5 or more locations in Fresno or Madera County** |
| **2.7%** | **DK/NA** |

C. What is the zip code of your current location in Fresno or Madera County?

|  |  |
| --- | --- |
| **100.0%** | **Enter zip code** |
| **0.0%** | **Not in Fresno or Madera County [TERMINATE]** |
| **0.0%** | **Not sure [TERMINATE]** |

D. Which industry would you most closely identify with? [DO NOT READ, ALLOW MORE THAN ONE RESPONSE] (Multiple Responses Permitted - Percentages May Sum to More than 100%)

**20.0% Healthcare services**

**16.0% Manufacturing**

**13.3% Retail**

**10.7% Agriculture**

**10.0% Information and communications technologies (ICT)**

**7.3% Food and accommodation services**

**6.7% Building and design (includes construction, architecture and engineering)**

**4.0% Transportation and logistics (Railroad, trucking, etc.)**

**3.3% Professional, scientific and technical services (including consulting)**

**2.7% Business support services (includes employment and management services)**

**2.7% Other services**

**2.7% Government**

**2.0% Automotive services**

**1.3% Finance, insurance and legal**

**2.7% Other – *No single category over 1%***

`````````````````````````````````````````````````````````````````````````````````````````````````````````````````````

**SECTION 1 - Organization-Related Questions**

I’d like to begin by asking you a few general questions about your firm and your current employees. For this survey, please only answer for your current business location in Fresno or Madera County. If your firm has other locations, please do not include their data.

1. Including all full-time and part-time employees, how many **permanent and temporary** employees work at your location? (Do not accept 0 as a response for Q1)

|  |  |
| --- | --- |
| **24.0%** | **1 to 5 employees** |
| **32.0%** | **6 to 10 employees** |
| **22.0%** | **11 to 24 employees** |
| **11.3%** | **25 to 49 employees** |
| **6.0%** | **50 to 99 employees** |
| **3.3%** | **100 to 249 employees** |
| **0.7%** | **250 or more employees** |
| **0.7%** | **Don't know/ Refused** |

2. If you currently have [TAKE Q1 #] full-time and part-time **permanent and temporary** employees at your location, how many more or fewer employees do you expect to have at your location **12 months** from now?

**Breakdown:**

|  |  |
| --- | --- |
| **38.7%** | **More** |
| **2.0%** | **Fewer** |
| **54.0%** | **(DON’T READ) Same number of employees** |
| **5.3%** | **(DON’T READ) Don't know/ Refused** |

**Expected Employment in 12 months**

**(Calculated by only examining businesses with both current and projected data)**

**Current 12 months**

|  |  |  |
| --- | --- | --- |
| **n** | **142** | **142** |
| **Mean** | **22.08** | **23.58** |
| **Median** | **10.00** | **10.50** |
| **Total Employees** | **3,136** | **3,349** |
| **Change** |  | **213** |
| **% Growth** |  | **6.8%** |

[If amount differs by 10% or more in either direction, ask: ]

Just to confirm, you currently have \_ employees and you expect to have \_ (more/fewer)

employees, for a total of employees 12 months from now.

**SECTION 2 –Hiring Challenges & Assessment**

Now, I would like to ask questions about positions at your current location that typically require less than a four-year degree of college.

3. Of the #Q1 full-time and part-time employees who work at your location, how many typically require less than a 4-year college degree as their expected level of education for employment?

|  |  |
| --- | --- |
| **4.7%** | **No employees that require less than a 4-year degree** |
| **4.0%** | **1% to 24% of employees require less than a 4-year degree** |
| **10.7%** | **25% to 49% of employees require less than a 4-year degree** |
| **11.3%** | **50% to 74% of employees require less than a 4-year degree** |
| **68.7%** | **75% to 100% of employees require less than a 4-year degree** |
| **0.7%** | **Don't know/ Refused** |

4. What are the primary occupations or positions that you employ at this location that typically have less than a 4-year college degree as their expected level of education for employment? [DO NOT READ: ACCEPT MULTIPLE RESPONSE, RECORD VERBATIMS]

(IF NEEDED: For this question, we are just looking for you to identify general occupational categories that you employ at this location, that typically require less than a 4 year college degree) (Multiple Responses Permitted - Percentages May Sum to More than 100%) (n=143)

|  |  |
| --- | --- |
| **42.0%** | **Technicians, assemblers, or machine operators** |
| **31.5%** | **Customer service and/or sales workers** |
| **29.4%** | **Administrative or clerical support workers** |
| **21.7%** | **Cleaners, helpers or laborers** |
| **14.7%** | **Craft and related trades workers** |
| **14.0%** | **Managers or supervisors** |
| **4.2%** | **Other – *No single category over 1%*** |
| **0.7%** | **Depends on occupation** |
| **0.7%** | **Have not hired entry-level recently** |
| **0.0%** | **Don’t know/ Refused** |

5. Thinking about these ***positions where the workers typically have less than a 4 year college degree,*** that you hire at your location, how much difficulty does your company have finding qualified applicants who meet the organization’s hiring standards? (n=143)

|  |  |
| --- | --- |
| **43.4%** | **Little to no difficulty** |
| **33.6%** | **Some difficulty** |
| **20.3%** | **Great difficulty** |
| **2.8%** | **Don't know/ Refused** |

6. Please tell me how important the following items are when considering candidates for positions at your firm that do not require a 4 year college degree: Extremely important, important (IF NEEDED, just important), or not important. (n=143)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RANDOMIZE** | **Extremely important** | **Important** | **Not important** | **It depends** | **Don't know/ Refused** |
| **A. An industry recognized credential or certificate** | **18.2%** | **28.0%** | **51.0%** | **2.1%** | **0.7%** |
| **B. At least one year of industry**  **related work experience** | **22.4%** | **48.3%** | **26.6%** | **2.1%** | **0.7%** |
| **C. Ability to speak and**  **communicate with customers and colleagues** | **73.4%** | **21.7%** | **4.9%** | **0.0%** | **0.0%** |
| **D. An associates degree** | **4.2%** | **21.0%** | **71.3%** | **3.5%** | **0.0%** |
| **E. Ability to write and**  **document complex information** | **38.5%** | **37.8%** | **21.0%** | **2.8%** | **0.0%** |
| **F. Ability to use technology**  **and learn new technology tools and applications** | **47.6%** | **38.5%** | **11.2%** | **2.8%** | **0.0%** |
| **G. Ability to work with others**  **and contribute as part of a team** | **78.3%** | **21.0%** | **0.7%** | **0.0%** | **0.0%** |
| **H. Technical training and**  **expertise specific to the position they are applying for** | **30.8%** | **43.4%** | **23.8%** | **2.1%** | **0.0%** |

[ONLY ASK IF Q6 = “Extremely important” OR “Important” FOR EACH ITEM]

7. Now, thinking about those candidates or recently employed workers for positions at your firm that do not require a 4 year college degree, how often are they deficient for each of the following items: often deficient, sometimes deficient, or seldom or never deficient.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RANDOMIZE** | **Often deficient** | **Sometimes deficient** | **Seldom or never deficient** | **Depends** | **Don't know/ Refused** |
| **A. An industry recognized credential or certificate (n=66)** | **18.2%** | **39.4%** | **31.8%** | **1.5%** | **9.1%** |
| **B. At least one year of industry**  **related work experience**  **(n=101)** | **22.8%** | **37.6%** | **36.6%** | **1.0%** | **2.0%** |
| **C. Ability to speak and**  **communicate with customers and colleagues (n=136)** | **15.4%** | **37.5%** | **43.4%** | **0.7%** | **2.9%** |
| **D. An associates degree (n=36)** | **22.2%** | **38.9%** | **22.2%** | **8.3%** | **8.3%** |
| **E. Ability to write and**  **document complex information (n=109)** | **20.2%** | **42.2%** | **33.9%** | **1.8%** | **1.8%** |
| **F. Ability to use technology**  **and learn new technology tools and applications (n=123)** | **15.4%** | **38.2%** | **44.7%** | **0.8%** | **0.8%** |
| **G. Ability to work with others**  **and contribute as part of a team (n=142)** | **17.6%** | **31.7%** | **48.6%** | **0.7%** | **1.4%** |

**H. Technical training and expertise specific to the position they are applying for (n=106)**

**25.5% 33.0% 34.9% 2.8% 3.8%**

8. Are there specific skills or areas of expertise that are difficult to find among job applicants for positions that typically have less than a 4 year college degree, that we have not already discussed?

***Verbatim responses to be provided***

**SECTION 3 – Non-Entry-Level Hiring Challenges & Assessment**

Next, I would like to ask about the other positions at your current location that typically require a 4 year degree or more.

9. Thinking about those ***positions*** at your current location that require a 4 year college degree or more, how much difficulty does your company have finding qualified applicants who meet the organization’s hiring standards? (With employers that indicated 100% of their workforce requires less than a 4-year degree removed)

|  |  |
| --- | --- |
| **26.7%** | **Little to no difficulty** |
| **20.0%** | **Some difficulty** |
| **12.7%** | **Great difficulty** |
| **40.7%** | **Don't know/ Refused** |

[IF Q9 = “Some difficulty” OR “Great difficulty) ASK Q10 OTHERWISE SKIP]

10. Are there specific skills or areas of expertise that are difficult to find among job applicants for positions that require a 4 year degree or more?

***Verbatim responses to be provided***

**SECTION 5 – Interest and Support**

11. Next I would like to know your organization’s level of interest in the following training and education programs that could be developed and offered through a community college or local educational facility.

As I read each possible program, please tell me whether your organization would have no interest, some interest, or great interest in the following workforce development programs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RANDOMIZE** | **No interest** | **Some interest** | **Great interest** | **Don't know/ Refused** |
| **A. Customized "in-house" training for your current employees at your facility** | **58.7%** | **27.3%** | **12.0%** | **2.0%** |
| **B. A certificate program in specific occupational**  **categories offered at a local educational facility** | **45.3%** | **37.3%** | **13.3%** | **4.0%** |
| **C. A training program and coursework for**  **management and supervisors, including performance management and coaching** | **46.7%** | **36.0%** | **16.0%** | **1.3%** |
| **D. A training program and coursework for**  **business communications, including business writing and presentation skills** | **62.0%** | **25.3%** | **10.7%** | **2.0%** |
| **E. A training program and coursework to develop**  **digital literacy and the use of computer**  **applications like Excel in the workplace** | **52.7%** | **30.7%** | **14.0%** | **2.7%** |

12. Are there any other areas of training or specific certificates that you would like to see offered at a local training facility which we have not discussed?

***Verbatim responses to be provided***

13. Lastly, would you be interested in advising the local training provider and Community College decision makers on how to best prepare students to work in today’s economy?

[If yes] we will forward on your contact information to the Fresno State Center Adult Education

Consortium and they will contact you. Your contact information will not be used for anything else.

***Contact information to be provided***

**Thank you for completing the survey. Since it sometimes becomes necessary for the project manager to call back and confirm responses to certain questions, I would like to verify your contact information.**

A. First and Last Name of Respondent \_

B. Position of Respondent \_\_ \_

C. Phone of Respondent \_

D. Email of Respondent \_

E. Name of Company \_ \_

F. Company Address (including City) \_ \_

**Those are all the questions I have. Thank you very much for your time.**

G. Date of Interview \_ H. Time of Interview

I. Name of Interviewer \_ \_

J. County