

# **nma Nevada Manufacturers Association**

**963 Topsy Lane, Box 306-182, Carson City, NV 89705 775-882-6662 cel 775-771-8550**

April 18, 2014

TO: Subcmte chair Kirkpatrick and Cmte members cc: Chair Woodhouse

FROM: Ray Bacon

SUBJECT: SB 391 Interim Study on Community Colleges - Academic subcmte

Reference: The SB 391 Wish List

Some of these items will not seem like they are Community College issues, but I have a very strong believe that others inflict burdens on the Community Colleges at huge cost and often making them less efficient then they could and should be. Many of these are not directly related to the topic of this committee, but rather to the bigger and more important issue systemic issue of dramatic improvement in our education system to impact citizens and make them more global competitive in our economic sectors. Our piecemeal reforms and changes rather than a systemic approach may be part of the reason we haven't made the progress we would like.

Nevada needs Math and Science teachers and that means programs to meet our needs. The Nevada production of CTE teacher is dismal and we could use CC programs to convert existing teachers into CTE teachers and perhaps more important create TFA type boot camps to get a teaching certification to industry people into class room to teach math, science and CTE classes in record speed. We need one year max programs. There is plenty of data showing most second career teachers are among the best teacher – regardless of their age and how long they stay in teaching.

We need mapping of private sector needs to the existing degree programs in the state and changing the programs which don't meet state job needs to enhance those that do. The private sector jobs are changing fast so we probably need a 5—10 year review cycle with a phase out or reduce programs as the private sector jobs change and evolve. We probably could better utilization of the NVIE outreach data into programs course content etc. for private sector to education matching. I think DETR also has some matching data tools already but not used.

Nevada needs a complete revamping of the colleges of education to produce what we need with a focus future needed skills. Multi skill level self-paced student class rooms where the outcome is the same and the pace through the subject and content area is the variable. We need to be teaching to mastery on a self-paced basis rather than a minimum level to pass a test. We should be using the best of ideas and processes from KIPP and TFA, Cultural Literacy and Khan Academy to align with skills and content which will be needed in the future. Remember in general we don't training CC instructors we just hire them based on the degree they hold. Some are great and other not. We need a program to help them get better as instructors and new methods adoptions. However if they become highly rated by their students than keep them out of K-12 make no sense.

Nevada needs recognition that many generalist programs have limited employment value in the private sector. A General Studies degree is nothing a student could not achieve from a public library at much lower cost. Create a known and defined way for a student to test out of any course and content area as one way to lower the cost of a college education. We have to figure out how to bring the cost down. In a related issue, the Guinn scholarships could be changed to vary in value based on the needs to the state. Those in engineering and science programs, medical studies and a few more should get more time, more money. We also should consider enhancing the program for first in family, first in generation and low SES but high achieving students. We need a goal to reduce student debt in areas of high state needs in the private sector.

Reading by 3<sup>rd</sup> grade and arithmetic by 6<sup>th</sup> grade needs to be mandatory requirements to stop social promotion of students who are not ready. Many places have done the reading side and the payback in terms of graduation rates is significant. Our math scores are holding the state back so I think we need to arithmetic factor too. More important a child advanced when they are clearly not ready is often damaged for LIFE. They often never catch up and if they don't we have often created a "likely" dropout at third grade. If they ever try to get back on track later in their lives they routinely cost more and consume valuable CC resources. The payback has a long fuse, but we clearly have a failed record trying the social promotion approach for a few decades.

Teachers should be done when all their students achieve mastery. Students are done when they achieve mastery for the year. In self-paced programs they can move on immediately or be done for the summer sooner or later if still not to mastery. The traditional school year need to go away and be redefined in term of programs which reaches mastery in whatever time it takes. As an alternative which gets to the same point, the school day and school year need to change based on student skills and performance. We know when kids are falling behind early on and getting them an intense schedule of more time on task focused on the needs and skills of each child and not the whole class or school. That would require different contracts for teacher based

on the needs of their students. It might pressure districts to get the best teachers linked to the highest needs children and we know we are not doing that today. The impact of having every child learning can dramatically reduce the later burden on the community colleges and our society. The side benefit of having every student achieve mastery every year is it will narrow the skills spectrum each year for teachers rather than widen each year as we do now. That should make teaching more effective and actually easier. In many high school classes a high school teacher has students with 3<sup>rd</sup>/4<sup>th</sup> grade level skills and knowledge to 2<sup>nd</sup> and 3<sup>rd</sup> year in college level. That is 'nuts' and does a disservice to all students. It is costly and inefficient and then we pass along most of the spectrum to the CC's or the other post-secondary programs.

CTE Dual Credit programs need to be established. Right now we make those difficult to get done even though most colleges accept AP courses in the academic areas. This might mean some type of skills testing for the CTE areas, but get it done and quit screwing the kids we need to stay in our Nevada workforce.

CTE programs need to be based on EMPLOYMENT needs and not on what kids and parents want. Creating CTE programs where there is no local or state employment needs is a really poor use of state resources. Somehow we need to find a way to project future job growth areas and create CTE HS and CC courses which match future needs to the best of our ability.

We need programs to start weeding through the 1.1 million and starting peeling them off into programs and will make them more productive members of society with viable jobs into the future. Once on a path the social services and all levels need a scheduled phase out which is firm and certain as an incentive to stay on track and get off the dole. Lowering the cost of social programs needs to be a higher education and state goal with a direct link where possible. No one should be rewarded for being on the dole with an easier life than an engaged worker. Assisting the working poor needs to have considerable more value to our society than assisting a non-worker at any level.

The worker demand for companies is not a 9 month a year demand, so we need to consider seriously moving the career and technical programs in the CC to a year around schedule with staggered completions of programs and courses. The CC's need recognition for what they do whether it is a week long course or an AA degree.

If a CC gets a student 90% ready for an AA before they go to the university, the CC's should be allowed to issue the AA once the additional course work is done at the universities. On the other side if a student completes all the course work for an AA, but fails or is delayed from

completely and BS/BA, someone in Nevada should issue them the AA they have achieved. It makes a difference in employment and they have done the work.

The last legislative session passed a bill requiring a College and Careers Readiness measurement. I believe this state should consider the NCRC (National Career Readiness Certificate) for that purpose. DETR already has an unlimited testing contract in place with ACT. It has a proven record. Six states use it as an exit exam already – IL, MI, ND, AK, WY and NC. It is not a pass fail exam but a range of skills – bronze, silver, gold, platinum. It has real value to employers and to the employees. It is discrimination free; it looks at the skills and knowledge without caring about color, race, sex or age. With 33k juniors headed for testing next spring, this will be the cheapest, fastest way to get there and it has proven data in many locations. While it is focused on employment skills it can be related to higher education potential and skills. While this may be toward the bottom of this list it has the potential for great near immediate impact. The DETR contract has some limitation of how many HS students or schools can be tested, but that should be fixable and least for the CTE enrolled students.

This should be the final item on this wish list and it is about a fundamental change in the way we do things in this state. We know the good CTE high school program creates students with the soft skills and at least some of the hard skills employers and higher education want. Last fall SWCTA had 3300 applicants for 400 seats or a demand over 8X their capacity. We also know the CTE programs have a very high graduation rate - over 95% in many cases and a very high post-secondary rate – over 85% in some cases. Unfortunately we also know that a significant portion of those who go into post-secondary programs do so in out of state programs. The long term data for decades tends to show if students escape their home state the odds of getting them back are low. In my always somewhat tainted view that means we need a serious look at what we do and how we do it with a view to retaining many more in the state.

May I suggest at the state level that some of the CTE programs defined are obsolete and need to go away or become skills and not careers or need future looking criteria. As a specific, I think we still have a career sequence in Photography. I did that for a living many years ago, the chemistry portion is gone, much of the lighting and optics is gone or needed by a select few that a one year course for the skill “might” be valuable, but the career is gone. The same is true to some degree with Graphic design. The skills are needed by many but the careers have at least changed and in many cases that has become a skill and not a career. All need an employment future needs review as mentioned above.

Where is this going is that we need a top to bottom review of what we have, what we need, how do we align those from employer needs and long term career viability, with our existing and future CTE programs into our CC programs and back into the workplace? How do we get faster and more responsive to industry needs which are and will continue to change? How do we keep a large percentage of those we do train in the state? How do we put a timely bullet in programs that whether students “like” them or not have little or no long term job prospects? How do we

archive what we did and the materials we had so we can retrieve it if needed later? How do we align or CTE programs and credits with college credits to get kids into careers much faster and cheaper? In my view it would be fine to have a student have an AA or National Credential or certification within a semester or a year at one of our CC's. Likewise it would be wonderful to have PLTW students graduate in three years or less with engineering degree from either of our universities. Our focus need to be on the best possible outcome for the students and at the lowest reasonable cost. That will mean changes in our higher education system and we need to do that. Both K-12 and Higher Education need to look at and use the productivity improvement tools common in the private sector, but in many cases common among their private school program counterparts.

I have looked a little without finding a good document, but students need a student debt to degree likely income to years required to pay back the student loans chart. We have student loans where the payback is approaching forever and we have moral obligation to stop that as often as we can. The high schools need that data and the college staffs need that data. The faculty in those "low rate of return programs" need a whack in the side of the head if they are not completely honest the students. The counselors at the college and in the high schools need to data and need to learn to discuss realistically with students. Having a Nevada student be shocked by the reality that will be paying of student debt for three or four decades should not be acceptable. The target should be to raise a yellow flag at any case when the payback seems likely to exceed a decade. The counselors with the financial expertise need not be the same one with the career expertise.

I am often unimpressed with counselors at all levels in education. They seem to lack exposure to and understanding of reality in the career fields in general. Perhaps those positions should become full time positions with summers and normal school vacation periods requiring external engagement with employers, gaining understand of the skills needed and the changing work environment. Education as a disconnected silo from the realities of the rapid changes in the workplace is not working all that well. The counselors are often on a track to become administrators and "knowing your customers" is a huge part of be successful as an administrator. Counsellors should be the linkage which gets the faculty linked to employer so the real world applications is clear between that classroom and the careers.