"Restructuring Rural High Schools--

A Career Academy Model"

Testimony for Public Hearing Gillette College Tech Center, June 23, 2010 by Dr. Lyn Velle, CTE Coordinator for Campbell County School District

The "Small Learning Community" concept is probably the most common model for high schools in Wyoming, many of them having less than 500 students. In that model there is a strong relationship between the teachers and the students, the administration and the teachers and the students, and between the school and the community. When schools begin having a student enrollment of over a thousand, those relationships are generally not as strong or supportive and many students get lost simply because of size of the school. Campbell County High School is not a typical rural school because it has a student population of approximately 1400. This large number of students has led to a fairly high drop out rate and a graduation rate that is lower than desired. With those opportunities in mind, the Campbell County Board of Education members, the Superintendent, several administrators, career and technical education and core academic teachers and community leaders began looking at a model that would benefit the students in preparing them for careers and for college and as a side benefit, for the community to address workforce needs. That model is a type of "Small Learning Community" the career academy concept.

What is a Career Academy?

The concept of career academies originated forty years ago to address academic rigor, relevance of instruction and to build strong and supportive relationships between students and adults. The success of career academies over the years has been attributed to their dual objective of college and career preparation, the broad cross section of students they serve, as well as paying close attention to data and research. Students who participate in academies are engaged in a significant way, as academies support the students' positive motivations. Understanding the student's motivations or career goals have helped engage students in a significant way. We also know that career academies within small learning communities foster accountability at every level.

A career academy is generally comprised of a group of students that takes classes together for at least two years and has a team of both career technical education teachers and core academic teachers who stay with that group as much as possible. Career academies generally have a career theme that helps students to see the relationship between what they are learning in their academic subjects and the application to real world work, which get to the question of "why do I have to learn this?" before the student asks. They also help to develop partnerships with employers, the community and the local community college. Students have the opportunity to

get real world work-based learning through mentorships (unpaid), internships (paid), on-the-job training, job shadowing and school-based enterprises, such as Cafe' Latte' and Camel Cafe', both within junior high and high school culinary arts classes.

The National Standards of Practice for Career Academies recommends that every career academy has a written definition of its mission and goals. These should be available to the administrators, teachers, students, parents, advisory board and others involved in the academy. These include at least the following:

- a. A focus on college and career. Academies enable students to complete college entrance academic requirements while exposing them to a vertical segment of the occupations within a career field, encouraging them to aim as high as they wish.
- b. Raise student aspirations and commitment. An academy seeks to increase the level of the students' motivation while in high school. The biggest limiting factor in many youths future plans is not their ability, but where they set their sights.
- c. Increase student achievement. An academy provides support to its students to increase their achievement in high school. This comes through close relationships with teachers and fellow students, rigorous and relevant curriculum and exposure to career and educational options outside the high school.

Some Research About Career Academies.

Research tells us that students who are involved in a career pathway or a career academy stay in school, graduate at a higher rate, get better grades, do better and stay longer in college or career and strangely enough, have been reported to establish more fulfilling homes and families. (David Stern, Charles Dayton, and Marilyn Raby. February 2010, "Career Academies: A Proven Strategy to Prepare High School Students for College and Careers").

History of Career Academies in Campbell County

Campbell County School District began using a structure that involved four Career Pathways in the mid 1990's when "School to Careers" was a major focus of the federal legislature. An emphasis was placed on giving students a better understanding of how their likes and dislikes should play into selecting a career. This allowed students the opportunity to learn about the career options available for them. Grant money was used to establish career centers, employ career center directors and assist students in a comprehensive K-16 program of study or individual four or five-year career plan. The four career pathways that were developed at that time; validated by local industry have remained a viable vehicle for assisting students to get into classes that will enhance their career or higher education choices. Although students were provided with the opportunity to visit the career centers and take an "Individualized Interest Inventory" to help them select some career options and one of the four pathways, there is a gap between the student knowledge of the career pathways and the teachers interest in learning about them. Because change is so hard, many teachers simple rely on the old adage that "this too shall pass"! Change is difficult, and can be very challenging, but it is time to embrace changes that will advance the educational opportunities of our youth!

There is a story about an engineer, a doctor and a teacher who lived 100 years ago and came

back to see what the world was like today. Both the engineer and the doctor could hardly recognize anything that had to do with their chosen career; buildings, bridges and hospitals had changed tremendously. However, the teacher could easily identify the schools and the classrooms. Teachers were still in their own individual classrooms, teaching by themselves and most of the buildings still looked the same on the outside. Fortunately, the technology used within the classrooms has improved.

What steps has Campbell County School District taken to learn more about and implement career academies?

It has become glaringly obvious to those of us supporting the career academy concept that one must "see it to believe it!". With that in mind several groups had the opportunity to visit school districts with successful career academies, beginning with the members of the Board of Education and the Superintendent. The next opportunity was for other administrators and counselors along with interested instructors to do some career academy site visits. Some of the schools/school districts visited were in Bakersfield, California, because of their emphasis on energy related areas, Palm Beach School District in Florida (over 100 career academies in 98 high schools), San Diego City schools, wall-to-wall career academies, Junction City, Kansas, EVIT Culinary Academy in Phoenix, Arizona, four career academy schools in Brooklyn, New York and most recently, a group of the Hospitality and Tourism Advisory Board members from Gillette visited Mt. Diablo Culinary Academy in Napa, California. Once participants have had the opportunity to watch the operation of a career academy and to speak with the students, they become totally supportive and aware of the benefits being in a career academy has on student achievement and outcomes.

Another step taken to increase awareness of the benefits of career academies was to hold large community dinners with guest speakers from the Career Academy world. Three such dinners have been held, supported by the Board of Cooperative Higher Education Services. The first speaker was Deb Mills, from The Center for Occupational Research and Development in Waco, Texas. The second guest speaker was Dr. Ken Grey, author of "Other Ways to Win" and the third was Ms. Connie Scotchel-Gross, Career Technical Education director for all the career academy schools in Palm Beach County, Florida. These dinners included parents, community members from business and industry, administrators, school board members, students, counselors and other interested persons. Since that time other experts have been brought into the school district to train interdisciplinary teams of teachers in the areas of Integration of Career and Technical Education with Core Academics, Project-based Teaching and Learning and Reforming Education Through Smaller Learning Communities.

The Wyoming Department of Education, Career and Technical Education Unit, has been invaluable in helping to promote the career academy concept in Wyoming. They were responsible for funding three Demonstration Site Grants, one of which Campbell County School District received to establish an "Academy of Hospitality and Tourism". They also sponsored a state-wide career academy conference in March, 2010, and invited a Career Academy guru to be the keynote speaker for the Wyoming Association for Career and Technical Education Conference in Buffalo, Wyoming in June of this year. The speaker, Dr. Valerie Jones, Assistant Principal from Braden River High School in Bradenton, Florida was successful in structuring a

new high school into three career academy pathways. In three years she attained cooperation from all parties and the school was such a hit that there is a waiting list to get in. Dr. Jones was asked to repeat her achievement in a tougher 70% Title I environment. She was given just a year to come into a traditional high school, win support of councilors, teachers and administrators, train them all and work through the class schedules. How's she doing? "Right on Track" The secret of her success is that every teacher, counselor, administrator and student is aware of and involved with one of the Career Academy/Pathways. Braden River uses only three pathways. Our four pathways are well established and could possibly present a workable structural option for Campbell County High School. The mantra is if it is good enough for some students -- why not for all students?".

What we have learned along the way.

First, change is REALLY hard and second, there must be a Career and Technical Education sequence of courses available for the academy students.

The first career academy that was started at Campbell County High School was an "Energy Academy", which had all the major components of an academy except for CTE classes on which to base student career choice. So, students wanted to be in the academy for the relationship part of the academy, but were scattered as to their career goals. Students wanted to be doctors, architects, cosmetologists, engineers, everything but energy related kinds of careers. Because of that, nearly half of the 50 beginning academy students opted out of the academy the second year as they all needed different math classes, different science classes and wanted to take AP and college classes, which weren't built into the Energy Academy. The good news was that not one of the Energy Academy students dropped out of school.

There was a very strong group of academy ambassadors from the first year who went to the Junior High schools to recruit the students for the second year of the Energy Academy. Because of the interest and enthusiasm of the ambassadors, fifty ninth grade students signed up for the Energy Academy year two. We are starting year three of the Energy Academy now in the fall with 27 seniors and 47 juniors. Most of these students have had the same core academic teachers for two years, but have only worked with a team including career and technical education teachers for one or two projects. This career academy will be continued until these students graduate in two more years.

It was then decided to morph the Energy Academy into a Transportation Technology Academy, or perhaps, an Energy/Transportation Academy for students with a clear career goal in the transportation field. They will be taking a sequence of auto tech courses from Campbell County High School and their capstone courses in Diesel Technology from Gillette College. The career technical education teachers have been meeting with the core academic teachers this summer to prepare the curriculum for next year. So there will be an English teacher, a math teacher, a science teacher and two auto tech teachers working together for the Transportation Technology Academy team.

The third career academy is the Hospitality and Tourism academy which is one of the outcomes of the Department of Education Demonstration Site grant. Again there is a team of core

academic teachers, culinary arts teachers and marketing teachers who will be working with the students beginning as sophomores this fall. As soon as the academy students are ready, they will be able to go to the Gillette College Tech Center state-of-the art culinary kitchen and ultimately will serve meals in the dining room there.

Assisting in student knowledge and interest in career academies are two opportunities for students to enroll in specialized career classes at the ninth grade level. Sage Valley Junior High has a class called "Cruising to Careers" co-taught by a Family and Consumer Science Teacher and a Business Education Teacher. And Twin Spruce Junior High has a class called, "The Real Game", also taught by a Family and Consumer Science Teacher.

More things we have learned.

Each Career Academy must have an advisory board made of up local business and industry representatives. These members can provide job shadow and field trip sites, help with curriculum issues, act a guest instructors, help with activities such as the academy picnic, provide mentorship and internship sites and much more.

Both junior high and high school counselors must be on board with the career academy concept, because they are key to placing students in the appropriate majors and elective classes. Counselors must be very careful to assign a broad spectrum of students in the career academies and not emphasize the benefits to only "at-risk" students.

Unfortunately, scheduling Small Learning Communities within a larger high school configuration can be a nightmare. Career academy students generally must be hand scheduled, because of the sequence of courses required and the desire to keep all career academy students together for two years as much as possible.

Intensive conversation and professional development is extremely necessary to assure that all teachers, students, administrators, counselors and parents are aware of the value of career academies for student success.

Without clear direction for change from the Superintendent and the Board of Education to be carried out by the high school principals, with support of the other district administrators, the likelihood of success is limited.

The schools that we have visited with career academies generally have an administrator, a counselor and a director or lead teacher assigned to each academy or pathway.

As much as possible, the career academies should be physically close to each other, such as one academy upstairs and one downstairs or one per hallway. This requires the breaking up of departments causing much teacher stress.

Students should be allowed to change academies, only after they have completed a school year in the one that they selected first.

Whenever possible, teams of teachers should have a common planning time during the school day and should be allowed to spend professional development time in designing interdisciplinary projects and curriculum.

It is helpful to have the Career Center Directors work closely with counselors, especially those assigned to the ninth grade, to assist students in selecting their majors. They will also work with teachers, providing information and professional development around the career pathway/academy concept.

It is very difficult to have career academies in the truest sense of the word when you have a two campus model. One campus for sophomores and another for juniors and seniors, because the students have a hard time staying with the same teacher for more than one year.

Conclusion:

We know that we are losing students! No matter what the number, to lose even one student is problematic and not acceptable. Establishing our "career academies or small learning communities" we have learned much the first couple of years and will probably do even more "tweaking". But schools where the pathway or academy system is well established have found considerable success, which is the goal in Campbell County School District.

Summary: Restructuring Rural High Schools -- A Career Academy Concept.

Why do we need to change? Albert Einstein once said, "The definition of insanity is doing the same thing over and over and expecting different results". Career academies provide change in student interest in school, an increase in a sense of belonging and improved attendance and graduation rates. Career Academies reduce dropout rates and better prepare students to succeed into adulthood. And they increase student achievement through relationships.

Effectiveness of Career Academies (National Career Academy Coalition)

When career academy students are compared to non-academy student in the very same high school we find that academy student nationally:

earn more credits upon high school graduation (8 %-15% more) graduation rate is considerably higher (CA. 10% higher) drop out of school at a lower rate (7.3%-14.6% lower) enroll in postsecondary education at a higher rate (62% vs, 47%) matriculate from 2 yr, and 4 yr, colleges at a higher rate (52% vs. 36%) report lower remediation rate than the national average (8% vs. 20%) earned higher hourly wages, worked more hours per week, had more months of employment and earned about 10% more per month pass state exams at a higher rate (language arts 84% vs. 76%; math 80% vs. 74%) meet college entrance course requirements at a higher rate (50% vs 39%)

In Campbell County School District, we have not had career academies long enough to have had any students graduate, however, we now have a class of 27 seniors, who are completely dedicated to the Career Academy concept, as well as 47 juniors in the Energy Academy. We will start two additional career academies this fall in the areas of Transportation Technology and Hospitality and Tourism. We have learned much along the way, especially in the areas of communication concerning career academies and support of the concept from some administrators and teachers. We do have very strong support from parents and the community as a whole, generally expressing a desire to have more career academies added to the high school.

Because of the sequence of courses required in Career and Technical Education at Campbell County High School, students are really enrolled in a career academy of sorts, only lacking the core academic teacher involvement and integration. These areas include: Agriculture; Project Lead The Way (pre-engineering), Business and Finance and Television, Broadcasting and Animation Production and Careers, and generally involve at least two years with the same group of students. Emphasis is on the "Four R's--Rigor, Relevance, Relationships and Reflection".