



**MARICOPA COUNTY COMMUNITY COLLEGE DISTRICT
GOVERNING BOARD WORK SESSION
SEPTEMBER 11, 2012
MINUTES**

A Work Session of the Maricopa County Community College District Governing Board was scheduled to be held at 5:30 p.m. at the Integrated Education Building at GateWay Community College in Phoenix, Arizona, pursuant to A.R.S. §38-431.02, notice having been duly given.

PRESENT

GOVERNING BOARD

Doyle Burke, President
Dana Saar, Secretary
Don Campbell, Member
Randolph Lumm, Member
Debra Pearson, Member

ADMINISTRATION

Rufus Glasper
Maria Harper-Marinick
Debra Thompson
Nikki Jackson
Anna Solley
Lee Combs
Ernie Lara
Gene Giovannini
Chris Bustamante
Linda Lujan
Irene Kovala
Shouan Pan
Jan Gehler
Paul Dale
Shari Olson
Steve Helfgot
Absent: George Kahkedjian

BOARD WORK SESSION – Job Skill Programs

CALL TO ORDER

Governing Board President Doyle Burke announced the birthday of fellow Governing Board Member Dr. Don Campbell which was followed by applause.

The work session on the Job Skill Programs was called to order at 5:35 p.m. by Executive Vice Chancellor and Provost, Dr. Maria Harper-Marinick.

Chancellor Glasper provided the following comments:

He stated it was important to focus on topic of discussion. The past four years we have encountered great reduction in state funding. The state is focusing on workforce development and we have spent time talking to them about workforce needs and training. The Maricopa Community Colleges are the largest provider of workforce training in the state of

Arizona. We are being asked to put people into jobs. Our success will be measured on outcomes, degrees and how many will be employed. In conversation in State Legislative Speaker Tobin, he indicated that he had sponsored a bill that focused on education and community college. He indicated that he had appointed a committee which included the President of the Senate, PVC President Dr. Paul Dale, as well as two individuals appointed by the Governor, two member of GPEC and the Arizona Chamber of Commerce to discuss how we can become more productive and increase opportunities for many employers. This is a goal that we will be focusing on in the months and years to come.

GWC President Dr. Gene Giovannini welcomed everyone present to GateWay and especially to the new Integrated Education Building. He thanked the Chancellor his support in putting money into this project which had initially been proposed as a 90,000 s.f. project but resulted in 123,000 s.f. The campus is very proud of the building and students are being well served.

**OCCUPATIONAL
PROGRAMS AT
MCCCD**

Dr. Harper-Marinick stated that the data presented tonight would focus on three areas: Occupational Programs in Machinery, Energy and Healthcare. She highlighted the following information:

- 6,788 active occupational courses, 967 active programs
- Represent 27% of district-wide credit hour enrollment
- Occupational FTSE – 25,807 in 2011
- Largest occupational areas:
 - Healthcare - 21%
 - Information Technology - 20%
 - Business - 13%
 - Security and Protective Services (police & fire) - 12%
 - Occupational awards – 8,606 (2010), 10,373 (2011), 11,458 (as of July 2012)
 - 600 partnerships with 38,000 students served/trained

Credit Hours in Workforce consist of:

<i>Top 10 CIP Groups</i>	<i>Credit Hours</i>
Health Professions and Related Clinical Sciences	167,083
Computer and Information Sciences And Support Services	158,106
Business, Management, Marketing, and Related Support Services	102,336

Security and Protective Services	96,737
Parks, Recreation, Leisure and Fitness Studies	37,127
Biological and Biomedical Sciences	35,287
Multi/Interdisciplinary Studies	26,837
Visual and Performing Arts	25,366
Family and Consumer Sciences/Human Sciences	18,884
Mechanic and Repair Technologies/Technicians	17,921
Other	107,604
Total Occupational Course Enrollments	793,288

Number of Occupational Degrees and Certificates Awarded Annually:

FY 09-10: 2,838 to 5,768

FY 10-11: 2,906 to 7,467

FY 11-12: 3,073 to 8,670

Emerging Industry Sectors include:

Cloud Computing	<ul style="list-style-type: none"> • Computing resources delivered over the Internet • Advantages – cost, reliability, security, scalability
Mobile Computing	<ul style="list-style-type: none"> • Soon, more people will access the Internet via phone than by computer
Nanotechnology	<ul style="list-style-type: none"> • Not an industry, but an “enabling technology” • Impacting sectors including electronics, agriculture, aerospace, materials, healthcare, environmental

Personalized Medicine	<ul style="list-style-type: none">• Customization of healthcare services• Targeted therapies, tailor-made drugs, digital records
Energy	<ul style="list-style-type: none">• Solar, wind, biofuels, algae, nuclear and non-nuclear operations and generation, power transmission and distribution, power engineering
Unmanned Aerial Systems	<ul style="list-style-type: none">• Pilotless aircraft and the systems that support them• Aerospace and defense employs 43,000 in AZ, \$84,000 average wage• Sequestration (spending cuts) is an issue

MACHINERY

C. J. Wurster, Assistant Director of Instruction at the Maricopa Skill Center and Mark Weathers, President of Excalibur Precision Manufacturing conducted the presentations pertaining to Machinery Instruction.

Mr. Wurster indicated that the Skill Centers offer competency-based, non-credit programs and hands-on skills training. The connection to the workforce is key and therefore they have advisory boards to keep them abreast of needs and industry standards, apprenticeship programs and industry certifications. Finding skilled workers has been the biggest constraint.

Mr. Burke asked if we were working with the high schools on apprenticeship programs. Mr. Lumm asked about certifications and is they could transfer into an AA or eventually a Bachelor's Degree. They were told that the most thing to get into this field was having a mechanical aptitude. The investment of equipment and supplies supplied by GWC has been excellent. Salaries start at \$9.00/hour and increase to \$18.00 after three years.

Main Points Regarding Arizona Tooling and Machining Association:

- Local chapter of NTMA
- Founded around helping each other
- Workforce development has always been a focus
 - Ran a training program and facility in the 80's
- 80 machine shop members
- Lack of skilled workforce is one of the largest and most persistent problems
 - Perception problem leads to empty pipeline of workers
 - Need a better class of employee
 - Founded local chapter of National Robotic League (Battlebots)

Advisory Boards

- ATMA has participated in MSC and GateWay Advisory Board for years
- MCCCCD has been a great partner
- Apprenticeship is the intersection of education and industry

AZPMAP - Arizona Precision Machining Apprentice Program

- Started as a cross-country NTMA grant pursuit
- Transformed into a local inter-agency apprentice team
 - MCCCCD
 - City and County WIA
 - Department of Education
 - Industry
- Two-year effort to launch federally registered apprenticeship 'co-operative'
 - Employers pool resources to pay for administrative and

- coaching staff
- Web-based reporting and exception management tool
- Launched in June 2012

Concluding Remarks:

Model partnership

Experiential learning is the only satisfactory education for precision machining

Jobs are available

ENERGY

Speaking on this topic were Clay Goodman, Vice President of Occupational Education at Estrella Mountain Community College and Ann Adams, Manager of Strategic Workforce Planning and HR Initiatives for Arizona Public Services.

Ms. Adams provided the following information pertaining to Arizona Public Service:

- Arizona’s largest electric utility
 - 1.1 million customers
 - 6,650 employees
 - Nearly half eligible to retire within the next five years
- Estrella Mountain is helping us build our talent pipeline
 - Line workers, generation technicians, transmission and distribution technicians, plant/field operators
 - Well-paid positions with great benefits in stable industry
- Why our partnership works
 - EMCC’s focus on what business needs
 - Innovative, pragmatic approach to meeting those needs
 - Strong relationships with key target audiences – business, industry, government, education

Arizona Electric Utility Hiring Projections for 2012-2017

Hiring Projections			
<i>Job Category</i>	<i>Current Job Openings</i>	<i>Hiring Projections through 2015</i>	<i>Hiring Projections through 2017</i>
Lineworkers	29	153	255
Technicians (non-nuclear)	36	267	445

Technicians (nuclear)	47	162	270
Generation Workers (non-nuclear)	75	347	579
Generation Workers (nuclear)	18	67	112
Engineers (non-nuclear)	46	226	376
Engineers (nuclear)	26	91	151
Electricians (mining only)	120	360	600
TOTAL	397	1,673	2,788

Comments from Clay Goodman following Ms. Adams' presentation:

Governing Board, Chancellor and members of the CEC you have just heard from one the largest and most respected companies in Arizona that Estrella Mountain and the Maricopa Community College district is an integral and key partner in providing them with the highly skilled and trained workforce they need to supply electricity to our state.

Arizona's electric utilities are not going to add a large number of jobs to what they have now. It's not a growth industry –their needs are focused on replacing their retiring workforce and more importantly the skill sets those employees are leaving with.

Ann indicated that APS employs over 6,600 individuals and they anticipate they'll lose almost half within the next five years. APS's situation is not unique - Arizona's other electrical utilities Salt River Project, Tucson Electric Power Company and the state's rural electric cooperatives are in similar straits and need to replace an aging workforce.

The chart above will give you an idea of where their needs are and when they need to hire. As you can see, the bulk of their needs fall in at the technician level and the requisite training includes the successful completion of a two year degree and 3 to 4 year apprenticeship.

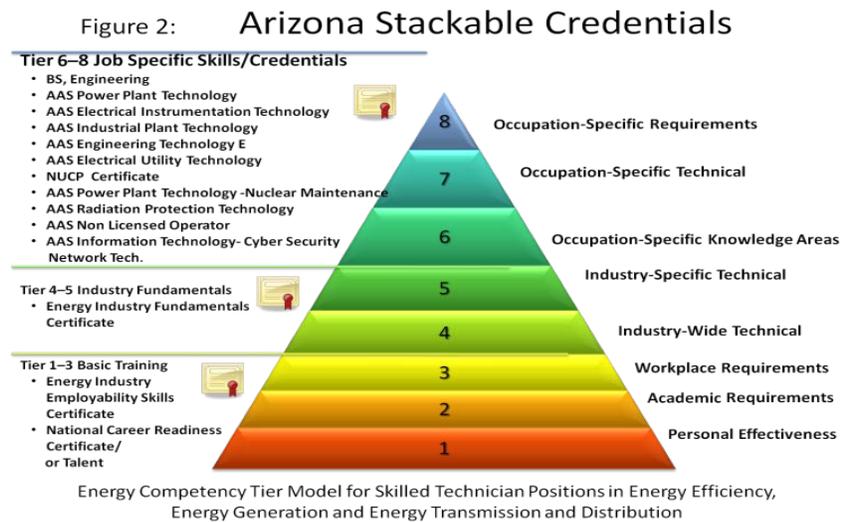
Our industry partners tell us that it takes at least five years for a newly hired and trained employee to become fully productive at their job. So, if you do the math it is may take a student as many as 11 years to get to

where our industry partners need them to be.

It is critical that as their education partners we do our jobs well and provide APS and others with the quality workforce they need to keep Arizona supplied with energy to rebuild our economy.

Now, how do we do that?

Get Into Energy Program Pathway



Comments by Clay Goodman pertaining to credentials listed above: Knowing that the model on the screen may be difficult to read, Mr. Goodman walked audience through it. This was jointly developed by the Center for Energy Workforce Development in cooperation with the United States Department of Labor. This competency model provides a clear pathway of stackable skills and associated credentials that will lead students well paying, sustainable jobs within the state.

Tiers 1-3 address basic competencies such as Integrity, Professionalism, Motivation, Mathematics, Writing, Listening, Science, Locating, Reading and Using Information. In addition to Business Fundamentals, Teamwork, Ethics, Employability and Entrepreneurship Skills and Decision Making. These skills crosswalk with the Arizona Employability Skills Standards adopted by the Arizona Department of Education. Students can sit for and receive the National Career Readiness Certificate from ACT and an Energy Employability Skills credential from SkillsUSA. The Energy Industry has identified NCRC Silver and Gold Levels as being appropriate for their jobs. Students at Estrella Mountain are acquiring these skills and sitting for both assessments while completing a career and personal development course – CPD104.

Tiers 4-5 Focus on both industry wide and specific competencies such as

Safety awareness, Environmental Laws, Trouble Shooting, Non Nuclear Power Generation, Nuclear Power Generation. Electric Transmission and Distribution. Students receive these competencies in a new course PPT120 Energy Industry Fundamentals and have the opportunity to sit for a third industry recognized credential approved by ANSI.

Tiers 6-8 Focuses on the degrees and certificates offered by Estrella Mountain and Chandler Gilbert Community College required for employment at one of Arizona's Electric Utilities like Arizona Public Service.

Estrella Mountain Pathway



- Certifications embedded in coursework
- Students complete 9-10 credits toward a degree while earning three industry recognized credentials

HEALTHCARE

Dental Hygiene: Mesa – Phoenix College – Rio Salado

Sharon Halford provided introductory remarks into this part of the presentation pertaining to Dental Hygiene. She stated that Dental Hygiene is identified as one of the fastest growing occupations for the greater Phoenix area. According to the Arizona Department of Commerce, the profession is expected to grow approximately 33% between 2008 and 2018. In addition, I indicated that Phoenix College had the first dental hygiene program in the state, opening its doors in 1968. RSC began its program in 1998 and MCC in 2005.

Deborah Kappes, Chair of the Department of Dental Programs and Phoenix College, provided the following information:

- Apply for Dental Hygiene Program through the Maricopa Community Colleges Dental Hygiene website exemplifying One Maricopa
- Single application process with common admission criteria
- Common program pre-requisites, shared curriculum, different delivery
- Phoenix College – day program delivered over 4 traditionally-timed semesters

- Rio Salado – 18 month accelerated program with more online delivery
- Mesa – afternoon classes, evening clinics offered at Arizona School of Dentistry and Oral Health
- Variety means we meet more student needs; Rio's program delivery may be changing but one thing is certain, they will continue with their emphasis on online delivery
- Dental Hygiene Program Council – reviews and improves the application and admission process; addresses individual admission and readmission issues, makes recommendations on disciplinary actions including dismissals, reviews and recommends curriculum changes – a model of collaboration that strengthens all three programs

Skill Development & Career Pipeline

- Many applicants are dental assistants seeking career advancement
- This year's new class of DH students at PC – over half are practiced dental assistants
- Real clinical practice is key to skill development
- Graduation from an accredited program is required for licensure – focus on workforce readiness
- University Transfer – degree completion through NAU
- Prepared to assume expanding roles that increase access to oral health services
- The most efficient and effective way to develop these complex psychomotor and sound clinical decision-making skills is at a school-based clinic where dental hygiene students average 654 clock hours of clinical practice
- Benefits include: consistency and ease in ensuring equitable educational opportunities and outcomes; collaboration among professional teacher that enriches the learning experience for the student; a significant additional benefit is serving the public – providing dental hygiene services to underserved populations (we charge a nominal fee to help cover costs and because we believe individuals are more likely to follow through with their care if they have invested in it)
- Disadvantages: expensive
- Program accreditation through the Commission on Dental Accreditation (same agency that accredits dental schools) and is one of the three pillars of quality assurance – that practitioners are well qualified to enter the workforce (graduation from accredited school, passing a national written exam, passing regional clinical exams = state licensure)
- NAU provides an online program for degree completion and will, under most circumstances, recognize 90 credits from our pre-requisites and program credits to apply toward BS completion; for students who do not transfer right away, they also offer credit for

work experience – this is not a formal articulation agreement but it is a very solid pathway

- Benefits of degree completion: more job opportunities beyond private dental practice (these jobs appear to be shrinking and more community-based, corporate, and educational opportunities are expanding)
- Future trends: Increasing access to oral health services: 35 states allow direct access which means that the dental hygienist can initiate treatment based on his or her assessment of patient's needs without the specific authorization of a dentist, treat the patient without the presence of a dentist, and can maintain a provider-patient relationship. Some states allow hygienists to place and carve permanent filling materials; new workforce models expand scope of practice to include restorations, place preformed crowns, pulpotomies, and non-surgical simple extractions (Minnesota)

Sustainability – keeping abreast of regulatory changes, trends, emerging workforce models

Internships and Apprenticeships – none in traditional sense – we use service learning model; just a few examples

- St. Vincent de Paul: Virginia G. Piper Medical and Dental Clinic
- John C. Lincoln Hospital: Desert Mission Children's Dental Clinic

New: First Things First: South Phoenix Region

In many of the sites, dental students are also there. As health care providers, graduate dental hygienists must be prepared to serve the community's needs in all aspects, not just private practice. These experiences expand students' knowledge and allow for increased professional growth. It helps to develop a service-minded practitioner. Mutually beneficial – our partnership helps to increase their capacity to serve; reaches special populations that wouldn't come to our clinics for various reasons

Connection with Community & Jobs

Our accreditation standards require us to have advisory committees – I like to think we would do this anyway – extremely valuable connection to the professional community. For example – they weigh in on proposed curriculum changes and keep us informed on current practice trends; they offer advise on what technologies we might invest in; and they conduct our exit interviews and treatment reviews for quality assurance in our clinics – simply stated, they keep us “real” (grounded)

Maintain strong connections with professional associations – we have program-based student chapters of these organizations so students begin

networking with their future colleagues right away and are able to take advantage of many benefits including leadership development and scholarships; we are very excited to have partnered with Arizona Dental Foundation for many years in their annual Give Kids A Smile campaign. We open our clinic, students and faculty volunteer their time to provide services to underserved children in the community

We also get valuable information from our graduate and employer surveys – unfortunately our graduate surveys have been showing that demand for dental services follows the trends in the economy because the patient or private insurance pay for services. Slow times in economy means a slowdown in demand for dental services. Our graduates are having a more difficult time finding employment or working fewer hours right now

*United States Department of Labor, Bureau of Labor Statistics,
Occupational Outlook Handbook, 2010-2011 Edition*

Considerations affecting future employment opportunities for dental hygienists: These include an ongoing economic downturn, the proliferation of dental hygiene education programs and graduates, sluggish graduate rates for dentist-employers, and an already saturated job market in many areas of the country.

Summary: Machine Trades, Energy, and Dental Hygiene are unique occupational education programs that at first blush may seem to have little to connect them. However, there are some common threads that can be found among each of these distinct programs.

1. Each of these programs is skill based. Students completing these programs gain not only the technical skills related to the occupation, but also the employability skills necessary for high job performance. Through internships, clinical experiences, apprenticeships, and other practical application opportunities, students develop their abilities to evaluate situations and problem-solve, to think creatively, and to view themselves as part of a team and be accountable.
2. Each of these programs connects to the community. Our advisory councils link interested, competent, and concerned individuals to our programs. Advisory Councils assist us in establishing and maintaining up-to-date educational programs. Changes in technology, business, industry, and government increase the need for effective communication between education and industry. Councils contribute to our environmental scanning and forecasting work, to the development of program curriculum that meets industry standards and skill performance expectations, and to program review.

Other partnerships support professional practice placement to ensure students have ample experiential learning opportunities. Others review new technologies or specialized equipment needs within the profession with us and assist with equipment donation and/or equipment sharing. And still others seek funds to establish scholarships and/or awards for students and help develop community awareness of our programs.

3. Each of these programs result in industry recognized endorsements. In some instances, these endorsements are professional certifications or licensures required by local, state, regional or national entities as a part of employment. In other instances, these are credentials developed by a specific industry segment or program accrediting body.

Whether through a program offered at one of our Skill Centers, a certificate or an associate degree, our students can select from a diverse group of workforce education pathways - each designed to lead to good positions responsive to community and workplace needs.

Comment: We lose high school students because they lose interest. JPEDs are connected to career programs. Important to work with career counselors and work with high school students to reach out to students.

CLOSING COMMENTS

Dr. Harper-Marinick thanked the partners and presenters who attended, as well as all others in attendance. Good work is being done.

ADJOURNMENT

The work session adjourned at 6:53 p.m.

Dana G. Saar
Governing Board Secretary

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ADJOURNMENT