

# THE TEXAS LABOR MARKET DASHBOARD

A TOOLKIT OF JOB MARKET DATA FOR UT SYSTEM CAMPUS LEADERS

## CASE STUDIES



### CASE STUDY #1

#### CASE STUDY

**I am a department chair. I want to ensure curricula are aligned with current and future market demands.**

#### RESULT

**The curriculum for the Computer Science degree program should be modified to include instruction in Python. More efforts need to be made to attract students to this in-demand field, including educating students on the three certifications necessary for employment. Finally, we must decide whether or not to offer these certifications in the future.**

#### HERE IS HOW I ARRIVED AT THIS DECISION

My supervisor directed me to the Texas Labor Market Dashboard when we were evaluating curricula. After communicating with my supervisor and reviewing the contents of the dashboard walkthrough from the Resources tab, I feel comfortable utilizing the dashboard to answer my questions. I am particularly concerned about the Computer Science degree program. I worry the skills and certifications offered to students at my institution are not aligned with the current and future labor market trends because I know the tech field is quickly evolving.

Many of the graduates from our program become software developers. I first navigate to the Occupations & Skills report tab and select "Software Developers, Applications" from the Occupations table. The Skills most in demand are Java, SQL, and Python. I'm starting to have concerns because we do not provide instruction using the Python programming language. I want to gain more understanding of how skills required for this occupation might change by education and experience levels. To discover this, I apply the Education Level filter at the top of the page to see the data for Bachelor's degrees and Master's degrees. There isn't much difference in the top requested skills by Education Level. I also check what happens with the various years of experience by changing the Experience Level filter; but once again, I am not seeing large differences in requested skills by Experience Level.

I move on to the Growth & Location Quotient report tab to see how the demand for software developers in my metropolitan area compares to demand nationwide, particularly for the three previously identified skills: Java, SQL, and Python. I am also interested in the Projected Growth for this occupation and these skills. In the table on the left, I am able to select the "Software Developers, Applications" occupation. The Projected Growth and Location Quotient are very high. This is reassuring to know because there is expected growth for this occupation, as well as local demand, but I'm concerned we are not meeting this demand as an institution. We only have 10 graduates per year from this program.

I then move to the right-hand side to view these metrics for skills: Java, SQL, and Python. All three of them have a Location Quotient category of "Very High." When I look at Projected Growth, I see a yellow arrow for growth next to Java, and SQL, indicating a small projected increase in demand for these skills. However, Python has a green arrow with a projected growth of nearly 20%. I now realize we need to emphasize Python instruction because it is in demand in the current job market, and the demand is expected to increase. One method I plan to use to promote Python skills is to offer a micro-credential for a Python coding bootcamp. These data also reiterate that my institution needs to make more effort to attract students to this program because we are not likely to meet the market demand for this occupation and associated skills if we only have an average of 10 graduates per year.

I am also interested in expanding the certification offerings for the Computer Science students. I pull up the Certifications - by Occupation Family report tab to review which certifications fall under the "Software Developers, Applications" occupation. "Security Clearance" is highly requested, as well as "IT Infrastructure Library Certification" and "Certified Scrum Trainer." Since we do not currently offer any of these certifications, I want to develop these certification options within my institution, and/or make students aware of the market demands for these certifications.

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## CASE STUDIES



### CASE STUDY #2

#### CASE STUDY

**I am a campus leader overseeing academic offerings. I want to identify gaps in offerings to create new programs aligned with market needs.**

#### RESULT

**I am proposing a new program in the business school with a focus on management.**

#### HERE IS HOW I ARRIVED AT THIS DECISION

A colleague from another UT institution points me to the Texas Labor Market Dashboard tool. Based upon the information presented in the dashboard walkthrough from the Resources tab, I feel comfortable with the contents and functionality of the dashboard and I am ready to navigate it to gain insights.

First, I visit the Occupations & Skills report tab on the dashboard. I immediately set the filters at the top of the page to "Bachelor's Degree" for education and "0 to 2 years" for experience to limit the data to job postings that are applicable to our students completing their undergraduate degree and entering the job market. I also set the Metropolitan Area filter to the location of my institution, as previous analyses have shown our graduates predominantly stay in the area.

I focus my attention on the "Bachelor's Degree" column in the Occupations table. I examine the top occupations by number of job postings, and consider my institution's program offerings to ascertain if we have existing programs that meet the demand for that occupation. Registered Nurses is the top occupation, but we already have a program for that. I notice many of the other top occupations are related to Management (e.g., managers, sales managers, medical and health services managers, marketing managers, etc.). However, our institution does not currently offer a Management concentration or a related degree. I am beginning to think that Management is a potential new program offering.

I want to find out more information about management occupations, so I move to the Growth & Location Quotient report tab. I look for the Management occupations previously identified in the Occupations table in the Occupations & Skills report tab. Now I am able to examine the Projected Growth and Location Quotient for these occupations. I see all green arrows for Projected Growth, so I know the demand for these Management occupations is likely to increase. The Location Quotient for three of these occupations is categorized as "High" or "Very High," disclosing there is higher demand for these occupations in my area than in the rest of the nation. These new data points on Projected Growth and Location Quotient support my thought that Management is an area of critical need in the labor market. Since our institution is not currently meeting that need, I decide to propose a new program in the business school with a focus on management.

### ACCESSING THE DASHBOARD

You can access the Dashboard along with helpful context, instructions, and resources by using the following link: <https://data.utsystem.edu/FutureOfWork>.

OIRA will expand and update data regularly to ensure the Texas Labor Market Dashboard continues to provide a timely and comprehensive look at the Texas labor market.