SILICON VALLEY **BUSINESS JOURNAL**

WORKFORCE DEVELOPMENT

Portraits of success

PATHWAYS TO EDUCATIONAL AND CAREER OPPORTUNITIES ABOUND IN SILICON VALLEY'S ROBUST ACADEMIC ECOSYSTEM

BY KATY SMITH, Silicon Valley Business Journal contributor



ocal leaders representing community colleges, K-12 education and career-technical education know all too well the challenges of building a workforce that can meet demand in tech, healthcare, environmental science and the building trades.

Silicon Valley Business Journal recently heard from four such experts, who bring a combined 100-plus years building the educational and workforce sectors in California. During a 90-minute conversation with Tom Zahiralis, SVBJ market president and publisher, these leaders shared their insights and told stories of successful academicindustry collaborations that changed students' lives.

The participants were:

 Alyssa Lynch, superintendent of the Metropolitan Education School District (MetroED) in San Jose, who has spent three decades in career technical education.

- Mary Ann Dewan Ph.D., Santa Clara County Superintendent of Schools, who has spent 37 years in the field of education.
- Maniphone "Moni" Dickerson, vice president of strategic partnerships and workforce innovation, San Jose City College. Dickerson has spent 20 years in workforce and curriculum instruction.
- Kristina Whalen, president of Foothill College, who has held roles in higher education in California for 20 years, including

stints at Las Positas College and City College of San Francisco.

The following conversation has been edited and condensed for clarity. Listen to the full conversation at our website.

Tom Zahiralis: Is a college degree still necessary today? And what's better for today's workforce: a twoyear degree or more?

Maniphone "Moni" Dickerson: Yes. Companies still look at degrees when they are deciding which employees to keep during an economic downtime. So having a degree is a layoff-proof strategy.

As for what degree, it depends on the occupation. Many at entry level require two-year degrees, and certificates are conducive to getting you direct employment. If you're inclined to get to bachelor's-level occupations, like engineering or physician's assistant, you'll need a four-year degree.

Alyssa Lynch: In some careers, students can receive training and go right to work. This may lead them to a two-year or four-year degree. Training for electricians, heating, ventilation, and air conditioning technicians, and some administrative assistant positions will probably lead them to college. But I don't think that every single student needs to have a two-year or four-year degree.

Mary Ann Dewan: In education, certificated positions do require degrees—teaching, counseling, becoming an administrator. Beyond that, some people find value later in life to have their credential or their degree from a university in terms of career change possibilities. A

MEET THE EXPERTS:



MARY ANN
DEWAN
Superintendent
Santa Clara County Office
of Education

Dr. Mary Ann Dewan, the Santa Clara County Superintendent of Schools, has served in education for over 33 years. Her distinguished work in education reform and change leadership is grounded in her commitment to serve the community and un-derserved, vulnerable youth and a mission that is centered around diversity, inclu-sion, equity, and social justice. A strong advocate for the expansion of early learning services, health, and education, Dr. Dewan believes in providing each and every child opportunities that promote high quality, equitable, and inclusive experiences.



MANIPHONE "MONI" DICKERSON

Vice President of Strategic Partnerships and Workforce Innovation San Jose City College

Dr. Maniphone Dickerson is currently the Vice President for Strategic Partnerships and Workforce Innovation at San Jose City College. Prior to the Vice President role, Dr. Dickerson served as Division Dean for Business and Workforce Development. Dr. Dickerson has over twenty years of higher education experience as an administrator, staff, and instructor. Her experiences included workforce development partnerships, and grant management funds for Perkins, Strong Workforce, National Science Foundation (NSF) Advanced Technology Education (ATE), online Career Education Pathways, Guided Pathways, Asian American Native American Pacific Islander Servicing Institute (AANAPISI), Education Innovation Fund, Rising Scholars and many career pathways funds. Dr. Dickerson has also served as an administrator and researcher at the University of South Florida, Florida International University, and Southern Connecticut State University."



ALYSSA LYNCH
Superintendent
Metropolitan Education
District (MetroED)

Alyssa Lynch serves as the Superintendent of Metropolitan Education District which operates Silicon Valley CTE Center, the largest Career Technical Education Center in Northern California, and Silicon Valley Education Adult Education for six school districts in Santa Clara County.

For 30 years Alyssa has been a champion for Career Technical Education state-wide. While at Metropolitan Education District, she has brought in over \$15 million dollars in grant funding and started programs in response to the labor market.

Alyssa has been active with local rotaries, the San Jose Chamber of Commerce, Work2Future and Santa Clara County School Board Association. She has been awarded 2008 Career Technical Education Administrator of the Year, 2016, Silicon Valley Business Journal Women of the Year, 2018 Superintendent of the Year and recognized by Santa Clara County Office of Education Women's' Leadership Network in 2023 for contributions in education.



KRISTINA
WHALEN
President
Foothill College

Dr. Kristina Whalen is the 8th president of Foothill College. She started in the role in March 2023 after serving four years as a vice president of instruction at Las Positas College and one year as the associate vice chancellor of Enrollment Management and Instructional Success at City College of San Francisco. While in these positions, Dr. Whalen played an active role in strategic planning and accreditation and has developed a special commitment to data-informed practices to improve the student experience. She has been nationally recognized for her leadership and was recently a member of the Aspen Institute's 5th cohort of Presidential Fellows for Community College Excellence.

number of people who come into education as a second career come in already having earned a college degree.

Kristina Whalen: When you look at the aggregate data on the Public Policy Institute of California website, it tells a pretty powerful story on the economic mobility and earnings potential from earning a college degree. But of course, when you disaggregate that data, you see that some degrees don't really increase a student's earnings or mobility, while others do.

What about work experience or strong technical skills? How necessary are those in today's marketplace?

Lynch: In today's marketplace, a combination of work experience and technical skills is necessary to be successful. Artificial Intelligence is something everybody needs to have as a new skill. It gives you a competitive advantage. Just to give you an example, I hired someone two years ago because they had an automation skill. They were able to put a lot of our work online. That was a chief business officer position, which you may find surprising. But the technical skills and the automation were pertinent to the work we needed to do in our institution.

Dickerson: I would concur with this. Every occupation right now needs technical knowledge and technology know-how. You really can't go into an occupation without knowing how to work an iPad or a computer or generate reports.

Dewan: In some industries, the workforce is highly competitive. Having strong technical skills can help someone set themselves apart and bring them opportunities even during tight job markets.

How well are high schools and colleges helping their students prepare for what comes next? And what role do counselors play?

Whalen: In the school district I worked in previously, there was a strong connection between the high school districts and the regional occupational programs. That connection prepared students with a range of options, and there was a high rate of students going from high school on to college. But there were also other avenues to a career path, and that happened

through the partnership structure that existed among the K-12 schools, the community colleges, the universities and the regional occupational program.

Dickerson: San Jose City College is part of the California Regional K-16 Education Collaborative, so the intentionality has been forged for all of us in this region to support our students when they are moving from the high school. We're working to make sure the high schools, the two-year institutions and the four-year institutions are aligned, so students don't have to repeat courses or start over. We're consciously making that effort to create a seamless transition for the students. Many of us are offering dual enrollment.

Dewan: In the K-12 setting, we have been learning more about the best ways to talk to students about their futures, starting conversations about both college and career pathways and what might be necessary for them to enter those jobs are now starting at a younger age. The state of California has provided some great frameworks for earning A-G credentials and dual credit opportunities. We do have counselors in our schools, although the ratio of counselors to students could be improved. That's why we also talk about how it's not just the counselor's responsibility, or opportunity, to prepare young people.

Lynch: In the 1980s, there was one pathway-every student should go to college. Vocational education was treated as something you should not be proud of. Fortunately, about 10 years ago, they added career readiness, and it became popular. Students in career technical education (CTE) classes gained the ability to apply their course toward UC "a-g" requirements. This really changed the trajectory for CTE programs. Today, 87% of MetroED students go to college. When I started in 2013, it was only 36%. One key point I want to make for high school counselors is that when you don't talk about CTE, you're doing students a disservice. Students may go on to a two-year college or four-year university and attend Stanford, University of California, or California State University and pay \$30,000. Then, when they graduate, realize they're not actually interested in what they just studied. That happens a

"Community colleges want to talk with industry groups to learn about shortages of qualified applicants and skills gaps, and they will partner on writing curriculum."

KRISTINA WHALEN

lot, which is why I'm happy they're talking about career readiness starting in the early grades.

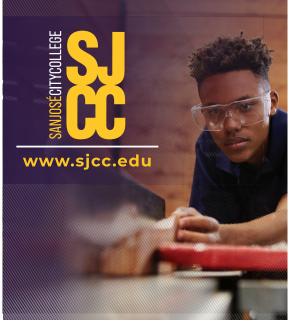
Dickerson: Like in K-12, at two-year institutions, we don't have enough counselors. So we're advocating for having academic advisors and staff advisors, and we do a lot of outreach with our Counselor Day to educate them about our programs and link to employers. We also have initiated student ambassadors, because students are the best source to tell other students.

Whalen: Data from Foothill's service area showed we were losing a student population coming from an adjacent school district. Because

we must use all the tools at our disposal, we have moved a lot of our high school outreach work to outreach specialists. But I really like the model many of us continue to use in the community college world, which is having counselors who are liaisons with particular high schools. That embedded model has worked well.

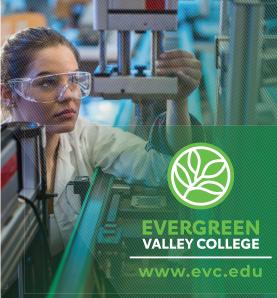
For those who decide to go the college route, what steps do you think universities need to take to better prepare students for the workforce?

Dewan: The opportunity to practice and develop soft skills is really helpful in preparing students for the









workforce and for universities. That includes teaching students how to establish and build a professional network, giving them strategies to achieve work-life balance, and helping them learn to advocate for themselves professionally and personally.

Dickerson: Our industries across the board tell us they need a workforce with those soft foundational skills, no matter how heavy their technical skills are. They need the ability to contribute in a collaborative team environment and be good communicators. Students must be able to advocate for themselves, to speak up when a machine goes down, to put in their feedbacks or suggestions in a team meeting. Due to COVID, for our students in the next generation, the connectedness has dissipated, and we must work harder in engaging them to learn communications skills. Even in a simple networking environment-how do they approach somebody and manage their anxiety level to have a conversation?

Lynch: High school students can really benefit from hands-on experience related to their desired

"The opportunity to practice and develop soft skills is really helpful in preparing students for the workforce and for universities."

MARY ANN DEWAN

college major so they can determine if that's something they're actually interested in. I would go so far as to say colleges should make such internships a requirement. In high school, if you're only academically focused, how well-rounded are you? Getting that work experience sooner rather than later builds character as well.

How can local businesses partner with your organization to gain access to a pipeline of well-trained students?

Lynch: I think it starts with companies in Silicon Valley, such as Google, opening their doors. When students visit a business on a field trip, they remember what they see. Another component is internships. It's vital for employers to be able to try on a student and for the student to be able to try on a company. Job shadowing is also important. Just going out for a day really opens students' eyes to what the possibilities may be. Advisory meetings are also great, once or twice a year. Businesses can meet with a small group of educators to evaluate course outlines for updates to better prepare students. Companies can also send guest speakers to talk about their pathways. Mentoring is another valuable option as well.

Whalen: We invite businesses to join our advisory groups at Foothill College and help refine the curriculum so it speaks to industry needs. Community colleges want to talk with industry groups to learn about shortages of qualified applicants and skills gaps, and they will partner on writing curriculum. Businesses can also provide "learn and earn" programs.

Dickerson: At San Jose City College, we're very focused on diversity, equity and inclusion, and we hear a lot of our industry groups saying there's no or not enough diversity and equity in the candidate pipeline. So we have formed intentional, strategic partnerships with organizations, for example, PG&E Energy Training, Power Pathways, and Santa Clara County for Community Behavioral Health have a direct diversity pipline. We have developed memorandums of understanding with our industry partners that give them a role in reviewing our curriculum, guarantee our students from diverse background receive entry level employment interviews, and industry information sessions for our students to be fimilar with the employment opportunities for that company.

Dewan: Businesses can participate in career fairs—we've been doing a lot at the K-8 level. Another

opportunity is scholarships. Part of the way we're going to diversify the workforce is to create more opportunities for students to pursue additional training or college, and businesses can partner in providing some of those scholarships.

Many of our school districts and communities have promise programs where they're providing support to young people to attend San Jose State or another university, and businesses can really help those young people by supporting those promise programs.

What role can partnerships with industry groups play in terms of employee training initiatives?

Dickerson: We can customize training initiatives to industry needs. For example, Google IT came to us, and we said OK, we will create a curriculum or certificate around that. We just did a pilot for Santa Clara County Behavioral Health with 12 students who earned an industry certificate after a 12-week, intense training. It really depends on what the industry needs—we can customize it for how many employees they are looking to hire.

Lynch I really applaud Subaru. They needed technicians and mechanics, so they donated three cars to our center so our students could become proficient in working with Subaru. Ford provided us with 10 free, online modules of curriculum for students to complete. At the end, they can be hired in an entry-level job at Ford. Most recently, we had Santa Clara Valley Transportation Authority (VTA) come to us to develop a training center for technicians for zeroemission buses. So it's businesses coming to us to train locally and then have access to the pipeline of employees.

Dickerson: Similarly, when I was at Evergreen Valley College as Dean, Tesla was willing to provide the college eight cars for a paid 12-week training for students who then get hired afterward. If industries don't know how to do that (kind of partnership), we know how to package that. I think a lot of companies are no longer depending on their HR learning and development offices to do these trainings; we can be that partner to provide the occupational training.

Whalen: We've partnered with GE



"Students should learn cross-functional skills that embed computer science or computer information systems into their occupations."

MONI DICKERSON

where they're bringing instruction adjacent to ours, creating a wonderful networking opportunity and a lot of collaboration.

Where do you see the most demand now from employers in terms of jobs? Does this match with what students want to do?

Whalen: When you think about Silicon Valley, of course you think of technical jobs. But there are also lots of jobs in healthcare. At both institutions I've worked at, there are industry partners coming to us, wanting us to help build a pipeline of workers-surgical technologists, certified nursing assistants, phlebotomists, all in high demand, and employers are looking to community colleges to help. Are those careers what the students want? I think they do. We have far more applicants than open slots in areas like respiratory therapy or radiological technology. Those are industries in which we can't produce enough graduates to meet demand.

Dickerson: The apprenticeship model has been on the radar of industry partners where the student can take the course and be hired as an apprentice and apply that knowledge right away, instead of waiting until the end of the course to get an internship. Students are wanting more hands-on experience as opposed to solely theoretical knowledge, even (beyond the trades) in fields like pre-law, early childhood, the humanities, communications and digital design. I've seen that trend enhancing the student experience and future opportunities when industry is willing to do an apprenticeship model versus an internship.

Dewan: We're seeing high demand from employers to add individuals with training and credentials in the area of mental health and wellness, emotional well-being and social-emotional. And there's some interest among our young people to pursue those fields, but similar to some other industries, the need is far greater than our current pipeline is preparing.

Lynch: A certification will help students get right to work. This year, we opened a nursing careers program and we already have 65 students in two classes. We also converted one of our automotive programs to an electrical vehicles program. Typically, a new program might start with 20 students, and that one started with 44 students. We have 71 students in our metals technology (welding) program, and honestly, all we can accept is 66 students. So overall, we're filling those jobs, matching the demand for our community.

Dickerson: Our construction, HVAC and computer information technology programs are fully filled. But we also focus on occupations students are demanding. For example, the education pathway, the students aren't demanding it due to the low income potential. It's just horrible. So we're trying to push the innovation needle, making sure that livable wage is a key factor in the students deciding which occupations to demand.

What future skills and knowledge sets do students need to learn to stay relevant in their future occupations? How important is Al as a skill to learn?

Dewan: I think a lot of companies want young people to know about AI and to be able to use it appropriately, to understand its place in whatever career they're pursuing. They also want them to understand the ethical considerations around the use of AI in their life and in their work. We know that AI is likely going to expand much faster than we'll be able to keep up with.

As far as industries in demand, climate and environmental science are of great interest to our young

people, and I foresee high demand for workers in epidemiology, the environment and emergency response. We also hear from students that there is a lot of interest in understanding diseases and how they might be able to improve the wellness of their communities. And then one other area ripe for support and growth is public service, democracy, civic engagement and preparing people for elected office and to serve in government and governmental agencies.

Whalen: My faculty is forming an Emerging Technology Institute. The emerging technologies skill set is in demand, and I think the challenge is knowing what, out of all the opportunities, is best for our institution to pursue on behalf of our students. One small example is there's a hot job market out there now for writing AI prompts. They're paying people a good chunk of money to do that now, but the trajectory of that job is probably one that's going to rapidly diminish. So we made a choice not to invest our limited bandwidth into pursuing training and education for that,

because we're looking to prepare our students for jobs that will sustain them.

Dickerson: Students should learn cross-functional skills that embed computer science or computer information systems into their occupations. For example, a political science major may want to learn some data analytics. Music majors might want to know a little HTML so they can do the web design for their music company.

Lynch: Students must be able to navigate a variety of different AI platforms. And they need to be able to learn the tools quickly. That will make them valuable wherever they're working.

Can you train someone to think about their career trajectory, and what pathways do you offer someone to map out the next 10 or 20 years?

Lynch: Yes, in high school, they recommend a 10-year plan. For a student who isn't thinking about going to college, we ask them about their career pathway and help them learn about the ladder that they



VISIT PROGRAMS IN:

- Animation, Fashion, Film &
- Automotive Body and Electric Vehicles
 Construction & Electrical
- Maintenance Culinary & Hospitality
- Fire Science & Law Enforcement Medical Assisting & Pharmacy
- Tech Manufacturing & Welding
- Mobile App Design, Computer
- Nursing Careers

OUR PROGRAMS:









can follow. A high school career counselor or the transition specialist at the community college could help them map that out.

What do you have to offer career changers? And what kind of advantages or disadvantages do they have to deal with right now?

Dickerson: There's no straight path to your career. The advantage is career changers have a grip on reality, on what are the skill sets needed to move on and have a different career. The disadvantage is because they've been in the workforce, they may feel like their experience and salary should equate in their new career. But the reality is, if you're leaving a career as a professional chef to become an information systems analyst, you're starting fresh like everybody else at entry-level salary, and you may need to temporarily sacrifice the income that you're used to so you can get to the next level. Another advantage for career changers is that they know what they want. They're committed to getting it done and seeing it through.

Whalen: It's enormously gratifying to work with career changers. Often, they're seizing a hope, when maybe the industry that they've been working in is dissipating, or they're pursuing a passion. I've had some of the most heartwarming experiences as an educator working with career changers. One thing that I would add is that the entire California community college system has embarked on making sure there is credit for prior learning available to people who have a long history of work experience. We have a community health worker program where most of the people are getting this credential, but have been working in that field for some time. At the celebration of graduation for receiving that credential, I remember a student standing at the podium saying the credit for prior learning made them feel so validated. That's a real success story that their past work experience mattered, and it was recognized by the institution.

Dewan: A lot of people do have multiple careers throughout their life—that's a lot more common today than ever before. And in the education sector, we warmly welcome career changers. Most often, our career changers are

"Students must be able to navigate a variety of different AI platforms. And they need to be able to learn the tools quickly. That will make them valuable wherever they're working."

ALYSSA LYNCH

coming to us because they want to make a difference. They want to pursue a passion or an interest, they see that they can have some impact for young people that maybe they didn't necessarily experience in their previous careers. In other cases, it's just coming into a teaching career and pursuing a classroom role. They're coming from other careers into education and applying these incredible experiences with diverse backgrounds. That's to the public's benefit.

Lynch: I want to add a different lens—the immigrant population. We have a large population of adult students coming to us who don't speak English, and they're starting over. Before they arrived here, they were doctors and engineers in their homeland. Then they go through our program. Once they can speak English and they're looking for a new job, we have evening programs where they can train for the medical, dental, or pharmacy industry. They're not looking to work in the same profession they did in their homeland. English is difficult for them so they start over.

Would you like to share some success stories about your students?

Lynch: We had a student in our fire science program who interned at the San Jose Fire Department and continued on to Foothill College. He got involved in technology in the fire department. He went from there to work for Lucile Packard Children's Hospital in the IT department, and then got hired by Stanford. He earned a two-year degree and worked his way up at Stanford. He has been a system administrator for four years, and is very successful. He comes back to tell his story frequently at our center to inspire and motivate other students.

We also had a female student take the auto body repair and then went to work at Tesla. She worked her way up to become an engineer at Tesla. So again, no degree, but has had success along her career pathway. We're proud of that here in Santa Clara County.

Dewan: We had a mom who left her original career in tech to be home with her children. Once they were in school, she began working at the school as a volunteer and then became a paraprofessional. Then, she participated in our teaching pathway program, earned her credential and is now teaching in a classroom.

Dickerson: Our student ambassador Rinaldo graduated last year, but we didn't know that his mother was one of our superstar custodial staff here until he graduated. They kept it a secret. He's first-generation, the oldest to graduate, and has transferred to San Jose State University in their computer science program. He's also doing an apprenticeship model program with us in the summer. We were amazed at the intersectionality of our staff and our community here, having their children come to our programs, and then having success stories like his.

Whalen: I want to lift up the beautiful story of a young woman, Christine, who is a first-generation student. Her parents were migrant farmworkers. She had never seen herself as a scholar and never seen herself as a learner. She received a science internship in our program with Stanford, and the power of her talking about walking onto that campus and feeling like she belonged there. She had achieved this degree of academic confidence that comes with actually doing the work. It was one of my favorite moments of celebration this last commencement ear.

Santa Clara County Office of Education

Join Our TEAM! #WeAreSCCOE

UPCOMING RECRUITMENT FAIRS

- Classified Job Fair September 23, 2023 https://sccoe.to/ClassifiedJobFair
- Step into Education February 10, 2024 https://sccoe.to/StepIntoEducation
- Teacher Recruitment Fair March 23, 2024 https://sccoe.to/TeacherRecruitment

FOR SUBSTITUTE POSITION INFORMATION: https://sccoe.to/Substitutes

For more information:
Call (408) 453-6500 or visit <u>www.sccoe.org</u>