



# Labor Market Report



## University Linkages Program

January 10, 2017  
IREX  
1275 K Street NW, Suite 600  
Washington, DC 20005

IREX is an international nonprofit organization providing thought leadership and innovative programs to promote positive lasting change globally. We enable local individuals and institutions to build key elements of a vibrant society: quality education, independent media, and strong communities. To strengthen these sectors, our program activities also focus on conflict resolution, technology for development, gender, and youth. Founded in 1968, IREX has an annual portfolio of \$70 million and a staff of more than 400 professionals worldwide. IREX employs field-tested methods and innovative uses of technologies to develop practical and locally-driven solutions with our partners in over 120 countries.

This Labor Market Report was written by Charles Guedenet, Michelle Grajek and Dr. Lori Mason with support from the U.S. Embassy, Baghdad through the Iraq University Linkages Program.

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# I. Executive Summary



## Introduction

From September to November, 2016, a total of 548 individuals from the private sector were interviewed to gather data on the state of the labor market in the Kurdistan Region of Iraq, Baghdad and Basra.

More granular data on which current positions were being filled by **expatriate staff versus local staff** was also gathered to understand which positions required external expertise. And lastly, employers were asked about their interest in collaborating with Iraqi universities in the future. The goal of this study was to provide partner universities, government ministries, and other interested parties with information that could inform curriculum development and career services.

The semi-structured questionnaire covered the following areas of interest:

- The **qualifications** most sought after by employers
- The **perceived gaps** in the preparedness of recent Iraqi graduates
- The **types of training opportunities offered**, if any, to new employees to address gaps in knowledge or skills
- Employer predictions of **education certificates or degrees that will be needed** by their companies in the next 3-5 years.
- **Past, current, and forecasted positions for hire** or recruitment within their companies



## Key findings, conclusions, and recommendations

Across each region surveyed the following key areas were cited as crucial to building the labor market and supporting private sector workforce in Iraq.

- **English language** skills were cited as “most needed” more than twice as much as any other knowledge or skill area.
- **Computer skills are highly valued by employers but are not always adequate in recent graduates**
- **Soft skills and in particular “critical thinking” and “problem-solving” were often cited as needed but lacking in recent graduates.**
- **Administrative/clerical positions are forecasted to increase over the next five years** – These positions represented the only field with a forecasted increase across all regions of Iraq.

## Methodology

Through a collaborative and iterative process, IREX staff designed and supported a process for data gathering to build capacity of Career center staff across Iraq. The approach in each region varied slightly depending on the scope of the

private sector, aims of the career centers involved in the process, and the security environment at the time of the data gathering. Details on the methodology for each region can be found in detail further in this report.

## Limitations

In assessing the results of this survey effort, the following limitations should be kept in mind:

- Enumerators had limited access to employers outside of major urban centers. As a result, the data and analysis is skewed towards employers in these areas and is less useful for drawing conclusions about the labor market in surrounding regions.
- The size of the sample (548) and the diversity of employers interviewed resulted in some sectors being better represented than others. The small number of respondents in some sectors makes it impossible to generalize about the employer perceptions, hiring practices, or preferences in those sectors.
- Companies included in the survey were not randomly selected. Users of this report should therefore take care when making generalizations about all companies based on the available data. This is especially true of sectors with smaller sample sizes.
- The position and seniority of interviewees varied across companies, ranging from sales representatives to management staff and human resource staff. The particular role or position held by the interviewee likely affected the level of insight interviewees had on each line of questioning.

# Recommendations

One essential first step in improving competence of university graduates to meet local market demands is to bring industry into planning and discussions with higher education institutions. Higher education leaders should consider ways to foster and sustain active connection and collaboration with industry. Several core recommendations are listed below:



Industry leaders cite challenges in accessing offices and individuals in a large, bureaucratic institution. Universities should consider creation of a **single point of entry** or office such as the career center to serve as a gateway for industry to connect to various programs and offices.



Facilitate sector specific **focus groups** with industry leaders for more detailed and nuanced sector specific information as well as recommendations for addressing changes in academic programs.



Creation of **industry advisory boards** or committees for input into academic programs are a vital resource for adapting curriculum and programs to address industry needs;



Development of a comprehensive strategy and framework for creating **academic standards and competencies** within each academic program;



Prioritize funding for initiatives that develop soft skills of university students such as **experiential education** programs. Internships, apprenticeships and other practical hands on initiatives provide a basis for students to develop skills and gain crucial real world experience.



Expand programs such as **university career centers** aimed at assisting institutions and individuals to connect to private sector.



**Professional development** for academic faculty to support introduction of new instructional strategies and student centered learning models that build the skills needed for success in today's world. Courses can be adapted to include strategies such as problem based and team based learning or capstone projects that require students to work in teams to solve problems, practicing essential skills in an academic setting.

## Further recommendations:

Given the importance of English language skills across all sectors and the few employer English training courses provided to meet demand, it is recommended that basic English language preparedness courses required for all students be assessed and professional development training offered for primary and secondary school English language teachers.



It is also recommended that the underlying reasons for poor English language skills among recent graduates be explored further through follow-up focus group interviews with university professors and students. The course curricula for English language programs and the pedagogical methods used by instructors may need to be reviewed to ensure they meet global standards and apply best practices. English language professors may need re-training or refresher courses in pedagogy.



IT/Computer skills and digital literacy training should be introduced across all academic departments. Partnerships with employers to co-develop or even co-implement training should also be explored. If partnerships are not feasible, universities can conduct a follow-up survey or interviews with employers already providing training to learn what skills, knowledge, and abilities are most needed in regards to IT/Computer skills in their specific work environments.



Programs and university courses that prepare students for administrative/clerk positions should continue to be supported and strengthened as demand for well qualified applicants for these positions will likely continue to increase in the near future. However, the few changes in forecasted positions compared to current positions across sectors may also reflect the high level of uncertainty around Iraq's political and economic future. Respondents may have forecasted the same positions as those currently positions in the absence of reliable information. It is recommended that more regular mini-surveys of current positions being advertised be conducted to identify trends in the labor market and improve forecasting.



# Baghdad/Basra Labor Market Report



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A. Please forecast or predict what positions or position types you believe will be needed by your company over the next 3- 5 years

B. Which skills or knowledge in each sector are most needed to solve current industry related problems or further develop companies

C. Academic programs most frequently recruited or hired from by sector

D. Number of respondents per sector that say their company provides training in each of these areas

E. What types of positions were hired for most in the last 24 months?

F. Number of companies currently advertising jobs for each position type, by sector

G. Minimum education requirements necessary to be considered for current vacancies



# I. Executive Summary



## Introduction

From July to August, 2016, a total of 439 individuals from the private sector were interviewed to gather data on the state of the labor market, with a focus on employers with offices in Basrah or Baghdad. The goal of this study was to provide partner universities, government ministries, and other interested parties with information.

More granular data on which current positions were being filled by **expatriate staff versus local staff** was also gathered to understand which positions required external expertise. And lastly, employers were asked about their interest in collaborating with Iraqi universities in the future.

The semi-structured questionnaire covered the following areas of interest:

- The **qualifications** most sought after by employers
- The **perceived gaps** in the preparedness of recent Iraqi graduates
- The **types of training opportunities offered**, if any, to new employees to address gaps in knowledge or skills
- Employer predictions of **education certificates or degrees that will be needed** by their companies in the next 3-5 years.
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# Key findings, conclusions, and recommendations

## 1 Gaps in technology skills are only partly being met by employer training

IT/Computer skills were the **second most frequently reported skill or knowledge area cited by employers** as needed to solve current industry related problems or further develop their company. Forty-two percent of employers indicated that recent graduates were “computer proficient” but **only 24 percent said they were very well prepared or prepared with the ability to apply technology knowledge in the work place**. This gap in skills and knowledge is often being met through employer provided training. **Forty-four percent of employers report providing training in computers, 19 percent specifically in Microsoft basic office software, and 10 percent in computer systems maintenance**. An outlier is the Oil and Gas sector where only 13 percent report providing training in computers.

## 2 High demand for English language skills is not being met

**Sixty-eight percent of respondents reported that English language skills were “most needed”** to solve current industry related problems or to further develop their company. This demand for English language skills was especially pronounced in the Oil and Gas (97%) and Transportation (95%) sectors. However, this demand is not currently being adequately met by universities as employers reported that **29 percent of recent graduates were very unprepared/unprepared in regards to English language skills, more than any other skill or knowledge area**. Despite this combination of high demand for English language skills and low supply, a little less than one quarter (23%) of employers offer training.

## 3 Soft Skills are often needed but recent graduates are not always prepared

While “soft skills” such as teamwork, problem solving, initiative, and positive work ethic or attitude were not the most highly demanded skills or knowledge area, **more than a quarter of employers reported that these were “most needed”**. Many of these soft skills were especially important to employers in the Oil and Gas sector. How prepared recent graduates were in these areas varied across sectors and, to some extent, by skill area. Half of employers reported that graduates were very prepared/prepared to work collaboratively with a team, more than any other skill/knowledge area. However, **27 percent of respondents indicated that graduates were very unprepared/ unprepared in regards to critical thinking, 25 percent in problem-solving, and 17 percent in adaptability/flexibility**. Roughly half or more respondents from the Oil and Gas sector found graduates somewhat prepared or somewhat unprepared across all ‘soft skill’ areas. An important outlier is the Telecommunications sector in which 45 percent of respondents reported that recent graduates are very unprepared/unprepared.

## 4

### High need to fill administrative/clerical positions reported for the past 24 months and forecasted for the next 3-5 years

There were no large overall changes in the number of forecasted positions for the next 3-5 years compared to those reported for the last 24 months. **Across both periods, administrative/clerical positions were the most frequently cited type, across all sectors. The exception is Sales** with fewer than half of employers forecasting that they will recruit or hire for this position in the next 3-5 years compared to the last 24 months (from 15% to 7%).

## Methodology

IREX used the opportunity to conduct this survey as a capacity building exercise for Iraqi Career Development Center staff from six career centers in Baghdad and Basra while also providing an opportunity for highly professional student volunteers to meet and interact with company representatives. The selected centers were established and developed through support and technical guidance provided by IREX through the Iraq Higher Education Programs.

Through a collaborative and iterative process, IREX staff designed and reviewed the questionnaire before fielding the survey. The 16-question survey was semi-structured and provided both qualitative and quantitative data.

IREX, in close coordination with the Ministry of Higher Education and Scientific Research, (MOHESR) conducted training for the 135 selected students and career center staff on strategies, communication and etiquette in approaching com-

panies for this labor market survey. Additional training and discussion was held on the survey tool to ensure interviewers fully understood the questions and the level of input desired from companies including nuances in meaning and business concepts.

MOHESR staff translated the survey into Arabic.

Career Development Centers proposed lists of companies for participation based on current and future collaboration with CDCs. IREX consulted on the spread of companies and sectors as well as additional contacts. The Ministry of Higher Education divided the industry contacts among the CDC's student teams. Teams of students arranged meetings with company representatives over a 2-month period gathering data and logging information in an online survey provided by IREX.

## Limitations

In assessing the results of this survey effort, the following limitations should be kept in mind:

- Limited access to employers outside of Basrah and Baghdad, major urban centers, resulted in smaller sample sizes for several sectors; namely, Security, Logistics and Life Support, and Food Services. As a result, the data is less robust for these sectors and especially limited for areas outside of Basrah and Baghdad.
- Companies included in the survey were identified based on previous contacts with career centers, they were not randomly selected and the results, therefore, cannot be generalized to all companies. This is especially true of sectors with smaller sample sizes.
- The position and seniority of interviewees varied across companies, ranging from sales representatives to management staff and human resource staff. The particular role or position held by the interviewee likely affected the level of insight interviewees had on each line of questioning.

# Recommendations

One essential first step in improving competence of university graduates to meet local market demands is to bring industry into planning and discussions with higher education institutions. Higher education leaders should consider ways to foster connection and collaboration with industry including creation of a single point of entry or office to serve as a gateway for industry to connect to various programs and offices.

## Additional recommendations include:



Facilitate sector specific **focus groups** with industry leaders for more detailed and nuanced information as well as recommendations for addressing changes in academic programs.



Creation of **industry advisory boards** or committees for input into academic programs;



Development of a comprehensive strategy and framework for creating **academic standards and competencies** within each academic program;



Prioritize funding for initiatives that develop soft skills of university students such as **experiential education** programs. Internships, apprenticeships and other practical hands on initiatives provide a basis for students to develop skills and gain crucial real world experience.



Expand programs such as **university career centers** aimed at assisting institutions and individuals to connect to private sector.



**Professional development** for academic faculty to support introduction of new instructional strategies and student centered learning models that build the skills needed for success in today's world. Courses can be adapted to include strategies such as problem based and team based learning or capstone projects that require students to work in teams to solve problems, practicing essential skills in an academic setting.

## Further recommendations for key areas:



**IT/Computer skills** training and in particular, training on the application of those skills in the workplace, should be introduced across all academic programs. Partnerships with employers to co-develop or even co-implement training through career development centers could be explored. Universities can conduct a follow-up survey or interviews with employers already providing training to learn what skills, knowledge, and abilities are most needed in regards to IT/Computer skills.



The quality and scope of academic services to develop **English language skills** should be explored further through focus groups and targeted discussions with university faculty and students. Course curricula and instructional strategies for English language programs should be reviewed and revised to ensure they meet global standards and apply best practices documented in similar contexts. English language professors could benefit from professional development and refresher courses in pedagogy. Given the importance of English language skills across all sectors, it is recommended that existing basic English language preparedness courses be required for all students in order to graduate. Lastly, where resources permit, universities could invest in intensive English Language centers to provide supplemental courses for students and alumni.



Programs and university courses that prepare students for administrative/clerical positions should be supported and strengthened as these are and will continue to be important leverage points for improving the overall productivity of many companies. However, the few changes in forecasted positions compared to current positions across sectors may also reflect the high level of uncertainty around Iraq's political and economic future. Respondents may have forecasted the same positions as those current positions in the absence of reliable information. It is recommended that more regular mini-surveys of current positions being advertised be conducted to identify trends in the labor market and improve forecasting.

## II. Introduction



From July to August, 2016, a total of 439 individuals from the private sector were interviewed to gather data on the state of the labor market, with a focus on employers with offices in Basrah or Baghdad. The semi-structured questionnaire covered the following areas of interest:

- The **qualifications** most sought after by employers
- The **perceived gaps** in the preparedness of recent Iraqi graduates
- The **types of training opportunities offered**, if any, to new employees to address gaps in knowledge or skills
- Employer predictions of **education certificates or degrees that will be needed** by their companies in the next 3-5 years.
- **Past, current, and forecasted positions for hire** or recruitment within their companies

### Top 8 sectors by number of respondents

Sector	N	%
Construction	85	19%
Sales and Services	75	17%
Telecommunications	63	14%
Health and Human Services	41	9%
Hospitality	40	9%
Wholesale or retail trade	31	7%
Oil and Gas	30	7%
Finance/Banking	25	6%
Transportation	21	5%

More granular data on which current positions were being filled by expatriate staff versus local staff was also gathered to understand which positions required external expertise. And lastly, employers were asked about their interest in collaborating with Iraqi universities in the future. The goal of this study was to provide partner universities, government ministries, and other interested parties with information that could inform curriculum development and career services.



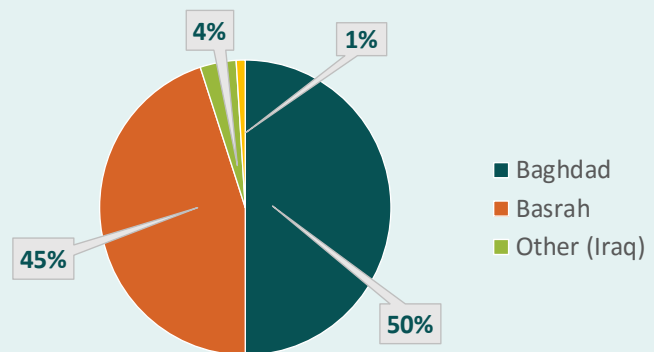
# III. Labor Market Breakdown



## Top 3 sectors in Basrah and Baghdad

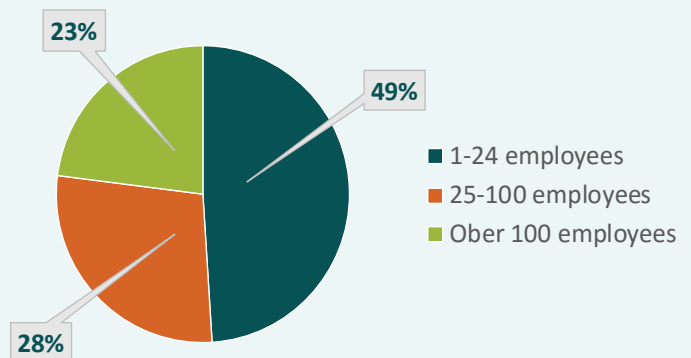
Baghdad	Number	Basrah	Number
Telecommunications	47	Construction	40
Sales and Services	45	Sales and Services	28
Construction	35	Oil and Gas	26

Percentage of respondents by location



A total of 439 individuals were surveyed from companies in more than 13 different sectors ranging in sizes from 1-25 (48%), 25-100 (28%), and over 100 people (23%). As expected, large companies of 100 or more people were concentrated within the sectors of Oil and Gas sector (16 Baghdad/30 Basrah) and construction (27/85). Smaller companies of 25 or less were more common within the Transportation (14/21), Hospitality (26/40), and Wholesale or Retail Trade (16/31) sectors.

Percentage of respondents by size of company



About half of all interviewees were from three major sectors: Construction (19%), Sales and Services (17%), and Telecommunications (14%). Nearly all employers were based in either Baghdad (49%) or Basrah (44.5%). A handful (5) of respondents represented foreign-based companies with headquarters in Amman, Beijing, Berlin, and Seoul. While construction was an important sector in both Baghdad and Basrah (16% and 20% respectively), there were important differences in other areas reflecting the different labor markets in both cities. Nearly 22 percent of employers interviewed in Baghdad were from "Telecommunications", for example, compared to only seven percent in Basrah. Besides Telecommunications, the sectors with the largest discrepancies between cities were "Sales and Services (21% Baghdad, 14% Basrah)", "Finance and Banking" (10% Baghdad, 2% Basrah), and "Oil and Gas" (0% Baghdad, 13 % Basrah)

## IV. Skills or Knowledge Most Needed



All skill/knowledge areas cited by at least 20% of respondents

Skills/knowledge	N	%
English language	297	68%
IT/Computer skills	224	51%
Sales	192	44%
Communication	171	39%
Business Management	160	36%
Accounting	153	35%
Marketing	151	34%
Positive work ethic or attitude	147	33%
Attention to detail and quality	135	31%
Problem solving	134	31%
Customer service	132	30%
Technical skills	128	29%
Finance Planning/managing budgets	107	24%
Teamwork	104	24%
Microsoft Office or other basic office software applications	95	22%
Familiarity with Government Regulations	90	21%

Over 20 skills and knowledge areas were highlighted by interviewees as most needed to solve current industry related problems or to further develop their company. The most commonly listed area was English language skills (68%) followed by IT/Computer skills (51%), Sales (44%), and Communication (39%).

It is also worth noting that three 'soft skills' were listed by roughly a quarter or more interviewees: "positive work ethic or attitude" (33%), "problem solving" (31%), and "teamwork" (24%).

English language skills were rated as one of the two top skills needed across all sectors except Food Services. Nearly all respondents in the Oil and Gas and Transportation sectors cited English as "most needed" (97% and 95%, respectively). However, there was some variation across sectors in other areas. The three soft skills, Positive Work Ethic, Problem Solving, and Teamwork were cited more often by the Oil and Gas sector (48%, 45%, and 31%, respectively) than in nearly any other sector. Only Construction cited Teamwork more often (36%). Business management skills were most important for Wholesale or Retail Traders (52%) and Oil and Gas (59%). One of the areas with the most variation was IT/computer skills which was cited by over 60% of respondents in Oil and Gas, Hospitality, and Telecommunications but cited by 40% or less by respondents in Sales and Services and Construction. The skill or knowledge areas least often cited were CISCO or Other Professional Certificate (average 6%) and Basic Project Management (average 13%).

### Practical skills building needed

"Fresh graduates usually have the academic knowledge without **the ability of applying it in real work environments**. Their skills and abilities should be improved like communications and team work skills."

## V. Preparedness of Recent Iraqi Graduates for Employment



Employers indicated that Iraqi graduates were most prepared for employment in regards to their ability to work collaboratively with a team, their computer proficiency, and communications. Only nine percent of employers said that recent graduates were very unprepared or unprepared to work collaboratively with a team. In contrast, graduates were found to be least prepared for employment in regards to their English language skills, their ability to apply technical skills and knowledge applicable to their company, and problem solving. Nearly a third of all respondents (29%) said that recent graduates were very unprepared or prepared with regards to English language skills.

Not surprisingly, there was some variation across sectors in how employers rated recent graduates. Nearly half of respondents in all sectors reported graduates as prepared or very well prepared to work collaboratively as part of a team with the exception of Telecommunications (37%) and Hospitality (43%). There was also more variation in how graduates were rated for computer proficiency with over half of employers in Food Services, Hospitality, Finance/Banking, Transportation rating graduates as very prepared or prepared in contrast to Wholesale or Retail Traders (27%) and Sales and Services (36%). Similarly, while the majority of graduates were rated as very well prepared or prepared in regards to Communication by Health and Human Services (63%) and Finance/Banking (56%), less than a third of employers from Telecommunications (29%) and Oil and Gas (21%) did. Finally, there was significant variation in the level of preparedness in regards to soft skills. More than 40 percent of respondents said graduates were very well prepared/prepared in terms of adaptability/flexibility in every sector except, notably, Wholesale or Retail Traders (13%), Telecommunications (15%), Oil and Gas (28%), and Transportation (29%). See the table to the right for the sectors reporting graduates as least prepared in four “soft skill” areas.

It is also important to note that there was not always high agreement among employers within a sector. For example, nearly an equal number of respondents from the Health and Human Services sector found that recent graduates were very well prepared/prepared or very unprepared/unprepared in regards to problem solving skills.

### Sectors reporting graduates as least prepared in four “soft skill” areas

<i>Skills/Knowledge Area and Sector</i>	<i>Very Unprepared/Unprepared</i>	<i>N</i>
<b>Initiative</b>		
Wholesale or Retail Traders	26%	31
Telecommunications	23%	62
<b>Problem Solving</b>		
Telecommunications	32%	62
Transportation	32%	21
<b>Critical Thinking</b>		
Telecommunications	45%	62
Wholesale or retail trade	32%	31
<b>Adaptability/Flexibility</b>		
Wholesale or Retail Traders	26%	31
Transportation	29%	21



# VI. Training Offered by Employers



**Percent/Number of employers providing training**

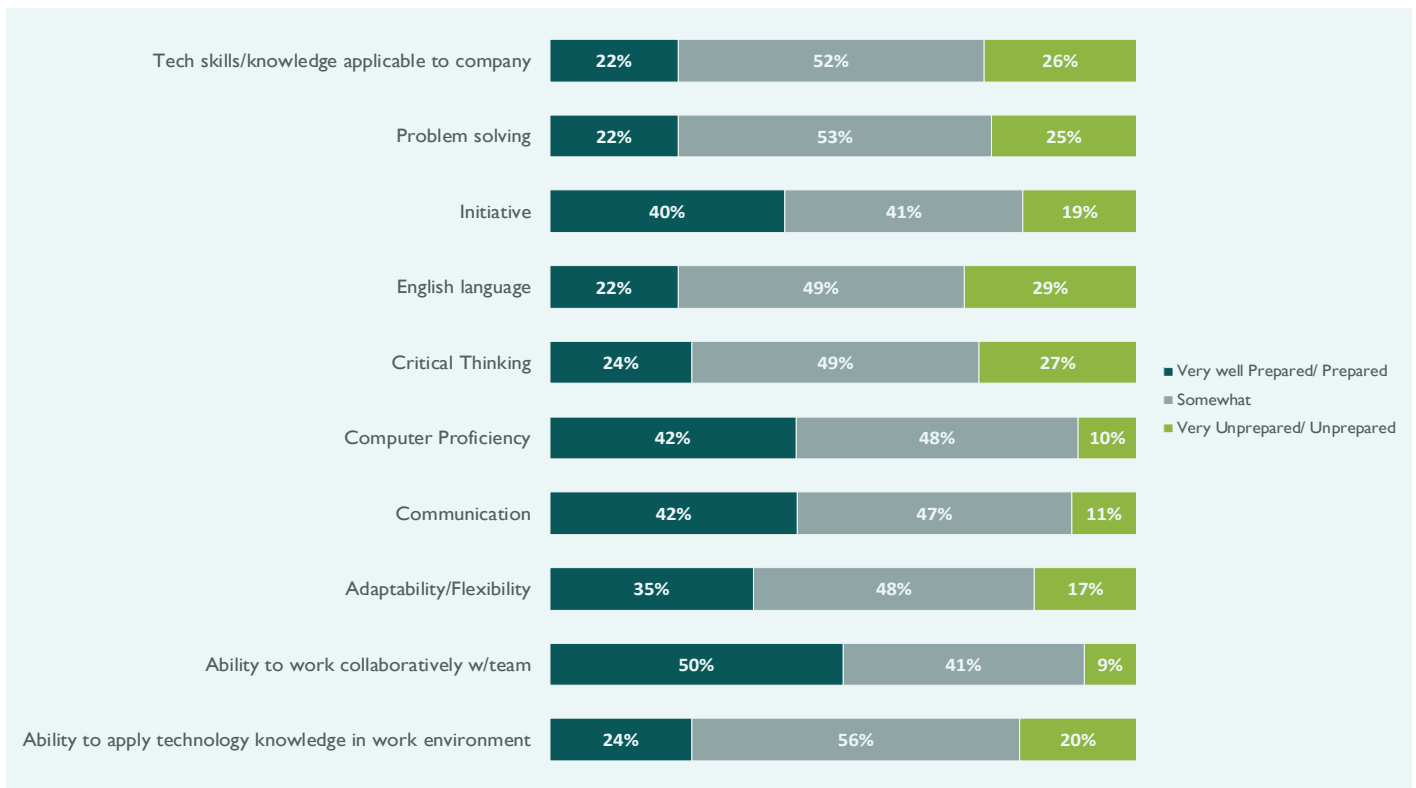
**Level of preparedness of recent graduates**  
Employers rated recent graduates as **most prepared** to work collaboratively in teams and least prepared with technical skills/knowledge applicable to their company

All employers interviewed reported providing some form of training to new employees to fill gaps in knowledge or training. More than half (62%) offer training in one or two areas while up to 16% offer training in up to three areas. The remaining reported offering between 4-9 types of training. The large majority reported offering training in technology, including computers (44%), Microsoft basic office (19%), and Computer systems maintenance (10%). Employers from the transportation sector reported offering training more than any other sector and more than 60% more than respondents in the sectors of Finance/Banking and Food Services. Interestingly, there does not appear to be a correlation between the size of the company and the number of trainings offered.

As expected, employers from different sectors emphasize some form of training more than others. Training in computers was the first or second most frequent form of training offered across nearly every sector with the exception of Oil and Gas

(13%), which prioritized training in health and safety (24%), Telecommunications (14%) which more frequently offered training in communication skills (19%), and the smaller sector areas of Security, and Food Services which also prioritized training in health and safety. Notably, the Finance/Banking sector more frequently offered training in computers (58%) than any other sector employer. Technical based training was reported as offered most frequently by Food Services (27%), Construction (23%), and Wholesale or Retail Traders (15%).

Other training provided by employers were in specialized areas such as lab work and blood collection (Health and Human Services), stock exchanges (Finance/Banking), operation and inspection of equipment (Oil and Gas), and driving skills (Security). Some form of accounting training was noted by employers in Sales and Services, Transportation, and Wholesale and Retail Traders.



## VII. Job Market



### Comparison of past job hires, current positions advertised, and forecasted job hires by sector and by position

For the majority of respondents, job hire forecasts by sector for the next 3-5 years were not very different than job hires reported for the last 24 months. However, there are two notable exceptions. These include “telecommunication” positions, which were 13 percent more likely to be forecasted than reported on as a past hire, and “health and human services” jobs, which saw a 9 percent decrease in the forecast. While “logistics and life support” saw a 56 percent decrease in the forecast, the small number of employers interviewed in this sector make generalizations about the job market difficult to make.

Past and forecasted **positions** as a proportion of total jobs did not vary by more than 4 percent in any one category. However, there is a forecasted decrease in the number of “engi-

neering entry-level” positions – with roughly 4 percent fewer employers forecasting hires for this position. Employers predict a similar drop in administrative/clerical positions in the future with roughly 4 percent fewer expecting to hire for this position compared to actual hires over the last 24 months. The sector showing the largest decrease for this position is Sales moving from 15 percent in the last 24 months to only 7 percent forecasted. Even with this decrease, however, administrative/clerical positions were a significant portion of positions either reported on in the past, currently advertised, or forecasted overall. Other significant changes by sector include a forecasted 7% increase (7 to 14%) in Communications/Marketing positions in the Finance/Banking sector.

Comparison of jobs hired to jobs forecasted by sector

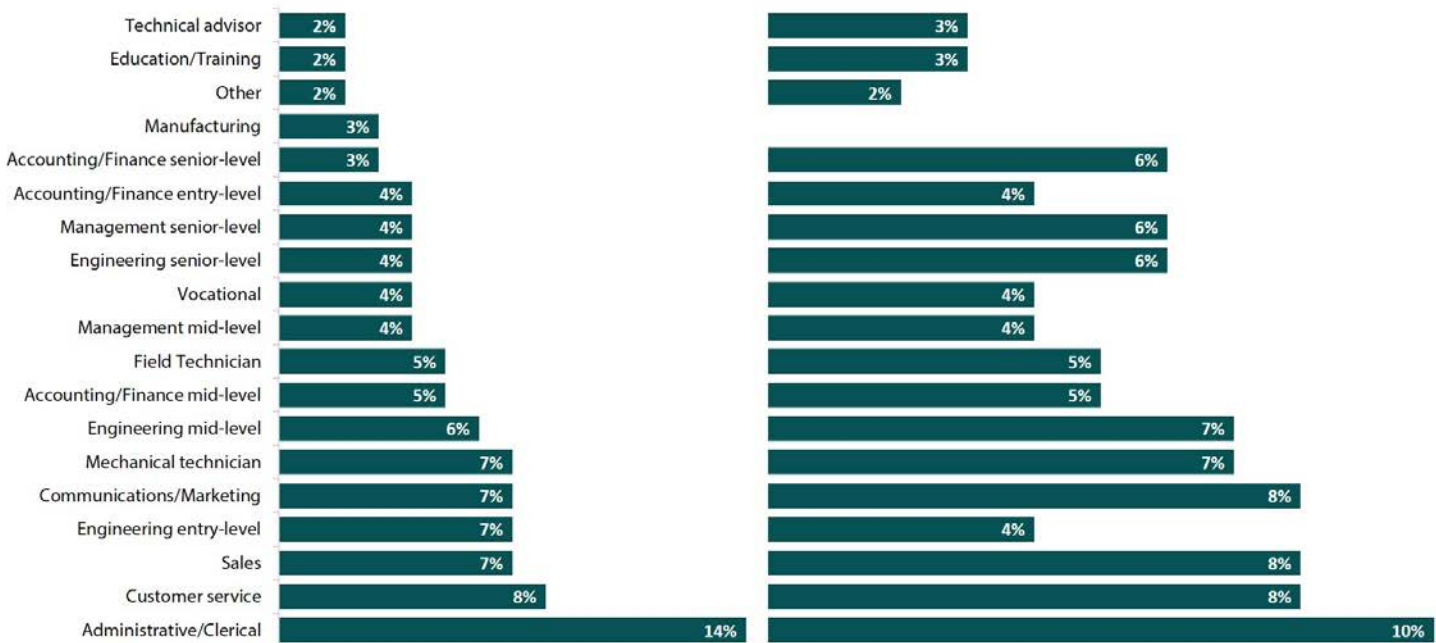
Sector	past 24 months	3-5yr forecast	% Change
Sales and Services	354	359	1%
Construction	416	429	3%
<b>Telecommunications</b>	<b>254</b>	<b>291</b>	<b>13%</b>
Oil and Gas	187	177	-6%
Hospitality	147	150	2%
<b>Health and Human Services</b>	<b>142</b>	<b>130</b>	<b>-9%</b>
Wholesale or retail trade	153	149	-3%
Finance/Banking	90	88	-2%
Transportation	72	70	-3%
Food services	33	33	0%
Logistics and life support	28	18	-56%
Security	54	53	-2%

# Comparison of past and forecasted job hires and recruitment

Administrative/Clerical positions were a significant portion of hires across both periods

Positions hired on recruited in last 24 months (n=1894)

Positions forecasted for hire in next 3-5 years (n=1964)



## Current vacancies and qualifications of local candidates

The number of currently posted jobs by position differs significantly from both past and forecasted jobs; however, it should be noted that the small number of total positions reported (92) for a specific period (current) make it difficult to compare data with past and forecasted positions. The majority of positions advertised in the last 24 months were in the areas of engineering mid-level, management mid-level, and administrative/clerical. Twenty-two percent of jobs currently advertised required an advanced degree and these were spread across six sectors.

Nearly a quarter (21%) of all interviewed employers responded "yes" to a question on whether their company has current vacancies that they cannot fill locally due to lack of qualified local candidates. This was particularly high in the sectors of Oil and Gas (80%), Hospitality (60%), Health and Human Services (59%), and Construction (28%). The lack of qualified candidates to fill current vacant positions may be due to the

seniority of positions currently advertised and the minimum education requirements of these positions (over 90% require a bachelor or above).

### Local & International experience needed

"Most of all having overseas experience is recommended to understand international work quality and practice. For foreigners, localization is important to do business but for local persons, international skill sets are highly required."

## VIII. Comparison of Academic Programs Recruited or Hired From



Respondents reported most frequently recruiting or hiring from the business (74%), applied science (52%), and language academic programs (24%). The remaining academic programs (basic/pure science, health sciences, education, and humanities and arts) were reported by 3-9% of respondents each. Graduates from business programs were most heavily recruited by employers in the Sales and Services (96%) and Finance/Banking (92%) sectors. In contrast, employers from the Construction and Health and Human Services sectors

more frequently reported recruiting from applied science programs (76% and 63%, respectively). The respondents from the Oil and Gas sector reported in equal measure recruiting from the business and applied science programs (72% each). Other outliers include the hospitality sector with nearly half of respondents saying that they recruited or hired from language academic programs.

## IX. Education and Degree or Certificate Requirements



The overwhelming majority of employers (90%) responded that graduates with bachelor degrees would be needed in the next 3-5 years. This trend was true across all sectors. Individuals with **Associate degrees** were also anticipated to be in high demand overall (43%) but especially in the Food Services industry (100%), Security (67%), Wholesale and Retail Traders (58%), and Hospitality (50%)<sup>1</sup>. One in four respondents indicated that individuals with **Master's degrees** would be needed in the next 3-5 years; demand was higher in the sectors of Telecommunications (38%), and Health and Human Services (39%), and Construction (33%). The Oil and Gas industry indicated Bachelor's degrees most often (80%), followed by Associate degrees (33%), and 1-year certificates (20%). Lastly, Health and Human Services reported a forecasted need for Advanced degrees (27%) more often than any other sector and well above the overall average of seven percent forecasting a need for **Advanced degrees** across all sectors.

The need for individuals with Bachelors was also true for positions that were currently being advertised. Of the 47 positions currently advertised with Bachelors as the minimum requirement, ten were from the telecommunications sector and eight from hospitality.

Education	Forecasted need	Current
1-yr cert	43	0
2-yr cert	42	0
Associate	188	1
Bachelor	397	47
Masters	109	1
Doctors	32	14
Other	17	NA

<sup>1</sup>Averages for sectors with few respondents, such as Food Services (7), and Security (9), may not be representative of the whole sector.

## X. Practical Experience Cited as a Need .....



Twenty-eight percent of respondents commented on the need for graduates with more practical experiences and 30 percent on the need for English language skills in an open question to employers regarding any additional comments, recommendations, or suggestions they may have to inform policy and provide input to employment ready skills of local university graduates.

### **Practical experience important**

“In addition to academic part of study, universities should pay more attention to the practical practice and train students and fresh graduates on many basic skills on how to deal with real work environment and improve the ability of responsibilities of staff.”



# Kurdistan Region of Iraq Labor Market Report



## University Linkages Program

January 10, 2017  
IREX  
1275 K Street NW, Suite 600  
Washington, DC 20005

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## Annex: Summary Tables

Table 1: Number of respondents per sector

Table 2: Please list any skills or knowledge most needed in solving current industry related problems or further developing your company

Table 3: Generally, do recent graduates, who seek employment, lack any skills your company wants? Select which skills they lack from the list below

Table 4: What types of training opportunities if any, does your company offer new employees to address skills gaps of locally hired employees?

Table 5: What academic programs do you most frequently recruit or hire from? Please check all that apply

Table 6: How well prepared are recent Iraqi graduates for employment in each of the following areas?

Table 7: Please list your current position vacancies

Table 8: For each of the vacancies you have, select the minimum education requirements necessary to be considered for the vacancy.

Table 9: What positions or position types do you think will be needed by your company over the next 5 years?

Table 10: What educational certificates and/or degree types do you think will be needed in your company over the next five years?

# I. Executive Summary



## Introduction

From September to November, 2016, a total of 109 individuals from the private sector were interviewed to gather data on the state of the labor market in the Kurdistan Region of Iraq, with a focus on employers with offices in Sulaymania, Erbil, and Duhok Governorates.

More granular data on which current positions were being filled by **expatriate staff versus local staff** was also gathered to understand which positions required external expertise. And lastly, employers were asked about their interest in collaborating with Iraqi universities in the future. The goal of this study was to provide partner universities, government ministries, and other interested parties with information that could inform curriculum development and career services.

The semi-structured questionnaire covered the following areas of interest:

- The **qualifications** most sought after by employers
- The **perceived gaps** in the preparedness of recent Iraqi graduates
- The **types of training opportunities offered**, if any, to new employees to address gaps in knowledge or skills
- Employer predictions of **education certificates or degrees that will be needed** by their companies in the next 3-5 years.
- **Past, current, and forecasted positions for hire** or recruitment within their companies

## Key findings, conclusions, and recommendations

### 1 English language

Sixty-six percent of respondents cited English language skills as “most needed”, more than twice as much as any other knowledge or skill area. All six respondents from the Finance/Banking sector cited English language skills as most needed. English language skills were also frequently cited by respondents from Construction (8 of 9) and Oil and Gas sectors (7 of 9). While English language skills were the skill most often cited as most needed, they were also most often cited by respondents as a skill lacking in recent graduates. Sixty-nine percent of respondents report that recent graduates lacked English language skills wanted by their company. Also, while a quarter of employers report providing training in English language skills, those companies that report most needing it are not always able to provide language training. Only 1 of 9 respondents from the construction sector, for example, reported providing training in English language skills.



## 2

### Computer skills are highly valued by employers but are not always adequate in recent graduates

About a third of employers offer training in computers or Microsoft/basic office software. Computer training was also either the first or second most frequent form of training offered across nearly every major sector represented in the survey (i.e. sectors with four or more respondents). The relatively high percentage of employers providing computer training may be correlated to employer perceptions that recent graduates are very unprepared or unprepared (22%) in regards to computer proficiency. This perception was especially strong among respondents from the following sectors: Manufacturing (3 of 4 respondents), Health and Human Services (2 of 4), and Oil and Gas (4 of 9). Similarly, 41 percent of respondents indicated that recent graduates lack computer skills that their company wants. The relatively high frequency of employers providing computer training also reflects the importance placed on computer proficiency. Computer proficiency was the fifth (out of 14) attribute most often cited as “very important” by employers and the second attribute most frequently cited as falling within the top five skills that made a person more suitable for employment or promotion.

## 3

### Soft skills and in particular “critical thinking” and “problem-solving” were often cited as needed but lacking in recent graduates

Only 7 percent of employers reported recent graduates as very well prepared or prepared in problem-solving, less than any other knowledge or skill area. Following closely behind were critical thinking skills, with only 8 percent of respondents reporting them as prepared or very well prepared. Recent graduates were rated better for initiative (20% very well prepared, prepared) and adaptability/flexibility (21% very well prepared, prepared). The soft skill area of problem-solving was also the fourth most commonly cited skill or knowledge areas as “most needed” (24%) to meet industry related problems or develop their companies. Critical thinking and the ability to work collaboratively were not far behind with 22 and 20 percent of respondents, respectively, citing them as “most needed.” The need for graduates with these soft skills is further supported by responses given to an open-ended question inquiring about “industry-specific hiring or human-resource problems that companies or industries face”. About 1 in 4 (27%) of respondents made a note that the lack of soft skills was among one of the top three problems facing their company or industry. In response to a question “what could be done to better equip Kurdistan graduates to enter the workforce”, several specifically made note of the need for “inter-personal management”, “leadership skills”, “creating thinking”, and “learning how to deal with people.”

## 4

### Administrative/clerical positions are forecasted to increase over the next five years

Respondents do not expect significant changes in most types of forecasted positions over the next five years compared to current vacancies. The exceptions include Administrative/clerical positions, with 28 percent employers expecting job vacancies in the next five years compared to just nine percent reporting vacancies currently. There is likewise a 10 percent decrease in the number of respondents forecasting Sales positions compared to current vacancies and a smaller decrease of 4 percent in forecasted Customer Service positions compared to current job vacancies.

## 5

### Important increase in demand for graduates with Bachelors and Masters degrees forecasted for the next five years

Nearly 9 out of 10 respondents (87%) said that positions in the next five years would require a Bachelors. This is a 37 percent increase in the number of employers forecasting vacancies in the next five years compared to the number reporting current vacancies. A smaller but still important increase of about 25 percent is expected for graduates with Masters degrees (39% of respondents forecasted compared to 15% of current vacancies).

## Methodology

Through a collaborative and iterative process, IREX staff designed and reviewed the questionnaire before fielding the survey. The 22-question survey was semi-structured and provided both qualitative and quantitative data.

IREX recruited the Career Development Centers at Soran University and at Raparin University in the Iraqi Kurdistan Region to interview companies. IREX conducted virtual training for staff at both CDCs on strategies, communication and etiquette in approaching companies for this labor market survey. Additional training and discussion was held on the survey tool to ensure interviewers fully understood the questions and the level of input desired from companies including nuances in meaning and business concepts.

The Career Development Centers proposed lists of companies for participation based on current and future collaboration with CDCs. Additional contacts and outreach to industry were conducted via email through the support of the U.S. Consulate, Erbil, Ministry of Natural Resources, Deputy Prime Minister's Office, and U.S. Chamber of Commerce. IREX consulted on the spread of companies and sectors as well as additional contacts. Staff at each CDC arranged meetings with company representatives over a 2-month period gathering data and logging information in an online survey provided by IREX. Over 80% of the data was collected through in-person interviews with company representatives, while 20% was through emailing a link to the survey.

## Limitations

In assessing the results of this survey effort, the following limitations should be kept in mind:

- Enumerators had limited access to employers outside of Erbil and Sulaymania, major urban centers. As a result, the data and analysis is skewed towards employers in these governorates and is less useful for drawing conclusions about the labor market in surrounding regions.
- The size of the sample (109) and the diversity of employers interviewed resulted in some sectors being better represented than others. The small number of respondents in some sectors makes it impossible to generalize about the employer perceptions, hiring practices, or preferences in those sectors. Sectors with less than four respondents include: Agriculture (3), Community Development (3), Education (3), Food Services (3), Security (3), Transportation (2), Legal Services (1), and Travel and Tourism (1).
- Companies included in the survey were not randomly selected. Users of this report should therefore take care when making generalizations about all companies based on the available data. This is especially true of sectors with smaller sample sizes.
- The position and seniority of interviewees varied across companies, ranging from sales representatives to management staff and human resource staff. The particular role or position held by the interviewee likely affected the level of insight interviewees had on each line of questioning.

# Recommendations

One essential first step in improving competence of university graduates to meet local market demands is to bring industry into planning and discussions with higher education institutions. Higher education leaders should consider ways to foster and sustain active connection and collaboration with industry.



Industry leaders cite challenges in accessing offices and individuals in a large, bureaucratic institution. Universities should consider creation of a **single point of entry** or office such as the career center to serve as a gateway for industry to connect to various programs and offices.



Facilitate sector specific **focus groups** with industry leaders for more detailed and nuanced sector specific information as well as recommendations for addressing changes in academic programs.



Creation of **industry advisory boards** or committees for input into academic programs are a vital resource for adapting curriculum and programs to address industry needs;



Development of a comprehensive strategy and framework for creating **academic standards and competencies** within each academic program;



Prioritize funding for initiatives that develop soft skills of university students such as **experiential education** programs. Internships, apprenticeships and other practical hands on initiatives provide a basis for students to develop skills and gain crucial real world experience.



Expand programs such as **university career centers** aimed at assisting institutions and individuals to connect to private sector.



**Professional development** for academic faculty to support introduction of new instructional strategies and student centered learning models that build the skills needed for success in today's world. Courses can be adapted to include strategies such as problem based and team based learning or capstone projects that require students to work in teams to solve problems, practicing essential skills in an academic setting.

## Further recommendations:

Given the importance of English language skills across all sectors and the few employer English training courses provided to meet demand, it is recommended that basic English language preparedness courses required for all students be assessed and professional development training offered for primary and secondary school English language teachers.



It is also recommended that the underlying reasons for poor English language skills among recent graduates be explored further through follow-up focus group interviews with university professors and students. The course curricula for English language programs and the pedagogical methods used by instructors may need to be reviewed to ensure they meet global standards and apply best practices. English language professors may need re-training or refresher courses in pedagogy.



IT/Computer skills and digital literacy training should be introduced across all academic departments. Partnerships with employers to co-develop or even co-implement training should also be explored. If partnerships are not feasible, universities can conduct a follow-up survey or interviews with employers already providing training to learn what skills, knowledge, and abilities are most needed in regards to IT/Computer skills in their specific work environments.



Programs and university courses that prepare students for administrative/clerical positions should continue to be supported and strengthened as demand for well qualified applicants for these positions will likely continue to increase in the near future. However, the few changes in forecasted positions compared to current positions across sectors may also reflect the high level of uncertainty around Iraq's political and economic future. Respondents may have forecasted the same positions as those currently positions in the absence of reliable information. It is recommended that more regular mini-surveys of current positions being advertised be conducted to identify trends in the labor market and improve forecasting.

## II. Introduction



From September to November 2016, a total of 109 individuals from the private sector were interviewed to gather data on the state of the labor market in the Kurdistan Region of Iraq. The goal of this study was to provide partner universities, government ministries, and other interested parties with information that could inform curriculum development and career services.

About 60 percent of respondents were based in Erbil Governorate (66), about a third in Sulaymania Governorate (36), and the remaining from Duhok Governorate (4) or other area. The semi-structured questionnaire covered the following areas of interest:

- The **qualifications** most sought after by employers
- The **perceived gaps** in the preparedness of recent Iraqi graduates
- The **types of training opportunities offered**, if any, to new employees to address gaps in knowledge or skills
- Employer predictions of **education certificates or degrees that will be needed** by their companies in the next 3-5 years.
- **Past, current, and forecasted positions for hire** or recruitment within their companies

### Top 10 sectors by number of respondents

Sector	N	%
Sales and Services	21	19%
Telecommunications	15	14%
Wholesale or retail trade	11	10%
Construction	9	8%
Oil and Gas	9	8%
Finance/Banking	6	6%
Hospitality	6	6%
Health and Human Services	4	4%
Logistics and life support	4	4%
Manufacturing	4	4%

More granular data on which current positions were being filled by **expatriate staff versus local staff** was also gathered to understand which positions required external expertise. And lastly, employers were asked about their interest in collaborating with Iraqi universities in the future.



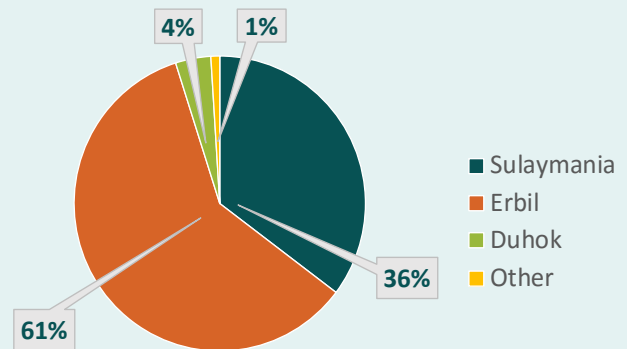
### III. Labor Market Breakdown



#### Top 3 sectors in Sulaymania and Erbil

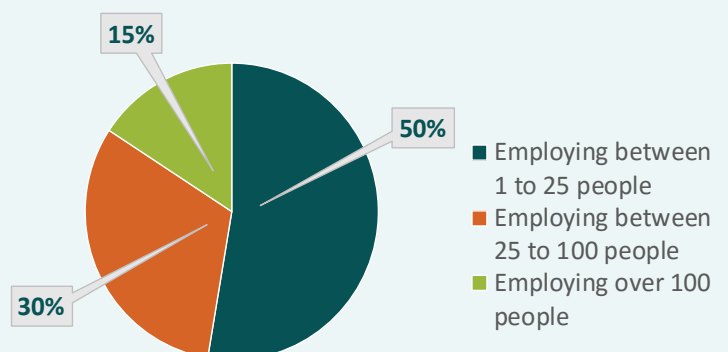
<i>Sulaymania</i>	<i>Number</i>	<i>Erbil</i>	<i>Number</i>
Sales & Services	13	Telecommunications	12
Construction	5	Wholesale or retail	7
Agriculture	3	Oil & Gas	7
Telecommunications	3		
Wholesale or retail	3		

Percentage of respondents by location



A total of 109 individuals were surveyed from companies in more than 19 different sectors ranging in sizes from 1-25 (50%), 25-100 (30%), and over 100 people (15%) . As expected, large companies of 100 or more people were concentrated within the sectors of Oil and Gas sector (5 respondents) and Wholesale & Retail Trade (3 respondents). Smaller companies of 25 or less were more common in the Sales & Services (10) and Telecommunications (8) sectors.

Percentage of respondents by company size



Nearly half of all interviewees were from three major sectors: Sales and Services (19%), Telecommunications (14%), and Wholesale or Retail Trade (10%). Nearly all employers were based in either Sulaymania (36%) or Erbil (61%) Governorate. A handful (4) of respondents were based in Duhok.

There were important differences in how many and which sectors are represented by this survey in Erbil and Sulaymania, reflecting the different labor markets in both governorates. Nearly 34 percent of employers interviewed in Sulaymania were from Sales & Services, for example, compared to only twelve percent in Erbil. Besides Sales & Services, the sectors with the largest discrepancies between cities were Telecommunications (18% Erbil, 8% Sulaymania), and Education (5% Erbil, 0% Sulaymania).

## IV. Skills or Knowledge “most needed” by companies versus “most lacking” among recent graduates



### Top 10 “most needed” skills/knowledge areas

Skills/knowledge	N	%
English language	72	66%
Communication	29	27%
Marketing	29	27%
Problem solving	26	24%
Customer service	26	24%
Sales	25	23%
IT/Computer skills	24	22%
Technical skills	24	22%
Business Management	22	20%
Positive work ethic or attitude	21	19%

Seventy-nine percent of employers interviewed responded that recent Iraqi Kurdistan graduates do not have the skills, knowledge, training or experience needed for jobs at their company. The skills or knowledge most often lacking are very similar to those identified as “most needed” by respondents. Specifically, the skills most often cited as lacking in recent graduates were English language skills (69%), communication skills (49%), technical skills/knowledge (50%), and computer proficiency (41%). Similarly, a significant majority identified English language skills (66%), followed by Communication (27%), Marketing (27%) as most needed to solve current industry related problems or to develop companies. Over 20 skills and knowledge areas were highlighted by interviewees as most needed to solve current industry related problems or to further develop their company. The top ten skills or knowledge areas are shown in the table above.

It is also worth noting that two ‘soft skills’ were among the top ten skill/knowledge areas selected by interviewees: “Problem solving” (24%), “Positive work ethic or attitude” (19%). The ability to work collaboratively and critical thinking were not far behind with 20 and 22 percent, respectively, indicating it as “most needed to solve current industry related problems or to develop their company.”

More respondents reported that English language skills was a most needed skills/knowledge area than any other skill/knowledge area, across all sectors except Manufacturing. English/language skills were most frequently reported by respondents in the Transportation (50%), Health and Human Services (50%), Finance/Banking (29%), and Construction (24%) Sectors. Problem Solving was cited frequently as a “most needed” knowledge/skill area by respondents from the Health and Human Services (75%), and Telecommunications (33%) sectors. Lastly, Technical Skills came through as the most or second most frequently cited knowledge/skill area in five sectors: Oil and Gas (9%), Manufacturing (15%), Construction (10%), and Agriculture (40%).

“Students need to master languages and language skills (English, Arabic and Kurdish) by joining language courses at universities or at private institutes”

– Respondent,  
Logistics and Life Support sector

## V. Industry-specific hiring or human resource problems that companies or industries face



A majority of respondents (59%) cited hiring or human resource problems related to the political or financial environment; specifically, 37 percent cited the financial crisis, 11 percent the political situation, and 11 percent, the weak regulatory environment. Half of respondents cited challenges related to technical skills/knowledge. About a quarter of respondents cited recruitment (28%), soft skills (27%), and lack of experience (23%) among job seekers. About a third noted challenges around English language (19%) or other non-English foreign languages (9%).

Recruitment was the first or second most commonly cited problem among many sectors, including Sales & Services (48%), Finance/Banking (19%), Telecommunications (19%), and Construction (19%). The financial crisis was most often cited by respondents from the Sales and Services (43%) and Wholesale & Retail Trade (24%) sectors as a hiring or human resource problem. Lastly, the **lack of experience** was the most commonly cited problem cited by respondents from the Oil & Gas (19%) and Telecommunications (33%) sectors.

Top hiring or HR problems faced by companies or industries

Hiring/HR problem	N	%
External (economy, political, regulatory)	64	59%
Technical skills/knowledge	55	50%
Recruitment	31	28%
Soft Skills	29	27%
Lack of experience	25	23%
English language	21	19%
Foreign language	10	9%

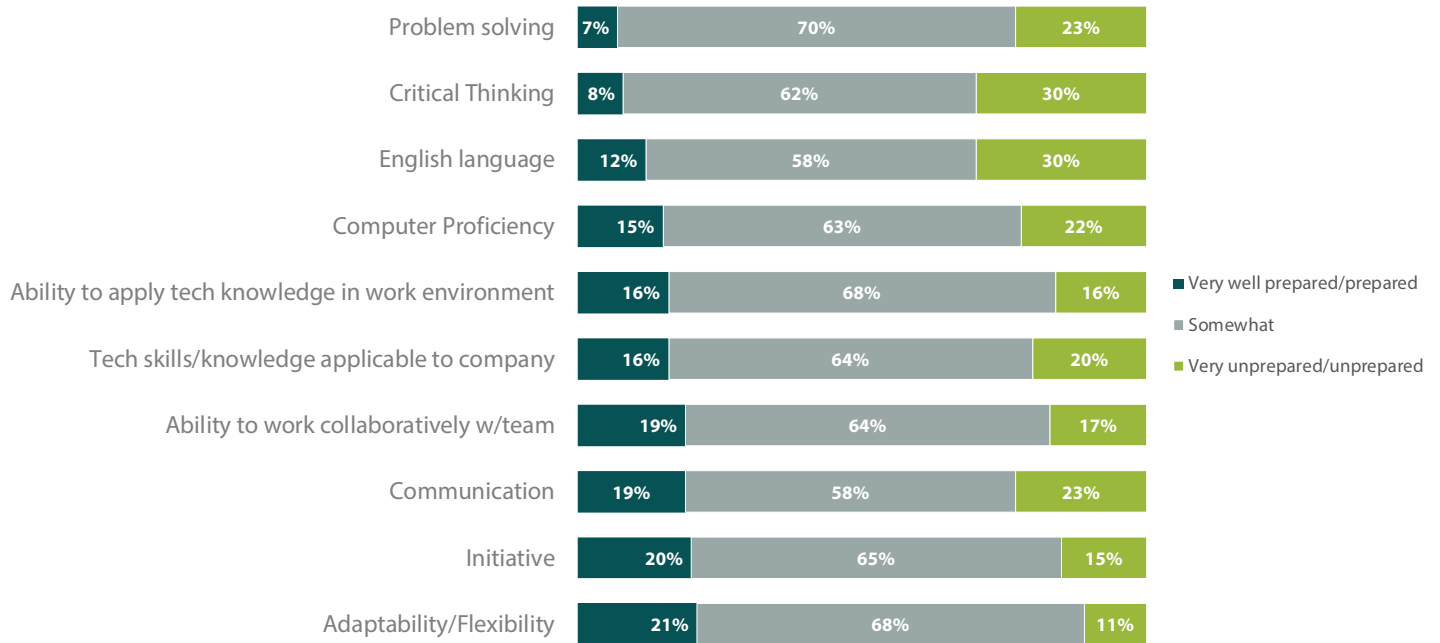


# VI. Preparedness of Recent Iraqi Graduates for Employment



## Level of preparedness of recent graduates

Employers rated graduates as least prepared in terms of critical thinking and English language skills



Nearly half of all employers responded that universities had given their employees very little or little adequate preparation for working in their company. Employers indicated that Iraqi graduates were most prepared for employment in regards to their adaptability/flexibility and initiative. In contrast, graduates were found to be least prepared for employment in terms of their English language and Critical Thinking skills. Only eight percent of employers reported that recent graduates were prepared or very prepared in regards to Critical Thinking skills. It's important to note that answers varied greatly among employers. For example, in Communication, nearly an equal high number of respondents reported students were very unprepared/unprepared (23%) as those that reported them as very prepared/prepared (19%).



## VII. Training Offered by Employers



Sixty-three percent of all employers interviewed reported providing some form of training to new employees to fill gaps in knowledge or training. At least a quarter of employers reported offering training in communication skills (35%), technical based skills (33%), computer skills (28%), and English language (25%). Seventeen percent of employers report providing training in computer and/or technical based training, more than any other training area. Following closely behind is computer training, with 14% of employers reporting that they offer this in some form to their employees.

There is some variation in the number and range of training opportunities currently being offered across sectors. Employers from the Sales and Services Sector reported offering training in every training category and Wholesale or Retail trader sector in all but two. In contrast, the nine respondents in the construction sector only report training in 3 of 8 areas: computers, technical-based, and English. The six respondents in Finance/banking report training in two areas: technical-based and English language.

As expected, employers from different sectors emphasize some form of training more than others. Training in com-

puters was the first or second most frequent form of training offered across nearly every major sector represented in the survey; however, it was most frequently cited by respondents in the Sales & Services sector (6/21) and Wholesale or Retail trade (5/11). In contrast none of the four respondents from Finance/Banking reported providing any computer training and only 2 of 9 respondents in Construction did.

In regards to Communication training, respondents from 14 of the 19 sectors report providing some training in this area. It was most frequently cited by respondents in Telecommunications (6/15), Health and Human Services (2/4), and Wholesale and Retail Trade (3/4).

Interestingly, while English language skills were cited as the most needed skill/knowledge area across all sectors, only a quarter provide training in this area and in most sectors, it is much lower. English language training was most frequently reported in Sales and Services (7/21) and Logistics (3/4). In contrast only 2 of 15 respondents in Telecommunications, 1 of 9 respondents in Construction, and 2 of 11 respondents in Wholesale or Retail Trade report providing English language skills training.

Percent/Number of employers providing training

Training type	N	%
Communication skills	38	35%
technical based	36	33%
Computer	30	28%
English language	27	25%
Health and Safety	8	7%
Computer systems maintenance	6	6%
Email etiquette	4	4%
Microsoft or basic office software	4	4%

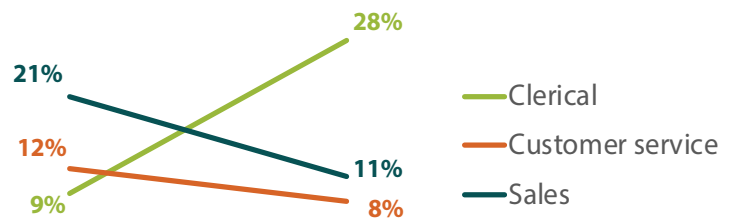
## VIII. Job Market



For the majority of respondents, the number of jobs by position for the next 5 years was not very different than the number of jobs currently being advertised. However, there are three notable exceptions. These include administrative/clerical positions with a 19 percent increase in forecasted positions over vacancies, and sales jobs, which saw a 10 percent decrease. Customer service positions also saw a slightly less drastic decline of 4 percent. The sharp increase in forecasted administrative/clerical positions can be largely explained by the increase in forecasted job hires by respondents in three sectors: Telecommunications (from 0% to 28% of respondents), Wholesale or Retail Trade (from 0 to 28% of jobs) and Finance/Banking (from 0% to 32% of respondents).

The Sales sector reported more current vacancies and forecasted jobs than any other sector. In fact, respondents from the Sales sector reported on average about twice as many current vacancies as those in the Construction sector. Sales respondents reported about 1.5 times as many forecasted positions as respondents from any other sector except Oil and Gas and Logistics.

**Comparison of current vacancies to expected vacancies in next 5 yrs**  
Administrative/Clerical, Sales, and Customer Service positions showed the greatest change

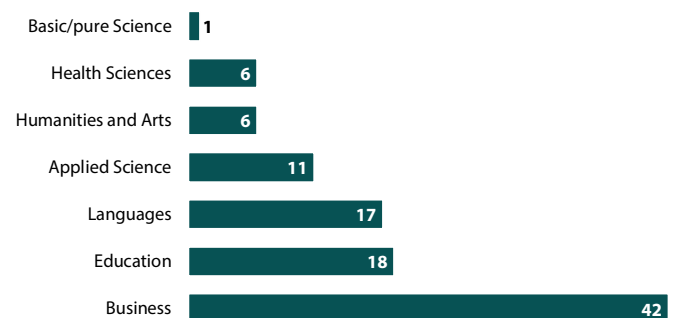


## IX. Comparison of Academic Programs that Employers Recruit or Hire From

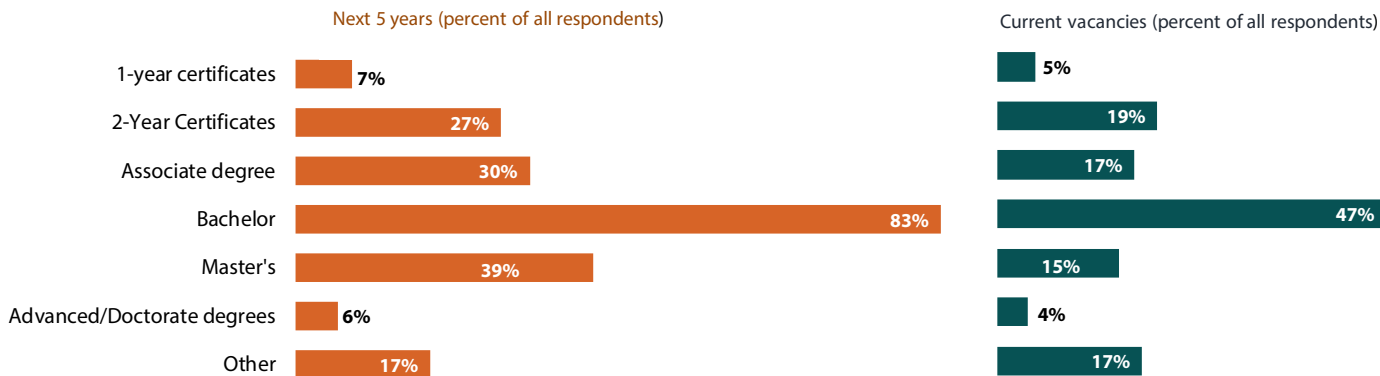


Respondents reported most frequently recruiting or hiring from the business (42%), education (18%), language (17%), and Applied Science (11%) academic programs. The remaining academic programs (basic/pure science, health sciences, and humanities and arts) were reported by 1-6% of respondents each. Graduates from business programs were most heavily recruited or hired by employers in manufacturing (75%) and Wholesale and Retail Trade (55%), and Sales and Services (62%) sectors. Recruitment or hiring from the Education program was more frequently reported by employers in the Security (33%), Manufacturing (25%), and Wholesale or Retail (18%) sectors. Respondents from sectors less well represented in this survey reported more frequently reporting from Humanities programs: Food Services (1 of 3 respondents), Logistics and Life Support (2 of 4 respondents).

**Academic programs employers most frequently recruit/hire from**  
At least twice as many employers report recruiting or hiring from Business programs



## Minimum education requirements for current and future (next 5 years) expected vacancies



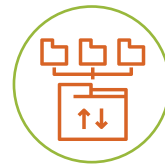
## X. Education and Degree or Certificate Requirements



Employers cited a Bachelor's degree as a minimum education requirement more than any other degree for both current and future expected vacancies. Employers expected the greatest change in education requirements over the next 5 years to be for Bachelor or Master degree holders. About 35% more employers believed that a Bachelor's degree would be a minimum education requirement in the next 5 years compared to current vacancies. The percent of total respondents expecting a Master's degree to be needed also increased significantly by 24 percent from current vacancies. Other degree or certificate requirements saw no or very little comparative increases (less than 15%) in the percent of total respondents. Masters or advanced degrees were most frequently cited as an education requirement for both current vacancies and in the next 5 years by respondents in the Finance/Banking sector (36%), Oil and Gas (36%), and Telecommunications (26%) sectors. In contrast, 2-year certificates or Associate degrees were more frequently cited for current and in the next 5 years by respondents from the Sales and Services (40%) and Wholesale or Retail sectors (44%).

<i>Degree</i>	<i>Forecasted in next 5 yrs</i>	<i>Current vacancies</i>
1-year certificates	8	5
2-Year Certificates	29	21
Associate degree	33	18
Bachelor	91	51
Master's	42	16
Doctors degrees	6	4
Other	19	19
<b>TOTAL</b>	<b>228</b>	<b>188</b>

# XI. Attributes that make a person more suitable for employment or promotion



The attributes most often cited as “very important” by employers did not always correspond with those most frequently cited as falling within the “top 5” attributes. Communication skills, for example, were cited as “very important” more frequently than any other attribute but were not the attribute most frequently cited as falling in a company’s top five. Even more noteworthy is how the ability to present oneself appropriately (e.g. dress, language, etc.) was marked as “very important” more than any other except Communication skills but was marked the least often (four respondents) as falling within the top five.

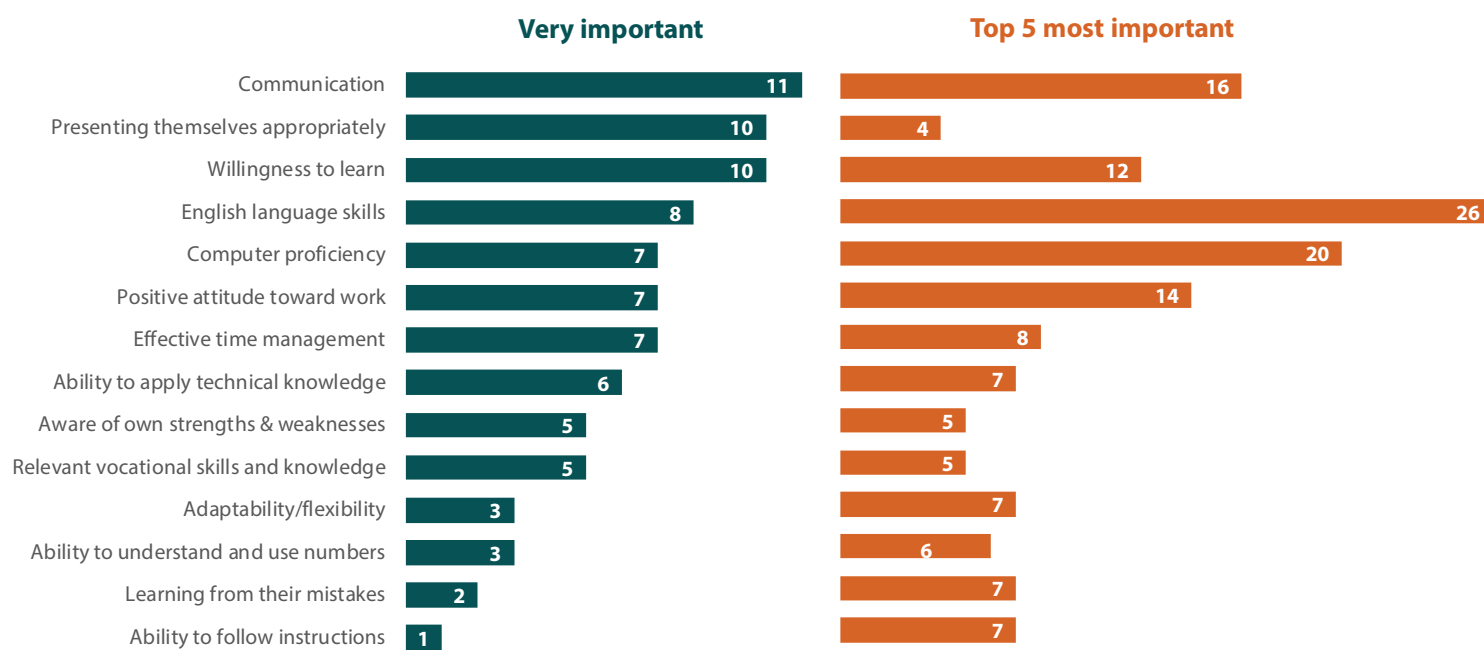
Unsurprisingly, attributes were more important in some sectors than in others. English language skills, for example, were more frequently cited as very important by respondents in the Construction sector (76% of respondents) than any other sector. “Willingness to learn” was cited as “very important” more frequently by respondents in the Hospitality (83%) and

Sales and Services (81%) sectors. Lastly, respondents from the Sales and Services sector cited “willingness to learn” (76%) and communication skills (86%) more than respondents from any other sector.

Within the sector of Oil and Gas, respondents cited the soft skills “adaptability and flexibility” (56%) and “positive attitude” (56%) more than any other attribute as “very important”. Within the Hospitality sector, respondents cited most frequently as “very important” the attributes: positive attitude (83%), ability to present oneself appropriately (83%), English language skills (83%), computer proficiency (83%), and the ability to apply knowledge in the work environment (83%). Within the Construction sector, the attributes most frequently cited as “very important” were “computer proficiency” (89%), English language skills (89%), “willingness to learn” (78%), and critical thinking (78%).

## Attributes that make a person most suitable to employment or promotion

English language skills were most frequently cited as falling in the top 5 attributes but communications skills were more often cited “very important”



## XII. The importance of technical skills and practical experience



Nearly all employers (95%) believed experience and job-related skills increase the chance of a graduate's employability when they apply for jobs in their company. About an equal number of respondents selected technical skills as "most important" for a job applicant to include on their resume as those that selected experience. However, in four sectors, at least twice as many respondents selected experience over technical skills: Construction (6 of 9 respondents), Sales and Services (15/4), Telecommunications (15/5), Hospitality (3/1), Wholesale or Retail Trade (8/2). Finance/banking was the only major sector represented by this survey with more respondents citing technical skills over experience (4 of 6 respondents). In an open-ended question to employers regarding suggestions for how Kurdistan graduates could be better prepared to enter the workforce prepared to address real world industry problems, about half stated that more practical experience is needed with many employers (17) specifically recommending internships.