



Career Pathway Outcomes



Health Workforce Initiative

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HWI

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As our nation continues to work toward the goal that every student should graduate from high school ready for college or a career, recent studies show there is still much work to be done.

In its 2016 national College and Career Readiness report, ACT reported that only 26% of the 2016 ACT-tested high school graduates met all four college-readiness benchmarks, and nearly one-third were not prepared in any of the core subject areas.

HWI seeks to help students focus on academic goals and achievement by exposing them to career awareness and career planning resources that may not be otherwise available. Student's interests often develop at an early age, which can lead to greater learning. Providing exposure and deeper knowledge of future opportunities can help promote students' motivation and targeted learning at an earlier age and potentially lead to college success.

Through special funding designated to increase student college and career readiness, the Health Workforce Initiative (HWI) of the California Community Colleges works to facilitate career exploration activities with middle and high schools throughout the state, particularly in economically disadvantaged areas.

Linda Zorn, HWI Statewide Sector Navigator, has seen first-hand the impact these early opportunities have on young students.

“The Health Workforce Initiative is committed to working with all of our educational and industry partners to provide work-based learning and career awareness opportunities to students. It has been very rewarding to watch students become passionate about a health care career and start their individual pathway to that dream.”

Outreach efforts also extend to high school teachers. HWI regularly provides job shadowing experiences outside of the classroom and professional development opportunities to help teachers keep up with technology changes in health care. HWI Deputy Sector Navigators assist teachers with curriculum development as well.

The collaboration between community colleges and their local middle and high schools helps inspire hundreds of students each year to become college and career ready, and to pursue careers in health care.

Early Exposure to Health Care Careers

In the Bay region, Cynthia Harrison, Deputy Sector Navigator, knows career exploration activities must begin very early, especially in the southeast area of San Jose, one of the city's most economically disadvantaged communities.

"We found that if we didn't get to students by 7th grade, we were not going to get them into high school, let alone into college," she said.

In an effort to connect with these students, the Health Workforce Initiative (HWI) hosts an annual middle school-high school outreach career exploration day. The most recent event brought more than 185 students and teachers from Sylvandale Middle School and Andrew Hill High School to the Mission College campus for an educational day designed just for them. The college's Health Occupations, Fire Science/EMT, and Hospitality Management Departments worked together to plan and host the memorable event.

Some of the hands-on activities included putting on fire turnout gear, learning proper gloving procedures, and perhaps the most instructive, practicing correct hand washing techniques. Students were surprised by the many germs left on their hands after washing, as seen under a black light.

After a campus tour and panel discussion, students boarded the school buses for home with the idea that college can be a reality for them, and that there are many interesting health-related programs awaiting them at local community colleges.

Further south, Orange County high school students were bussed to Saddleback Memorial Hospital in Laguna Hills to discover what really happens behind the closed doors of an operating room. More than 300 students filed into the hospital's auditorium to watch a mock surgery featuring health care professionals who provide surgical care for a living.

Laurie Sienkiewicz, Deputy Sector Navigator in Orange County, has partnered with local non-profit Vital Link for the past two years to facilitate this event for area high schools. Vital Link helps students explore career options by facilitating hands-on, interactive experiences.

Throughout the demonstration, each job was spotlighted as the professionals spoke about their particular roles during surgery. Students heard from an anesthesiologist, Operating Room nurse, surgeon, and other technicians who work in a surgical setting.

"The students are always fascinated by the mock surgery demonstration," said Sienkiewicz "They don't move an inch! And they love getting to tour the hospital campus."



Hands on Hospital Experience

There may be no better way for students to discover if they are interested in a health care career, than by job shadowing in a hospital setting. But finding hospitals willing to allow high school students this opportunity can be a challenge.

"It's hard to get into industry. Hospitals have a lot of requirements that need to be met in order for high school students to get in," said Trudy Old, Deputy Sector Navigator, Far North region.

Fortunately for high school students in Butte and Glenn Counties, Old has cracked the code. For the past two summers, HWI has partnered with Enloe Medical Center in Chico to hold the Health-Careers Exploration Summer Institute (HESI). During the three-week program, students participate in clinical rotations where they follow the progress of patients among the hospital's different departments, such as radiology and physical therapy. Students even get to stand next to doctors during surgeries.

"I had no idea where I wanted to be. At the hospital I did nine rotations, and I loved the mother and baby center. It was just amazing," said Pleasant Valley High graduate Lili Salinas.

The program includes more than observing. Students also attend lectures, complete nightly homework, and deliver a final presentation about their experiences at HESI to hospital staff, school administration and teachers.

"It's very rigorous," said Salinas. There's homework every day and it's very tiring, but it's so worth it. It's great to be around people who are so passionate."

Their knowledge of medical terminology, HIPAA Regulations and basic hospital skills, like making beds and moving equipment will serve students well as they pursue careers in health care.

Old also established a partnership with Shasta Regional Medical Center, which held its first HESI in July, 2016. To date, 40 students have completed the program which is a great start, given the level of commitment required by all involved.

Career Exploration Leads to Certification

In addition to job shadowing, high school students in San Bernardino and Riverside Counties were trained and certified in CPR and received soft skills instruction over the summer months. Students ages 14-18 were invited to attend one of three “911 Bootcamps” organized by Avante Simmons, Deputy Sector Navigator in the Desert/Inland Empire Region.

“These camps are very in-depth,” explained Simmons. Students participate in a speaker series, in job shadowing, and many get to visit health care facilities, such as the world-renowned simulation facility and medical museum on the Loma Linda University campus.”

While some students may attend simply to explore occupations in the health care field, 911 Bootcamp is actually a career-building experience.

“Not only do students get exposure to health care occupations, but they acquire communication and networking skills, as well as resume builder tools,” said Simmons.



In the Los Angeles region, CPR, first aid and heart saver courses are integrated into the annual Career Technical Education (CTE) Academy held each summer. During the week-long camp, middle school students rotate among stations that also include other CTE industries, like basic automotive, small engines, rocketry, crystal radio, and coding.

Shari Herzfeld, Deputy Sector Navigator of the Los Angeles region, has led the health occupations component of the camp for the past two years and always comes up with creative ways for students to showcase their new skills.

“We have an extravaganza on the final day and invite parents to come see what their students learned,” explained Herzfeld. “The students created rockets to launch on that last day. We staged a rocket ‘failure’ that caused ‘casualties.’ Of course the first aid and CPR students had to rescue them.”

Acting fast during the simulated emergency situation was a fun challenge for the students who are excited to continue exploring careers in health care.



Creating Career Pathways and Curriculum

Students at Duncan Polytechnical High School in east Fresno are also exploring medical careers with support from HWI. Although Duncan students have some of the highest poverty rates in the greater Fresno area, they also have the highest graduation rate and more than 80% of these students go on to college. Their nationally recognized Medical Academy and Science and Health (MASH) is a major reason why.

While MASH already offered sports medicine and Certified Nursing Assistant (CNA) programs, Valerie Fisher, Deputy Sector Navigator in the Central region, saw an opportunity to help the school develop a Rehabilitation Aide program that would lead students to the Occupational Therapist Assistant program to be developed at Clovis Community College, or to the Physical Therapist Assistant program at College of the Sequoias.

Fisher worked with the school's Pathway Coordinator, Katie Navarrette to develop the program curriculum. She also purchased specialized treatment tables and other OT/PT supplies needed including weights, balls, wheelchairs, and transfer equipment for their new skills lab/training area. This fall more than 50 students started in this new career pathway at the high school.



The Rehabilitation Aide program is the first of its kind at a high school in the Central Valley. It not only teaches students basic job readiness skills, but also instructs students in office-related tasks, patient dressing procedures and rehabilitative care, and the administration of active or passive therapeutic exercises.

“It’s a unique combination of occupational therapy, physical therapy and sports medicine,” said Fisher. “This training will give high school students job skills to work as an aide while continuing their education and applying to either the OT Assistant or PT Assistant programs.”

HASPI

Integrating medical concepts into high school core curriculum is another excellent way to prepare students for college-level health care training programs. In 2006, the Health and Science Pipeline Initiative (HASPI) was formed in San Diego County as a regional effort to prepare students from all academic and economic backgrounds to pursue a broad range of health care careers. HASPI has since partnered with HWI and is implemented statewide.

Through collaboration with education and industry partners, HASPI has developed curriculum that meets Common Core and Next Generation Science Standards. Modules, labs, and activities are incorporated into high school and middle school courses, including Biology, Chemistry, Math, and even English.

The contextualized labs are key to preparing students for medical careers, according to Ann Durham, Deputy Sector Navigator in the San Diego/Imperial region. She recalls a comparison between two groups of students who took a medical biology class. The curriculum was identical, except the second group completed labs that were contextualized to medical as part of the HASPI curriculum.

“A review of standardized test scores revealed that across the board, the contextualized lab group scored higher than the other group. Part of it is, you’ve got people who are really engaged and have an interest in health care careers.”

Durham’s involvement with HASPI and Dr. Peter Salk of Jonas Salk Legacy Foundation has been instrumental in the recent development of curriculum on immunizations and vaccinations. HASPI has even developed specialized kits that allow students to complete immunization labs in the classroom.

Please visit the HASPI website to access all the curriculum resources - <http://www.haspi.org>

A Focus on Faculty

While career exploration activities, pathways, and new curriculum help hundreds of students each year, none of these would exist without dedicated faculty to teach them. HWI funds professional development activities throughout the year for health occupations community college and high school faculty.

Faculty who teach at any of the 12 community college and K-12 districts in the Inland Empire/Desert region are invited to participate in Faculty Externships each summer. For the past five years, local business leaders and educators have come together to provide job shadowing and mentoring experiences for faculty that take place outside of the classroom. This allows faculty to meet with industry peers, and to identify cutting edge trends and technology in health care, which helps them better take real world lessons back to the classroom to prepare students for work.

Avante Simmons, who has helped organize these externships in the region, knows the value that comes from work experiences away from the classroom. "We encourage educators to job shadow, mentor, or network with their peers on a consistent basis," she said. "This helps give them a well-rounded idea of what future career opportunities there are for students."

At the end of each externship project, faculty report on their experiences and take their knowledge back to the classrooms to engage students in practical applications.

Since there are many moving parts in facilitating a successful externship program, the HWI team has developed an **Introductory Guide to Educator Externships**. The guide provides suggestions and useable documents to help program coordinators design a customized faculty externship program in their area.

This guide is available on the HWI website - <http://ca-hwi.org>.

Summer is the perfect time for high school faculty in the Sacramento area to attend a week-long institute designed just for them. Health pathway teachers are invited to learn about community college health program offerings and their requirements. Best practices and soft skills are also discussed in detail. As part of the well-rounded experience, teachers are also able to job shadow at industry sites each afternoon.



Sue Hussey, Deputy Sector Navigator in the Greater Sacramento region started the annual Health Pathways Summer Institute in 2015 and has built in some great incentives for participating teachers. "We have set up an experimental course for the institute so that each teacher who completes it earns two units of college credit. This is a big incentive for teachers, especially if they're working on their CTE credential," she said.

Thinking long-term, Hussey envisioned that the Institute would be a way to introduce high school and community college faculty to each other and for them to start having conversations on best practices for transitioning high school students to college.

"One of the outcomes we wanted from this was to create a 'Community of Practice' for health pathway teachers," explained Hussey. "We invited the high school teachers from the Institute as well as community college faculty and we meet twice a month to discuss how we can better work together, and to get to know each other's systems, because they're so different."

Topics they are discussing include dual enrollment, articulation and priority enrollment for high school students.

Funding for the Institute has come from multiple sources including Deputy Sector Navigator 1070 funding, California Career Pathways Trust (CCPT) grants, the California Endowment, and the College and Career Academy Support Network (CCASN).

Sharing newly developed curriculum and activities is another way faculty work together at HWI professional development events. In the South Central Coast region, John Cordova, Deputy Sector Navigator, hosts a two-day program called "STEMersion" for high school teachers. After teachers visit industry locations,



a facilitator is brought in to guide them in a hands-on learning experience.

“Part of this two day program that is that teachers develop sample classroom activities to use after the training,” Cordova said. “These are submitted and posted to our website for other teachers to access.”

STEMersion covers a broad-range of topics including biotechnology, a booming industry in the region.

Cordova is also assisting College of the Canyons and Santa Barbara City College with their geriatric nursing faculty development initiative. Support from the Archstone Foundation, a grant awarded to College of the Canyons, helps provide faculty development to infuse elder and geriatric care into the curriculum. Scenarios used are based on the National League of Nursing Advancing Care Excellence (ACE) resources, in addition to the Oxygen for Caregivers partnering with the Adventures in Caring Foundation.

Keeping up with Technology

Helping teachers and students keep up with technology use in health care is critical. Mobile stroke units, medical device security, and wireless wearable sensors are just a few of the year’s top technological advances named by ECRI Institute.

To provide this much-needed training, John Cordova has developed relationships with many industry partners in his region that regularly participate in his Advances in Health Related Technologies Health Tech in Motion events.

During the full-day event, high school students are invited to spend time with each participating vendor to learn about the new technology displayed. They get to see a demonstration and even engage with the product.

“Last time one of our vendors did 3D printing for prosthetic devices. We also had the 3D heart print used for surgery procedures,” said Cordova.

Teachers attend too, and keep a watchful eye on the students in the morning. Later in the day they create classroom activities based on their observations.

“Industry is calling us to request to be part of this event; to promote their technology and to help students and teachers keep up with the way technology is being used in health care. It’s ever-changing,” said Cordova.

Events like this are often the result of multi-sector collaborations within the community college system, and Cordova arranges several each year. Next up is a Biotech/ Biomanufacturing Day related to health care.

“In our area we have this pocket of entrepreneurs running biotech/ biomanufacturing businesses,” he said. “So we are partnering with the Information Communications Technology (ICT) sector and the Biotech sector to put together an event for high school teachers, students and community college faculty.”

Of course, advances in technology and especially telemedicine, expose the need for effective cybersecurity practices. To address this emerging field Cordova is working with other community college EWD sectors (Information Communications Technologies and Digital Media) to hold industry roundtable discussions on cybersecurity trends and training needs.

Skilled health care workers continue to be in high demand, and there are many exciting areas for students to explore. Providing career exploration experiences at a young age can help prepare students for college and set them up for long-term career success.

To find out more about HWI career pathway programs, contact Linda Zorn, Statewide Director/ Sector Navigator at ZornLi@butte.edu.



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CALIFORNIA COMMUNITY COLLEGES

Doing What MATTERS™

FOR BUSINESS & INDUSTRY

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