

KENTUCKY

Career and Technical Education

Volume X Spring 2015



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Associate Commissioner's Notes

Greetings from the KDE Office of Career and Technical Education. I hope your school year has been productive and your seniors are ready to make a successful transition beyond high school.

We continue to strive to develop a world-class system of career and technical education in the Commonwealth. Many initiatives have been implemented to ensure CTE programs are relevant and rigorous and provide students with a pathway that leads to further training and career success.

Kentucky Rising is a statewide initiative intended to enable our citizens to enjoy broadly shared prosperity in a fiercely competitive international economy. Reaching that goal requires a world class workforce.

Since the Kentucky Education Reform Act was passed in 1990, Kentucky has moved from close to the bottom of the states in school performance to the middle of the pack. The state is now committed to building on that achievement to reach the top of the pack, not just in the United States, but in the world.

That will require the state to carefully examine how Kentucky compares to the top performers in the United States and world on every major factor – from the quality of our teachers to the way we finance our schools – that affects the ability of our schools to educate our students to the highest standards in the world and function well in a global economy.

Researchers at the National Center on Education and the Economy (NCEE) have been studying the strategies used by the countries with the best education systems for more than a quarter of a century. They have identified Nine Building Blocks for a World-Class Education System. Not all of the best-performing countries are equally strong in all of these areas, but, again and again, the researchers have seen that the stronger a country or a state is in these arenas, the more likely it is that they will find a very high performing system.

Throughout the spring of 2015, Kentucky has been gathering data on its own performance in each of the Nine Building Blocks, comparing that data to the comparable data for the states and nations with the best-performing education systems. Career and Technical Education is one of the building blocks, and a comparison has been made between our system and the top performers.

In top-performing jurisdictions, students in all fields have the opportunity to gain the skills required by employers either in real workplaces or in simulated workplaces that have all the attributes of real ones. In Kentucky, a few students have such opportunities, but most do not. In top-performing systems, students in all fields have an opportunity to gain the skills required from instructors whose skills are state-of-the-art. Instructors are typically required to return to firms every few years to refresh. In Kentucky, most instructors must have had four years of experience in their occupation or trade, but there is no requirement to return to industry every few years to refresh technical skill.

In top performers, students in all fields have the opportunity to learn on state-of-the-art equipment. In Kentucky, the equipment made available to career and technical education institutions varies widely in the degree to which it is currently used in industry. In top performers, employers play the lead role in their CTE systems, setting the standards for student performance, providing slots for employer-based training, providing opportunities for teachers to refresh their knowledge and skills, providing opportunities for students to earn money while being trained and making sure that students acquire the necessary skills while they are in training. Kentucky is just beginning to develop a system that would support these kinds of roles for employers on a systematic basis across the state.

In the coming months the CTE Advisory Committee will review the gap analysis and consider action steps for elevating and integrating CTE. More information related to the Kentucky Rising initiative will be shared as the work progresses.

Best wishes for a relaxing summer!

Sincerely,
Dale Winkler
Associate Commissioner –
Office of Career and Technical Education



Upcoming CTE Events

June

KY FCCLA Leadership Camp Conference- June 8-10th
Hardinsburg, Ky.

National FCCLA July 4-10th Washington DC.

State FFA Convention, June 8-11, Rupp Arena and Lexington Center.

SkillsUSA National Leadership and Skills Conference, June 22-26, Louisville, Ky.

HOSA Future Health Professionals June 23-27 Anaheim, Ca.

FBLA-PBL National Leadership Conference, PBL- June 24-27, FBLA- June 29- July 2, Chicago, Ill.

TSA National Conference, June 28- July 2, Dallas, Texas

Kentucky Career and Technical Magazine is published quarterly by the Kentucky Department of Education's Office of Career and Technical Education. For more information about this publication or featured items, contact Tim Thornberry at tim.thornberry@education.ky.gov or call (502) 564-1270 extension 4229.

All photos and stories by Tim Thornberry unless noted otherwise.

Kentucky on the Forefront of Using Apprenticeship Model in New Ways

RUSSELL SPRINGS, Ky. – The saying “What goes around comes around” could be applied to the renewed attention apprenticeships are receiving both at the secondary educational level as well as those who have graduated from high school.



Torsten Langguth, CEO of Dr. Schneider Automotive Systems

As business and industry needs grow for qualified employees, many are looking at the apprenticeship model as a way to fill those needs.

According to information from the U.S. Department of Labor (DOL), apprenticeships have helped build America from its early colonial beginning to the present day noting some very famous early apprentices that included George Washington (surveyor), Benjamin Franklin (printer) and Paul Revere (silversmith).

From a national perspective,

there are almost 24,000 registered apprenticeship programs providing education and training for approximately 400,000 apprentices in a number of emerging and high-growth sectors such as energy conservation, health care and information technology, in addition to traditional industries such as manufacturing and construction, states the DOL.

Kentucky is on the forefront of utilizing the apprenticeship model in new ways to help combat a growing shortage of qualified employees for an array of business sectors.

Recently state Labor Cabinet Sec. Larry Roberts, Kentucky Department of Education Commissioner Terry Holliday and Torsten Langguth, CEO of Dr. Schneider Automotive Systems announced a partnership that will set a new standard in apprentice education in Kentucky.

Gov. Steve Beshear applauded the partnership with the German company. The announcement comes after the Governor recently visited Germany to share Kentucky’s accomplishments in workforce training and promote Kentucky’s thriving automotive industry at an international automotive conference.

Career readiness is a crucial part of our economic well-being now and into the future,” said Gov. Beshear. “This competency-based initiative not only helps students build better lives for themselves, but it sets a new standard in apprentice education in

the Commonwealth that will better prepare our workforce to meet the needs of employers and continue to attract new companies to Kentucky.”

In a ceremony held at the Dr. Schneider plant and attended by a host of local education and industry leaders from Russell and Adair Counties, Sec. Roberts said for the first time in Kentucky, the apprenticeship program will recognize competency-based learning, which provides participating high school students a more customized approach to training.

“This enhancement of Kentucky’s current apprenticeship program will allow students a more personalized approach to job training at an earlier age than many apprenticeships have in the past,” he said. “Also, it will give business partners a chance to grow a new generation of employees trained specifically for their operations.”

The new initiative, which is the first of its kind, allows high school students to complete up to half of their apprenticeship before graduation based on competency in registered apprenticeship programs – instead of a set amount of classroom and on-the-job training hours previously required for many apprenticeships.

The program at Dr. Schneider’s will work in conjunction with an already established pre-apprenticeship program known as Tech Ready Apprentices for Careers in Kentucky (TRACK). That program also allows students to gain apprenticeship credit through their Career and Technical Education (CTE) classes and participating local business and industry partners.

Holliday said work-based learning experiences are essential for Kentucky students to gain the skills and competencies needed for 21st

century careers.

“Kentucky and the U.S. in general are lagging behind other nations in this regard. As we look to expand work-based learning experiences for more students in Kentucky, this program will serve as a model for the rest of the state,” he said.

Langguth said he is pleased that his company is leading the way in a new era of apprenticeship while giving young people an enhanced opportunity to learn a lifelong skill.

Through an extensive screening process, Dr. Schneider Automotive Systems has already placed two students from the nearby Lake Cumberland Area Technology Center in this new training program. Garrett Foley, who works as an industrial maintenance technician, and Tyler Moore,



Kentucky Labor Cabinet Secretary Larry Roberts

who is an injection mold setter, are considered regular Dr. Schneider employees.

“My wish is to advance this whole program,” said Torsten Langguth, CEO of Dr. Schneider Automotive Systems. “I have been impressed with what the students have learned, and this spring we would like to start the process of looking for four more students to participate in this program. In operating this way, you have to look at apprenticeships differently, and realize these students are like diamonds that are being shaped, and eventually they will have lifelong skills.”

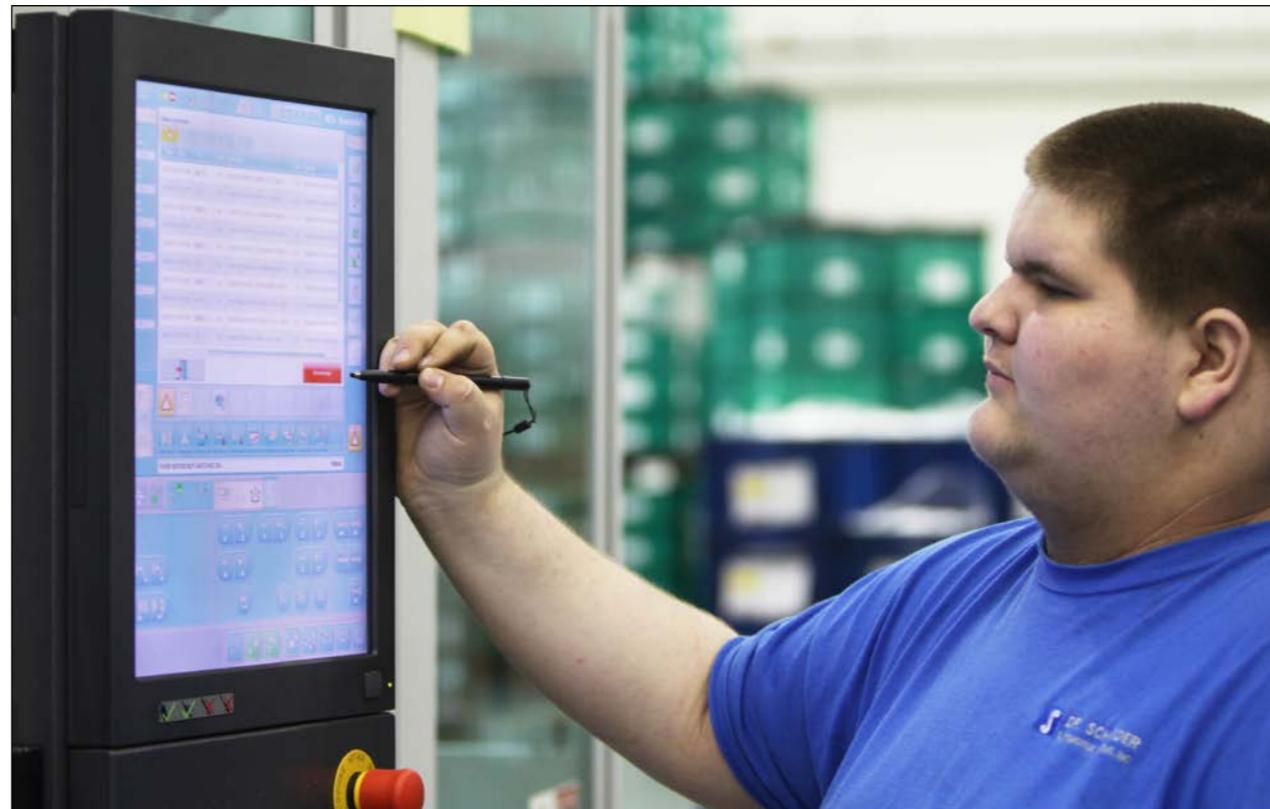
Langguth added that while these are just students, they are also regular employees and have been entrusted to work with very sophisticated technical machinery.

Foley said the program at Dr. Schneider’s is a life changing opportunity.

“I have learned skills in which otherwise I wouldn’t have and the program has jumpstarted not only a job in the workforce but a career,” he said. “This has put me in a real workplace doing real jobs and I think more businesses should implement this type of a program to create a better workforce.”

Moore said the opportunity has provided real-life skills that will create a better future.

“It’s giving me a great learning experience and options to better myself as an individual,” he said. “I’m enjoying this so much that I plan to make a career out of this apprenticeship.”



Tyler Moore works as an injection mold setter as part of his pre-apprenticeship program

On Page One: Garrett Foley, who works as an industrial maintenance technician, works on one of the many advanced pieces of equipment at the facility.

Adair County Superintendent sees Great Opportunities for CTE Students

COLUMBIA, Ky. – Alan Reed, superintendent of Adair County Public Schools is excited about where his district is going educationally and he gives a lot of credit to the high school's Career and Technical Education (CTE) wing.

Reed tells visitors by way of the district's web site that students will have more choices and opportunities than ever before with the opening of a new satellite technology campus of Lake Cumberland Area Technology Center (LCATC) and 39 career paths leading to industry certifications in health care occupations and welding/metal fabrication."

The 2014-2015 school-year marked the first for the satellite program and has brought about a heightened awareness of how valuable CTE programs can be to students and the community.

Reed said three years ago Adair County was a traditional college-prep high school. But when he started looking at data, early in his term, it was very evident something needed to change.

"Having come from a business background myself, I realized from my own life that college-for-all is not where it's at," he said. "Had I not had other certifications along the way I would have probably starved a few times in my life."

In addition to what he saw in the data coming from the state level, especially concerning college-and career-readiness (CCR) numbers, Reed said by chairing the Work Ready Committee in his county, he realized the positive connection CTE could make in getting the community moving forward in reaching Work Ready status.

The Kentucky Work Ready Communities initiative is a measure of a county's workforce quality.

Certification assures employers that a local workforce has the talent and skills necessary to staff existing jobs and to master the innovative technologies new jobs will require.

"The big catalyst was the Work Ready Community project and it was apparent early on how it, the performance of the local school district and CCR dovetailed," said Reed.

With the inclusion of the CCR measures implemented by the state through Senate Bill 1, many school districts began to see the relevance of its CTE programs.

Phyllis Curry, Adair County's instructional supervisor said until a measure was available that would hold the district accountable, CTE was not looked at in the way it is now.

"Once we got the career measure, that sort of changed the whole complexion of everything," she said.

Reed said with the changes have come renewed interest as indicative of the number of parents now attending school-related events like Parent Night functions.

One of those changes is to get every student coming to Adair County High into a career path and have them complete that path by graduation.

Reed said with the help of the Work Ready committee, some key partnerships were formed, grants were sought to help with funding and a massive public relations effort was put forth that has paid off with an immeasurable boost in community support.

But it was changing the perceived value of CTE and the students involved that really made a difference, he pointed out.

LCATC has long served the district's stu-



The 2014-2015 school-year marked the first for the CTE satellite program at Adair County and has brought about a heightened awareness of how valuable these programs can be to students and the community.

dents that wanted to attend. Reed said the problem was, he couldn't get students to take the 25 minute bus ride and those that were going were looked upon as those not likely to go to college or maybe even get a job.

But he thinks now with opening the satellite program and a heightened awareness of the value of CTE, Adair County may be setting the wave of the future.

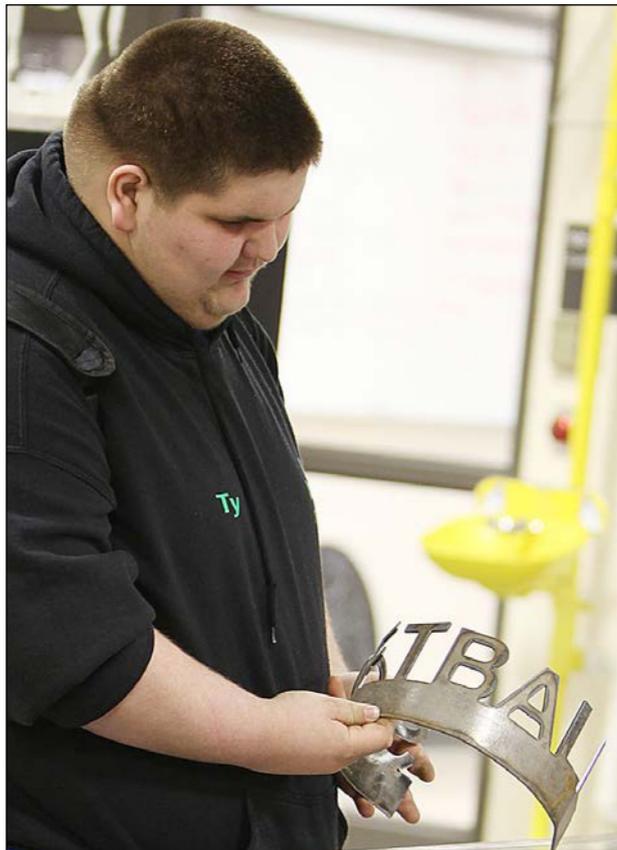
"You probably can't build whole career and tech schools because of budget constraints in most counties in Kentucky but you can build satellite campuses," he said. "To do that, you have to tear down the geographical boundaries and remember there are only the students and they need help."

Because of the new satellite program, Reed said the welding program went from about five students to 100 with a waiting list as did the health program with similar numbers.

The investment in those programs is already seeing dividends. The Adair County welding fabrication team took first place at this year's SkillsUSA-Kentucky State Conference which qualifies them for the national event to be held in June.

Reed said the renewed energy found at Adair County High School is due in large part to new opportunities for the students.

"CTE has risen to be the apex; it's the new cool," said Reed.



Adair County student Tyler Moore looks over a welding piece created in the welding lab. The welding fabrication team celebrated a first place win at the 2015 Kentucky SkillsUSA competition qualifying them for the national competition.



Since opening the health sciences program in the CTE Unit at Adair County High Schools, students have been lining up to get involved.

New Pathways Bringing Engineering and Tech-Ed Worlds Together

Thanks to a collaborative initiative taking place within the Office of Career and Technical Education (OCTE), new pathways are being created by blending some very traditional programs with Project Lead The Way (PLTW) curriculum.

The new pathways will be in automotive, manufacturing and construction engineering.

On the surface, these pathways would seem to represent a bringing together of two separate worlds, but, that is really not the case, according to Associate Commissioner Dale Winkler, who said many of the traditional programs have long had an engineering connection.

"Programs such as automotive, construction, and manufacturing technologies serve as the basis for so many engineering pathways and really always have," he said. "In bringing these programs together, we now can give our students an extra level of knowledge if they choose one of these directions."

Winkler added that not only does this enhance what a student will learn but gives them an extra leg up when the time comes to look for a job.

The workforce sector, especially in certain areas like advanced manufacturing, has strongly voiced its concerns about a lack of qualified employees to fill job opportunities that now demand more advanced skills with a higher degree of technology innovation.

Mary Taylor, OCTE Industry Training and Development Specialist said bringing these program areas together is just common sense when it comes to filling that void in the workforce while giving students a better chance of landing those high-tech jobs once they are finished with their education.

"We are doing this because industry needs students that have applied knowledge of engineering. They need the combination of the two different types of project-based learning," she said. "There are CTE schools at



Construction technology students actually create projects that are first designed in a computer program and transferred over to a machine known as a CNC wood router.

the secondary level that teach both the PLTW curriculum and traditional tech programs and when those programs work together, I have never seen it be anything but positive for both the students and the teachers. Now employers will reap the benefits."

Terry Miller, former OCTE manufacturing technology consultant said a solid foundation in one or all of the skills areas that make up the manufacturing programs gives students who want to enter into the engineering field a big advantage not only from an educational standpoint but from a future employee perspective, as well.

"Having been involved in the manufacturing industry for nearly 25 years years, I have seen, on many occasions, how beneficial it is to engineers to have an extensive background in programs such as welding, machine tool technology and industrial maintenance," he said. "They have a better understanding of what it takes to get a job finished in a timely and correct manner."

Todd Nickens, the OCTE automotive technology consultant said there are benefits to the program for both the students in auto-tech and engineering.

"For students who may be interested in Automotive Engineering, completing the Hybrid Pathway will expose them to how automotive systems actually react in the real world," he said. "For Automotive Technology students, it will expose them to the reasons that automotive systems react the way they do, such as engine operation, brakes, suspension, electrical, etc., and how one system on a vehicle affects the other systems it comes in contact with."

Educating engineers in general is a project-based type of learning that fits well with the CTE model, said PLTW's Mark Harrell, Director of School Engagement, Midwest Region.

"By creating hybrid pathways between PLTW and CTE, career pathways students will be exposed to Science, Technology, Engineering and Math (STEM) while seeing the relevance in their CTE courses," he said. "Students who enroll in one of the 11 OCTE approved hybrid pathways will have the opportunity to gain multiple, stackable credentials and have the skills needed to become both college and career ready."

Harrell added that the hybrid pathways are all about creating students who are not only college and career ready, but will have the skills to create a future high-skilled, high-wage workforce for Kentucky.

"We are very excited about deepening our partnership with OCTE in the Commonwealth. We have already been brainstorming other potential hybrid pathways to offer students with the rigor and relevance we both have to offer," he said. "With both organizations working together we can create a world-class workforce for Kentucky!"

Harrell explained how the program works by using the Electrical Engineering hybrid pathway under the Manufacturing Career Cluster as an example.

"A student entering this pathway would learn how to use a design process and computer aided design software to solve problems. They would also understand how to apply mathematical principals in the Introduction to Engineering Design PLTW course in his or her ninth grade year then apply those principles in their Electrical Principles CTE course their tenth grade

year," he said. "As this student progresses through the pathway they will deepen their knowledge of both Engineering and Electrical Applications."

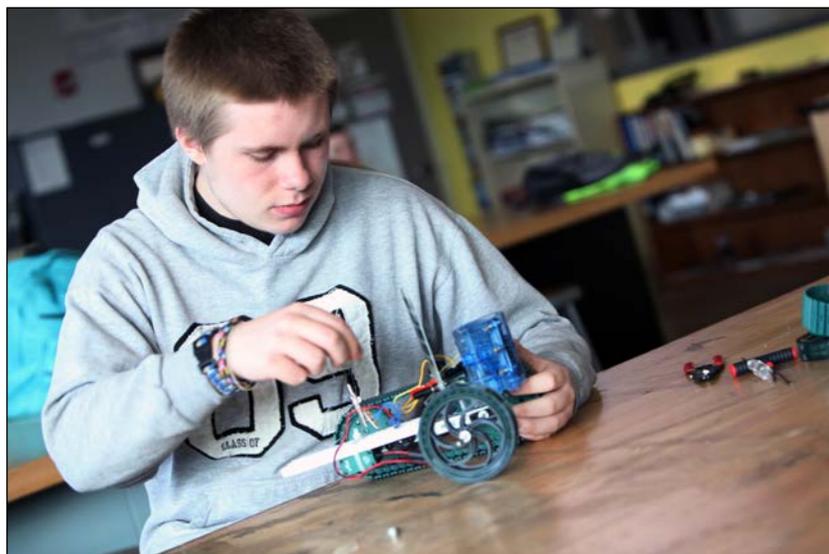
Harrell added that as that student nears the end of the pathway they will have an opportunity to gain their National Center for Construction Education and Research (NCCER) certification and possibly enroll in the (Tech Ready Apprentices for Careers in Kentucky (TRACK) pre-apprentice program.

Taylor said these engineering pathways and TRACK are a good match because apprenticeship programs are growing in popularity and give students a chance to begin their workforce careers before graduation from high school.

"As we expand the TRACK program, the engineering pathways have come along at a very opportune time, especially in the construction technology area," she said. "Skilled jobs in the construction sector are becoming more demanding due to the need to understand more of the engineering aspect of the business. It's not just hammering nails anymore; it's incorporating design techniques and energy essentials into the construction of facilities, for example, while learning operational necessities of a whole range of advance equipment."

The engineering pathways are set to begin in the next school year but preparations are taking place now to get information out to administrators and counselors to enable interested students to make informed decisions about enrolling in these programs.

A list of these pathways can be found at http://kytech.ky.gov/PLTW_CTE_HYBRIDS.pdf



Through project-based learning, engineering students are gaining knowledge in the basics of solar energy coupled with hydrogen power to make model cars operate.

Why Career and Technical Student Organizations are so Important



Frankfort, Ky. – Career and Technical Student Organizations (CTSO) have been around for as long as Career and Technical Education (CTE) has been taught and for those who are connected to CTE as a student, teacher or administrator, the bonuses that come from being involved in these groups are obvious.

But for those who have never been a part of, or involved with one of the seven Kentucky CTSO's, the value of membership may not always be completely evident.

Brandon Davis, the Kentucky FFA state advisor can attest to, on many different levels, just how important these organizations can be to young people.

As the leader of the state's largest CTSO, Davis said he sees on a regular basis how the organization extends the classroom and gives students a set of leadership skills they will carry with them for a lifetime.

"I think the major piece that makes the student organizations so important is that, aside from CTE providing real-world concepts and information, the CTSO then allows students to demonstrate that on a very practical level," he said.

That demonstration of skills comes through in a number of ways such as projects or events connected to each CTSO but even more than the hands-on activities is the way that information is shared, added Davis.

"Being able to share that through public speaking, written communications and even electronic form is so crucial," he said. "So being in a leadership organization that is tied to something you are passionate about draws all that together where a student entering the workforce has those skills to work as a team member, as a leader and one who can take direction and give direction as needed."

Davis noted that those employability skills can be difficult to teach but are second nature with CTSO's and the students that come from that background have a huge advantage over those that don't.

The student perspective

Hailey Harper, a junior student at the Rockcastle County Area Technology Center (ATC) serves on the state officer team for Kentucky SkillsUSA. She first became involved in the local chapter on the advice of her teacher but found out quickly she wanted to go beyond that local level.

"I surprised myself at every SkillsUSA event because I have been really shy at heart but I faced my fears and have tried to be a good leader because I really want to do something awesome with my life," she said.

Harper said as teachers saw leadership skills in her, she does the same with others and feels like the CTSO helps bring that out.

She also said she wants other people to become familiar with SkillsUSA and understand the value a student organization brings to its members.

"I want people to know what we are and who we are and what we're about," she said. "The membership at our school is good but I would like to see that everywhere because the students in SkillsUSA are the

people who will build our future."

Harper, who is a welding student plans on making welding a career by first getting her welding certification and then moving in to the engineering field.

Hannah Brown, another member of the SkillsUSA Kentucky state officer team said being involved in the organization has brought out leadership skills in her and taught her to get out of her comfort zone.

"In most any business you go into, you need to have leadership skills and I think SkillsUSA really covers that for its members," she said. "I hear other members talk about wanting to be an officer after they hear one of us speak and that makes me feel really good about what I'm doing."

Grace Bradley, a health sciences student from Wayne County, recently participated in the HOSA-Future Health Professionals State Conference. She said that organization is helpful for those going into the health professions field.

"It gets you ready for college and provides a lot of information you need to know even beyond college," she said.

Bradley added that being involved in the completion end of the program has given her an idea of just what being in the workplace will be like.

Because of her involvement in the health sciences program, Bradley was able to test for her Certified Nurses Aid certification, the first step needed in becoming a nurse. And she has accomplished this goal as a junior in high school.

"Some college nursing programs actually require that you have your CNA before being accepted into the nursing program," she said. "I think being in HOSA gives you an edge over those who have not been involved."

Getting a head start in careers and having pride in their respective CTSO's is just a couple of the fringe benefits created by these students groups. But perhaps one of the biggest advantages comes from being noticed by those outside of the education sector.

Kentucky CTSO's beyond the state line

The achievements made by students through their involvement in CTSO's are not only seen by their teachers, administrators or family members but by those in industry. And it isn't just the hometown companies taking notice; case in point, Breckinridge County ATC.

That school's machine tool technology program fostered a partnership with NASA because of the top 10 finish obtained at the last National SkillsUSA competition. That recognition gained the attention of Bob Zeek, International Space Station (ISS) Simulation engineer and project manager for NASA's High School Students United with NASA to Create Hardware program.

Zeek said it was because he noticed Breckinridge County had finished so well at the national competition that led him to the school to meet with Dean Monarch, the school's machine tool technology teacher.

Davis said many of the more than 40,000 Kentucky CTSO members are being recognized on the national level for their efforts.

"It's very true that if you look at the national recog-

nition we have with CTSO's, Kentucky is well above average which is a testament to the teachers in the local programs," he said.

Davis pointed out that teachers are reaching students in ways that don't just prepare them for local competitions but keeps them competitive with other students across the country.

Kentucky CTSO members and their advisors are making gains at the local, state and national levels. Davis himself received national recognition after being named Outstanding New Member of the National Association of Supervisors of Agriculture Education, an organization comprised of ag education leaders from across the country.

"I don't need a reminder of why I do what I do but when you receive national recognition you know people are taking notice and we're doing the right things in Kentucky," he said. "Any recognition I get, I see it as recognition of the entire ag-ed state staff and the ag-ed family beyond that."



Lee County ATC Program Expanding Opportunities for Students Close to Home

BEATYVILLE, Ky. – A new health science-related (HS) program being taught at the Lee County Area Technology Center (ATC) will expand opportunities for HS students by adding a business education component.

Francis Davis, who teaches the Medical Administrative Assistant program, said students enrolled in the class will learn how to work in the medical office of a clinical facility.

“This program will make our students more rounded because they will be able to work in the medical office as well as the clinical area of the facility,” she said. “Also, we found this type of work is something we need in this area.”

Davis added this is a type of cross-training allows students to gain many business related skills under a health science pathway.

“Students would possibly have to deal with accounting, billing or medical records issues in a medical office so I’m working with our business teacher to get information for them,” she said.

Craig Herald, Lee County ATC principal said the results of a community wide survey found a part-business/part-health science program would benefit their students even more than just something health related.

“The students are getting the medical terminology, CPR and vital statistic skills from the health science program but they’re also getting the medical office skills from the business program,” he said.

Herald pointed out some students do well on the academic side of the health program but don’t necessarily excel in the hands-on clinical side, while the opposite is true for others.

He said this program helps provide something for both types of students thus giving them more job opportunities in their own community where both sets of skills are needed.



Health students at the Lee County ATC are expanding their opportunities by entering the new Medical Administrative Assistant program which was created as a result of a community wide survey which found a part-business/part-health science program would benefit their students in that area even more than just a health-related program.

Another important reason to provide such a program is related to the postsecondary goal of a student’s education. Herald said it is important for students to get an idea of what they really want to do at the ATC because college campuses are located about an hour and a half away making it more difficult to change career choices at that level strictly from a logistics point of view.

Davis said the program is already seeing growth as more and more upcoming students are inquiring about it.

Kara Williams is a health science student at Lee County. She has wanted to be in some type of health profession for a long time.

“Last year I took a business class, as well, and this is sort of a mix between the two,” she said. “Before this class I never thought of the two

programs complementing each other but I think it is something I want to do next year. I think it will give more students more opportunities.”

Autume Lutes, another health science student said the health programs in general are preparing her for college and a career.

“I want to be a physical therapist and the programs here are helping me narrow down the best choices for college,” she said. “It’s good to get a start on my career here and it’s a lot less stressful.”

Amanda Kash entered the health sciences program last school year and is looking at the new class as a possibility for her senior year.

“I think it would provide more job opportunities. The more you have under your belt the better your chances when looking for a job,” she said.

Amanda Hutchinson is a high school representative with Spencerian College, which has a similar program to the Medical Administrative Assistant program now being offered at the ATC. She often visits the school to discuss career opportunities and what educational needs are required to fill these positions.

Hutchinson said there is a need for candidates in this field so high schools are beginning to promote this program as a way to fill this need.

“Where no one person owned a specific position within an organization, now they have the expert of that area in a lot of practices,” she said. “Getting the interest level going and making sure students are aware of this position is so important to the healthcare field. There is a lot of excitement around a position that blends the sciences of healthcare with an administrative function; the management piece of it.”

Herald said Lee County is one of a handful of schools offering this type of program on the secondary level and business and industry needs drove the addition of the program.

Kentucky Company Clearing a Path in Education/Workforce Partnerships One Log at a Time

BRYANTSVILLE, KY. – Gwen and Tommy Mitchell own and operate a unique business. Rocky Top Log Furniture and Railing Company (RTF) is a company built around the idea of making anything and everything from logs.

The Mitchells have operated the business for more than 20 years creating an impressive list of customers along the way.

Their business is so popular, the couple is starring in a reality show called “Log Heads” based on what they do and how they do it. Tommy describes it as a home make-over type show where they complete a surprise project for someone during each episode.

In addition to their love of the business, the Mitchells also have a love for the people that work for them some of which have been with them from the start. So, it comes as no surprise they are working to educate a new workforce generation.

In keeping with their “uniqueness” the business has partnered with recruitment and workforce solutions organization Adecco Staffing USA and the Kentucky School for the Deaf (KSD) to put students in a cooperative learning program, allowing them to get real world, work experience while supplying RTF with a few extra employees.

“We came to this location in 1999 with 16,000 square feet and thought that was huge at the time and now we’re at 80,000 square feet,” said Tommy Mitchell.

But the partnership is more to the Mitchells than just getting extra workers; it’s about giving students an introduction into a whole new



Under the watchful eye of Tommy Mitchell, KSD student Dillon Maynard puts together a table top using a piece of machinery in one of the shops at Rocky Top Furniture.

world, said Tommy.

Gwen Mitchell said of the students in the co-op program, it is they who have really taught her and Tommy something as opposed to teaching the students.

“They taught us a whole different way of being around people with a hearing impairment,” she said. “Our guys in the shop were nervous because they didn’t want to let those students down as were the students but at the end of the day both were happy.”

Tommy Mitchell said he has seen a big change in his employees in that they have come out of their shells to help with the students.

The KSD students are working at RTF as part of the school’s Education for Employment program. Dillon Maynard, a senior student at KSD just finished his co-op duties at RTF. Being in the advanced manufacturing class at the school helped in this job, he said.

“I learned many things about working in the real world at the school and I saw an opportunity by coming to RTF,” he said. “The hands-on activities I learned in class transferred here to this work experience program. I really enjoyed working here.”

Jay Cloud is the advanced manufacturing teacher at KSD. He said making the connection with math classes through his program really helps the students in an environment like RTF.

“This is real world experiences with numbers” he said. “These students have benefited both in his math skills and his English skills in helping to communicate and creating a resume.”

Cody Downey and Ryan Mayes are both junior KSD students who are also participating in the work program at RTF. Both said the experience has been rewarding and something they want to continue.

“I like it here and I want to do something with more of a challenge later,” said Downey.

Mayes said he likes doing new things and working with new tools, something he has gotten to do at RTF.

He also said that he has brought some of the learned aspects of the

job back to the classroom.

Cloud said the job has provided realistic life skills for the students with the Mitchells even setting up real interviews the students went through giving them an idea of what interviewing for a job is like.

Dillion said for the first three years he attended KSD, he didn’t have much confidence because he was still in the deaf culture but now, being out in the real world working, I see a different culture and has learned how to approach the hearing world.

Cloud said these students now they know they can be successful in the hearing world; a credit to both the students and the Mitchell’s.

Megan Searles, client services manager for the employment solutions program at Adecco Staffing, noted that the Youth Employment Services (YES) project focuses on the importance of getting students at the high school level into the workplace to learn vital professional skills that will help them find employment in the future.

“As I work with students in the YES program, I give the guidance to look at all the options available to them,” said Searles. “The program is primarily for high school juniors and seniors and the goal is to teach them about the workforce while making the program as easy on the companies involved as possible.”

Many industries have shied away from high school help because of their age as it relates to insurance purposes. Adecco has, in effect, removed that barrier by being the employment services component of co-op or pre-apprenticeship programs.

“The companies we partner with are providing a huge opportunity for these students so we work to mitigate the risks and tasks on the administrative side so these companies can focus 100 percent on their business and the best interest of the students,” said Searles.

She added that the idea of the program is to provide a work-based environment for the students and not just to add new employees to a participating company.

Gwen Mitchell said she is interested in getting more students and those who could work on the administrative side.

“This has been a blessing for us,” she said. “The students have those fresh ideas and they’re always fun to have around.”

Tommy Mitchell said the students have become real assets to the company and will be missed when they are gone.

But it is apparent, those students will take something with them that will last throughout their working careers.



KSD students Cody Downey and Ryan Mayes work on a custom made end table as part of the work they do through the co-op program at Rocky Top Furniture.



Gwen and Tommy Mitchell pose in front of their reality show’s logo

Dr. Jack McElroy: A conversation with Kentucky CTE Teachers' Teacher

FRANKFORT Ky. – Chances are, if you're a Career and Technical Education (CTE) teacher in Kentucky, you were trained under the guidance of Jack McElroy.

"Dr. Jack" as he is known, began his career of teaching Kentucky teachers in 1969 at the University of Kentucky (UK) but it was his involvement in the trade skills at home in Erie, Pa., that set the stage for a lifelong involvement in CTE.

McElroy's father was a machinist in an area where manufacturing was prevalent at the time and it was through a conversation he had with him that led McElroy to the local tech high school.

He entered into an apprenticeship after graduation. But it was on the advice of a friend who taught a machine shop class that would send him into the teaching profession.

"I would help him out at the night class he taught and my friend said I was a natural at working with the students and said I should be a teacher," said McElroy.

He enrolled at Western Michigan University which offered a teacher education program in industrial education. After graduation he taught a high school machine tool technology program for six years before taking a teaching position at Ferris State College. From there, McElroy applied for a teacher education position in the Department of Vocational Education at UK where he would spend the bulk of his career.

Today, Dr. Jack is known across the state for his contributions to Kentucky CTE and the teachers who have made a career for themselves in the education profession. But he still says that his proudest accomplishment education-wise was receiving his apprenticeship certificate.

"Upon entering high school, I had the choice of going to a tech school, a college-prep school or one of four general high schools in the area. And within those schools I had the opportunity to choose what area I wanted to study. I chose tool and die, as it was called then, because my dad said I could make more money in that field. That's really where I got my CTE niche."

McElroy came to the state by way of UK in 1969. In those days there were four of teacher educators who traveled throughout Kentucky to work with teachers in the state vocational school system, consisting of 34 secondary schools and 14 postsecondary facilities; what would become known as Kentucky Tech. While working at UK, he received his doctorate from the University of Cincinnati in 1974 and continued to work at UK until his retirement from there in 2001.

In 1981, the New Teacher Institute (NTI) began. McElroy said was set up under the director of the state Superintendent of Public Education.

"When it began, NTI was known as (Methods of Instruction) MOI. We



put together a set of credentials including four years of occupational experience and a certain amount of college hours that each CTE teacher had to complete," he said.

McElroy first served as the coordinator in 1983 and would serve in that capacity through a rotational basis with other NTI teacher educators many times over the years. However, he has been the only director since 2008.

"After my retirement from UK, I formally came to the Office of Career and Technical Education to continue my work with NTI. I initially planned to stay for two years. That has turned into more than 14 years," he exclaimed.

While many CTE teachers come from skills-training types of backgrounds, McElroy said that has not really created a challenge from his perspective but more of an opportunity.

"It has not really a challenge, and I think it's because of two things. First, these teachers have an advantage over other traditionally trained educators in that they have been trained in these skilled areas with many having worked in those areas throughout their careers," he said. "I know this first hand because when I began my teaching career, having been through an apprenticeship proved to be so beneficial to me in the classroom."

Secondly, McElroy thinks it's important to remember that the vast majority of CTE students have chosen to be in these specific classes and

they have a heightened interest in what they are doing. This fact alone makes the case for bringing back the idea of tech high schools.

From an overall educational perspective, McElroy said he thinks it's the CTE sector is important because of the need in the workforce for those trained in a variety of occupational skills.

"Not all students want or need to go to a four year college. There are other postsecondary options for them that often lead to better paying jobs with little or no student debt," he said. "But those in the educational sector must come to realize that either path a student chooses is just as valuable as the other. Just because I have a doctorate doesn't mean my educational endeavors are better than the person trained to work in the advanced manufacturing sector, or those who are plumbers, electricians and automotive technicians, for instance."

McElroy pointed out the need for those skills and the fact they can't be outsourced.

"I have the upmost respect for our skilled trade professional and the sooner the educational community recognizes that, the better we will all be," he said.

As the spotlight on CTE has grown brighter over the last few years, McElroy said there are issues to conquer that will make this type of learning even

better.

"Students need to be in the CTE classes longer than an hour each day. Because I attended a tech high school, I was able to complete a year and a half of my apprenticeship before I graduated from high school," he said. "It's hard to get the all the education they need by going one hour a day and I think as soon as the folks who make the decisions on such things realize how important this could be to our students and our communities, the better off we all will be."

McElroy pointed out that as good as the state's tech teachers are, the overall quality of teaching and student achievement would improve if teacher salaries would improve. In addition to better pay, teachers also need more opportunities for in-service training to reinforce teaching techniques that provide quality results for learning, he said.

"CTE has some very positive attention right now and I hope it never goes away. I think it is critical to understand its importance not only for the wellbeing of our educational system but for our country as a whole," said McElroy. "We can learn a lesson from the old days when of the tech high schools that were looked upon as favorably as the college prep schools. I will always take with me within my heart and soul, a personal satisfaction which I have been given from the thousands of teachers I have shared my life with; a kind of satisfaction that a teacher can only receive from another teacher."