

Cloud Computing Regional Advisory Committee Minutes Los Angeles County

May 29th 10am – 11:30am

Audio Recording

Speakers / Employers at the event:

- Dan Macfetridge, Global Employer Lead at Amazon Web Services (AWS)
- Joanne Peterson, Chief of Human Capital and Development at Los Angeles Metro
- Kevin Griffin, Senior Practice Director of Technology Enablement at Slalom Consulting
- Manish Bhardia, Partner at Think AI Corporation
- Mariana Holliday, International Program Manager on the AWS Educate Cloud Degree Team
- Mike Berman, Principal Program Manager for AWS Educate
- Myra Roldan, Lead Technical Curriculum Program Manager on the AWS Educate Cloud Degree
 Team
- Wendy Pantano, Senior Technical Recruiter at CDW Integrated Technology Solutions

Recommendations:

- Introduction to cloud computing as a course entry to the program will allow ramping up technical professionals and serve non-technical professionals as it pertains to procurement, upgrades and workforce transitions.
- Including electives to a core program will allow for the flexibility in many occupations necessitating programing, database management or serverless architectures.
- Include a course focused on security due to the importance of the topics to many companies.
- Cloud architects functions include mitigation strategies for ongoing secure environment and infrastructure maintenance.
- Include work-based learning opportunities to practice soft-skills development especially to articulate cloud technologies during interviews.
- Include visualizations to communicate insights on cloud data of architecture.
- Include project based learning to practice project management.
- Include hiring preparation programs along with curriculum for development of passion and cultural fit.
- Include methods for student certification practice and preparation.

Motions:

- 1. Approval of model Certificate of Achievement for Cloud Computing
 - a. Motion Proposed by: Mike Berman
 - b. Motion 2nded by: Charlotte Augustein, Regional Director Employer Engagement
 - c. 12 unit Core Cloud Courses (Introduction to Cloud Computing, Computer Engines, Data Base Essentials and Security) per submitted curriculum proposals.
 - d. Additional minimum of 6 unit in electives accordance to student focus per submitted curriculum proposals.
 - e. Motion Approved
- 2. Approval of Associate Degree in Cloud Computing
 - a. Motion Proposed by: Dan Macfetridge
 - b. Motion 2nded by: Myra Roldan
 - c. 27-30 units constituting core of Cloud Courses (12 units) and additional IT courses in support of the cloud core subject selected as electives and college specialties.
 - d. Additional 30 33 units of general education courses including English, math, and business courses to complement the technical major of focus.
 - e. Motion Approved

The Center for a Competitive Workforce (CCW) hosted a virtual Regional Program Advisory Meeting on the future of Cloud Computing workforce needs, on Friday, May 29, 2020, in partnership with the Los Angeles County Economic
Development Corporation (LAEDC). This was the final meeting of seven scheduled in the first half of this year, each focused on different high-growth middle-skill occupations. These meetings have an intimate roundtable feel and serve to guide community colleges in their curriculum development and strengthen their position as the leading source of future talent in the region.

Los Angeles County Community Colleges experienced 67% enrollment growth in Cloud Computing courses from Fall 2019 to Spring 2020, and as shown below, have had over 3,000 student enrollments from Fall 2017 to Spring 2020. When a sample of 328 of these students were surveyed, 43% had a Bachelor's or Master's Degree and were utilizing a Community College Cloud Computing Program for career advancement and/or career exploration. Notably, 65% of those surveyed had no previous IT work experience.

Spring 2020 Fall 2019 El Camino Summer 2019 ELAC Glendale LA Harbor Spring 2019 LA Mission LA Valley Fall 2018 Long Beach Pierce Santa Monica College Summer 2018 West LA Spring 2018 Fall 2017 0 100 200 300 400 500 600 700 800 900 1000

Figure 1: Enrollments by Term

In addition to the CCW team and Regional Directors, sixteen Los Angeles County Community Colleges participated in this discussion with industry representatives from <u>Amazon Web Services</u>, <u>CDW Integrated Technology Solutions</u>, <u>Los Angeles Metro</u>, <u>Slalom Consulting</u> and <u>Think AI Corporation</u>.

Each employer came with a unique perspective, representing a variety of industries and experiences. Common themes emerged and were quickly agreed upon; key discussion points and industry insights are included below.

Industry Workforce Trends:

- There is an increasingly high demand for Cloud architecture as companies continue to migrate into the Cloud—a trend accelerated by COVID-19.
- Companies are seeing the value of moving their processes to the Cloud and need to hire people with technical skills as well as problem solving skills.
- Successful workers in the Cloud space are able to evaluate internal systems for Cloud migration strategy as well as Cloud systems maintenance.
- There is a high demand for early career talent that understands Cloud and has the imagination to grow in their careers. Companies are looking to hire folks who exhibit a clear desire to keep learning and improving (e.g. getting advanced certificates).
- One new dimension employers are reporting is that non-technical roles in other industries including law, project management, purchasing, and accounting are increasingly needing to understand Cloud basics. Comfortability with Cloud is becoming a key differentiator in candidates applying to non-technical jobs. This will continue to be a growing trend as lawyers need to utilize Big Data, purchasing needs to understand Cloud elasticity principles, etc.

• Technology and the Impacts of Automation:

- o Skills that are highly coveted in the industry include basic programming skills like C++, C# and Java. Additionally, database skills like SQL, Oracle and MySQL, and API programming ensure workers' ability to completely execute a project from end to end.
- Another large piece of this industry is security—an increasing concern for companies.
 Competitive workers address both Cloud technology and the protection needed with Cloud solutions.
- Application modernization is a significant business need that is often included under the umbrella of server migration.
- When faculty asked which sectors were in the greatest need for these technologies, employers expressed their understanding that the public sector is most in need of migration as an industry, with the challenge of both cost and capability. Those in the meeting suspect the current economic crisis will accelerate that migration process.
- The two most prominent company needs are: migration strategy and ongoing, secure environment/infrastructure maintenance.

Opportunities to Bridge Knowledge, Talent and Certification Gaps:

- Employers agreed that combining Cloud skills with soft skills make a truly strong candidate.
 Companies want to hire folks who are able to have conversations and work with those who are not tech-savvy.
- o **Furning new Cloud data into insights for businesses** is highly desirable.
- o **Project** management skills and certifications are also a current workforce gap.
- o Industry representatives expressed the challenge of finding candidates who speak the languages of both Cloud and business; encouraging faculty to continue to teach students communications, leadership and psychology.

• Entry-Level Talent:

- o In hiring for entry-level talent, employers are seeking nimble, solutions-oriented professionals who can implement change beyond technical abilities.
- Companies are continuing to prioritize cultural fit, passion, leadership and values in their hiring processes.
- Industries experiencing high demand for Cloud talent include manufacturing, financial services, logistics, and professional services.
- It was shared that companies like Google, AWS and Facebook are deliberately removing four-year degree requirements for many entry-level roles. As an example, AWS is redefining job descriptions to include AWS-approved programs of study as an indicator of value for select roles. Employers in the meeting expressed their expectation that this trend will continue to grow.
- Overall, employers all highlighted the importance of: commitment to learning (upskilling and additional certifications), technological curiosity, understanding of the "why" behind tools, and passion for the industry.
- As a reaction to everything going on in the world today, the technology space is thriving.
 Organizations are needing to change for their own sustainability and growth—an incredible opportunity for people in the Cloud Computing workforce who are able to help companies become more nimble, interactive, optimized and secure.

Thank you to our industry and community college representatives for their participation and insights! Data-driven, college-industry partnerships are key to ensuring Los Angeles' local workforce is highly competitive across industries.

For questions, please contact Isabel Duran at Isabel.duran@laedc.org.

This post was written by Claire Anderson, LAEDC.

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