

Education to Careers

News about learning and earning

Education and Workforce Development Cabinet

Volume 2, May 2009

Still Giving

Even in a bad economy, many businesses are finding ways to help schools.

PLTW

The workforce is waiting on more than a few good engineers.

A Valuable Resource

KET is still proving to be a tool teachers can't do without.



The Sooner, the Better

The key to creating better students may be to teach them at a younger age.



Table of Contents

The Sooner, the Better

The key to creating better students may be to teach them at a younger age.....**Page 2**

A Valuable Resource

KET is still proving to be a tool teachers can't do without..... **Page 5**

PLTW

The workforce is waiting on more than a few good engineers.....**Page 7**

Still Giving

Even in a bad economy, many businesses are finding ways to help schools.....**Page 10**

Hot Off the Press

May is Vocational Rehabilitation Job Placement Month.....**Page 12**

For electronic users, click on the page number to view the story.

The Sooner, the Better

The key to creating better students may be to teach them at a younger age.

By Tim Thornberry

It is no secret that children learn at an astounding rate at a very early age. Numerous studies have shown the importance of this early childhood development as it relates to the learning abilities of children as they get older.

The need to address issues pertaining to early learning is a hot topic at both the federal and state levels.

In fact, the U.S. House Committee on Education and Labor has begun hearings devoted to strengthening early childhood education stating that “high-quality early education is one of the most important opportunities we can give our children.”

In Kentucky, Gov. Steve Beshear recently issued an executive order creating the Task Force on Early Childhood Development and Education. The group will work to promote greater collaboration among service providers to young children, bring a renewed emphasis to quality at all levels, and determine a common understanding and definition of “school readiness.”



“The future success of our commonwealth is dependent upon the education, health and welfare of our youngest citizens,” Beshear said. “We must all work together to provide for them a solid foundation on which to build happy, healthy, successful lives.”

The order was signed at the Early Childhood Center (ECC) in Lawrenceburg, a school that was the first of its kind in the state to enroll only preschool and kindergarten students. The nationally accredited school has become a model as a premiere learning center created specifically to foster the needs of some of the youngest learners.

Melissa Lentz, the school’s principal, said that just because the school has a younger clientele, doesn’t mean it doesn’t have the same standards as any other school.

“We are an extension of the elementary schools in essence, so we still have a lot of the same responsibilities. But this school is centered around early childhood, and it’s all about the kids,” she said. “Research shows that when you intervene with children from birth to age 5, you have the most impact on them from a learning aspect.”

Lentz also said her great staff was the driving force of ECC.

One of those staff members is Amy McGowan, a curriculum resource teacher.

“We try hard to hang on to the standards that are set nationally for early childhood learning. Connections are being made faster at this age than any other time in their lives. By age 8, their development is pretty well set and that’s what you have to work with,” she said. “There are a lot of brain connections at this level that aren’t available anymore once they get older.”

McGowan added that because the ability to learn so much comes at a younger age, in many areas, programs such as second languages and music are being taught to five-year-olds. “That is why we have the arguments for enrichment at this age,” she said.

The classrooms at ECC are filled with hands-on activities to get children involved in a variety of learning experiences.

Ginger Yeaste, a pre-school teacher, said that even at this age, students are introduced to the idea of subjects such as literacy and math.

“I’ve noticed that children who are introduced to literacy and math concepts early in the classroom seem to flourish,” she said. “When they are very young, they are excited about exploration of new opportunities. We begin to help them work on things like letter recognition and sound identification.”

Yeaste also said she thinks ECC benefits its students because of its structure.

“I think we are unique in the fact that we only have three- to five-year-olds so everything is based around early development. Everybody develops at a different level, and here the students can progress at different levels. They are allowed to go at their pace and what is developmentally proper for them.”

Jill Rock, who has been a kindergarten teacher at ECC for eight years after having taught third and fourth grades, said students at this point are beginning to read and those who have gone through preschool have a big advantage.

“I see a big difference because the students who have been in preschool come in more prepared to listen to the teacher, to follow directions and to get along with others,” she said.

Rock added that it’s important for students to have had some type of structured learning experience even before they get to the kindergarten level.

“It’s very crucial because some of them don’t get the exposure at home to books, letters in the alphabet and vocabulary,” she said. “Being able to come to preschool helps them to catch up on some of those things. The curriculum programs here are all geared toward early childhood and we can really focus on the students.”

ECC also houses a regional training facility that allows teachers from other areas to get professional development guidance in early childhood education.

When the task force convened in March, Gov. Beshear thanked them for their participation and told them how important this issue is to him and the state.

“From the moment I first thought about running for governor, early childhood development and education has been a priority of mine, essentially for two reasons,” he said. “One, we owe our children – every one of our children, from our inner cities to our suburbs to our farms and our remotest mountain community – the opportunity for a promising life. And two, in fulfilling that obligation we position our state for future economic success.”



A Valuable Resource:

KET is still proving to be a tool teachers can't do without By Ellen Soileau, KET

Students in Campbellsville Independent Schools have the best of both worlds, thanks to KET, according to Superintendent Diane Woods-Ayers. That includes big-city advantages right in the middle of small-town charm.

“Children in Campbellsville deserve the same level of resources as children in any other part of the state,” said Woods-Ayers, a former science teacher and high-school principal who came to Campbellsville from her position as director of middle schools in Fayette County.

“KET is one way to get it.”

In Lexington, KET was one of many resources. In Campbellsville, it is *the* resource. That fact was no secret to educators there, she said.

“When I came to my present assignment, I thought about the phrase my grandmother used to say — ‘You don’t miss the water until the well runs dry,’” she said.

“It became very apparent that the well was not very deep as far as resources. But I’m a quick study, and I quickly learned what the people in the district already knew: to provide the same experiences and resources,



Campbellsville Independent Schools
Superintendent Diane Woods-Ayers

the avenue for us was going to be Kentucky Educational Television.”

With just 1,500 students and three school buildings, far from the myriad cultural and enrichment opportunities of urban life, Campbellsville Independent teachers utilize resources such as KET EncycloMedia as effortlessly as they reach for chalk at the blackboard, said Woods-Ayers.

“In a unit on Native Americans, the students were able to actually get clips of them, showing how they went about their daily activities and put them in their movie,” she said.

“It was really neat to watch them and when I said, ‘Where did you get this?’ They said, ‘EncycloMedia!’ and looked at me like I had two heads. Of course they got it from KET EncycloMedia.”

KET’s value is readily apparent at Campbellsville Independent’s alternative school, Woods-Ayers said, where the goal is to get student achievement back on track as quickly and thoroughly as possible.

“The teachers make sure the lessons are creative, exciting and innovative for those students,” she said. “It’s not just the teacher up in front teaching the class, but he’s bringing in KET EncycloMedia clips, he’s using many different programs — so that they can actually experience, in a more comprehensive curriculum, what it is they need to learn.

“Anytime I’ve got a program where I’m going to accelerate a student, to get them back where they need to be, I’ve got to have a lot of good resources to back up that acceleration,” she added. From the latest technology KET offers, to traditional instructional television programs and professional development — not to mention KET’s extensive roster of materials to serve learners of all ages — the

entire Campbellsville community can make use of KET in their daily lives, Woods-Ayers noted.

“We want our children to be lifelong learners — and that’s what we are about in this school system,” she said. “Whether it be a GED program, completing some basic education requirements, or if some just wants to expand their knowledge in a particular subject or learn about different kinds of cultures, KET has the ability to physically do this.”

Additionally, Woods-Ayers emphasizes that it is educators’ trust in KET which makes it so invaluable.

“We’re constantly looking for ways to use our resources more effectively and more efficiently to improve student achievement — that’s our bottom line here.

There’s no better way for us to do that than to use materials from KET that we trust,” she said.

“They know the best practices, the latest research, and all we have to do, like with the computer, is just drag and click. Click on that Web site. Look at that program guide and see what’s available.”

Woods-Ayers added they don’t have to spend resources on a district materials center when there is an accessible, up-to-date resource like KET available at the state level.

Project Lead The Way

*The workforce is waiting on
more than a few good engineers.*

By Tim Thornberry

In today's economy, a pertinent question to ask might be, "Where are the jobs?" And that's a good question. But a better question might be, "What educational path will lead to a job, a good job with a future?"

While there is no one correct answer, the field of engineering may hold hope for a promising career. A program aimed at middle and high school students to get them involved is leading the way in a growing number of school districts across the state and nation.

Project Lead the Way (PLTW) is a not-for-profit educational organization aimed at giving students a strong background in math, science and engineering. The goal is to produce more graduates of two-and four-year engineering and engineering technology programs.



The program, launched in 1997, has become the best known pre-engineering project in the country. As of the 2007 school year, the curriculum was being taught in 50 states and the District of Columbia and encompassed 3,000 schools and 250,000 students.

According to the Department of Labor's (DOL) *Occupational Outlook Handbook*, the demand for engineers will continue over the next several years.

The Occupational Outlook Handbook is a nationally-recognized source of career information, designed to provide assistance to individuals making decisions about their future work lives. The handbook is revised every two years.

DOL projections show an 11 percent increase overall in the engineering field between 2006 and 2016. The demand is even greater in more specific fields.

For instance, Biomedical Engineering can expect a 21 percent employment growth during that time.

According to DOL information, "The aging of the population and the focus on health issues will drive demand for better medical devices and equipment designed by biomedical engineers."

Industrial engineers can expect to see nearly the same with an anticipated 20 percent growth.

"As firms look for new ways to reduce costs and raise productivity, they increasingly will turn to industrial engineers to develop more efficient processes and reduce costs, delays and waste," according to the Outlook, even in manufacturing industries with slowly growing or declining employment overall.

Environmental engineers can expect to see the largest growth at a projected 25 percent due in part to compliance issues with environmental regulations and to development methods of cleaning up existing hazards.

PLTW in Kentucky

As a Kentucky Master Teacher for PLTW, Mark Harrell not only teaches students the program, but he trains other teachers as well. His class at the Franklin County Career and Technical Center has grown over the last few years with most students extending their education after high school in a related area of study.

"I'd say 75 percent of my students go on to get Computer Aided Drafting (CAD) associate's degree, or an engineering technology degree or an engineering bachelor's degree," he said.

PLTW includes a lot of data collection at the college level to

track students that have come from the secondary program, Harrell added.

“That college freshman year is a tough one for engineering students because of all the information that is thrown at them, but that’s what we are preparing them for. I throw a lot at them, and while they may not see some of that same information in college, they are still use to how much they are responsible for doing. I think it helps with their work ethic.”

Harrell’s students work in teams on projects using applied mathematics and science principles, while learning to visualize these projects in “3-D.”

“We’re doing pretty advanced math in here, but there is something behind it. The students know why they are doing it not because it is on page 72 of the book. We are applying the math and science they are learning in the class. That makes them want to learn it,” he said.

Four of his freshman students recently won a state competition during the Kentucky Technology Students Association (TSA) annual conference. This is something very unusual for students coming into the program for the first year according to Harrell.

PLTW also includes a biomedical sciences program which parallels the engineering curriculum.

The initial program includes four courses, all aligned with appropriate national learning standards including, Principles of the Biomedical Sciences, Human Body Systems, Medical Interventions and BMS Capstone Course.

Engineering is responsible for a host of technological achievements, from indoor plumbing and the network of roads and rails our buses and trains ride on, to high-performance sporting equipment and space observatories. In fact, nearly all the items we rely on and use for hygiene, nutrition, learning, and recreation were made through engineering.

Source: Teachers’ Domain Web Site



Still Giving:

Even in a bad economy, many businesses are finding ways to help schools. By Tim Thornberry

The relationship between business and industries (BI) and local technical education facilities is one of the most important either entity will foster. It is through the help of the companies that tech centers often receive valuable materials and equipment and in turn, it is the schools, both secondary and postsecondary, that create a knowledgeable workforce for those businesses.

The Hughes Jones Harrodsburg Area Technology Center, a secondary facility serving four local school districts, is located in a BI hub. The school has a tradition of sending students to the area's workforce by way of education and training through college or an apprenticeship or straight into the job market.

"We are fortunate to be located in a community that sees past the current economical crisis to the opportunities that lie ahead," said HJHATC Principal Duane Flora. "The generous support of local industry validates the mission of our school in developing a versatile individual by providing technical education and skills training in a safe environment. We are so appreciative for their vision



and donation of supplies and equipment."

Even in a tough economy many businesses see their relationship with tech centers as a worthwhile investment. Rod Cunningham, owner of Custom Tool and Manufacturing located in nearby Lawrenceburg said HJHATC has done wonders for his company in providing a wealth of trained welders to fill an ever-present need at his facility.

"We have gotten a lot more from the school than we've given," he said referring to the number of welders he has been able to hire out of the program. "I've never gotten anyone from there that wasn't a hard worker and successful. Everyone has been excellent."

Cunningham credits that record with the quality education students receive at the school and feels that he can benefit from time to time.

“They (former HJHATC students) have a very good understanding of the process when they come here,” he said. “Every business that benefits from CTE needs to support it.”

Cunningham’s contributions have included the metal necessary to build 20 work tables for the ATC’s new welding shop along with a skid of welding wire necessary for teaching MIG (metal inert gas) welding. The company also recently donated enough new metal to last the welding shop the rest of the school year and \$4,000 toward the purchase of miscellaneous supplies needed, such as welding electrodes, grinders and mixed gasses.

Another big supporter of the school has been Modine Manufacturing which has donated a welder and coolant system to the welding program, 20 welding curtains for booths along with 10 new water-cooled TIG (tungsten inert gas) torches.

Modine is a world leader in applied thermal technology and the production of a wide range of heat exchange products.

A new business opportunity introduced to the facility prompted the need for skilled welders and thanks to an agreement made with HJHATC, an after-hours training program was developed to help train employees for an aluminum TIG welding program.

Jim Spurlock, Modine program manager, said the project has been very beneficial to his company.

“I initially contacted the school to ask them what would be the process of using the center to train our employees and, in turn, we could look at possibly hiring qualified graduated students in the future as our business grew and developed,” he said. “We started the process and have successfully trained 38 welders locally.”

Spurlock credits the work of HJHATC staff, including Welding Instructor Chris King with helping to make the project a success, noting that King uses the industry standard AWS (American Welding Society) guidelines to train and qualify the welders.

“The partnership with HJHATC has been a win-win situation,” he said. “We have greatly benefited in using the local facility and expertise of the educators to help teach a TIG welding skills to our employees and hopefully will gainfully employ newly-graduated students and others in the local community.”

Hot Off the Press

Gov. Beshear proclaims May Vocational Rehabilitation Job Placement Month

Gov. Steve Beshear has proclaimed May Office of Vocational Rehabilitation (OVR) Job Placement Month to celebrate the efforts of OVR staff in finding employment for people with disabilities.

OVR Job Placement Program Coordinator Robin Ritter said OVR is committed to the successful employment of individuals with disabilities in today's job market.

"We have an array of job placement services for individuals so that they can achieve suitable employment and independence," said Ritter. "We also provide employers with qualified applicants and quality services to assist them in their efforts to hire and retain a skilled workforce. Employers tell us that hiring qualified persons with disabilities makes good business sense, and that is why we are celebrating. It is our opportunity to enhance our marketing efforts and show our appreciation for our employers and consumers."

OVR Executive Director Beth Smith said she is pleased that Gov. Beshear once again recognized this service.

"Our bottom line is assisting people with disabilities in finding employment. Our relationships with our employers are crucial to our success," Smith said. "This administration clearly understands the importance of our front line staff in strengthening those relationships. I applaud our staff for the work they do."

Job placement is a statewide service of OVR that helps match qualified job seekers with employers. The activities that are planned for May will recognize and celebrate employer partnerships, placement activities and accomplishments of persons with disabilities in the workforce.

The Office of Vocational Rehabilitation, an agency of the Education and Workforce Development Cabinet, assists Kentuckians with disabilities achieve gainful employment and independence. For more information about services, call the department toll free at 1-800-372-7172 or at 1-888-420-9874 (TDD) or visit the OVR Web site at www.ovr.ky.gov.



Education to Careers

ETC is produced by the Kentucky Education and Workforce Development Cabinet which coordinates learning programs from P-16 and manages and supports training and employment functions in the Department for Workforce Investment.

For more information about our programs, visit www.educationcabinet.ky.gov or www.workforce.ky.gov or call 502-564-1270.