Kentucky prepares to observe reform’s 10th anniversary

April 11 will be the 10th anniversary of the signing of the Kentucky Education Reform Act of 1990. Educators and education advocates statewide are planning various publications and events to mark the occasion.

Interim Commissioner of Education Kevin Noland calls April 11 “more than just a date on the calendar” in terms of public education. “Kentucky not only designed the most comprehensive education package ever conceived, but has sustained a major reform initiative longer than any other state,” he said. “For that reason, this anniversary is an important time — a time to reflect on why Kentucky took unprecedented steps to improve public education and a time to look at how far we’ve come. It’s also a time to realize how far we have yet to go. While we celebrate what so many people have worked hard to accomplish, we also want to emphasize the need to continue that good work.”

The Kentucky Department of Education will observe the anniversary by holding a reception at the Kentucky History Center in Frankfort. At that event, the department will release its 10-year report, “Results Matter: A Decade of Difference in Kentucky’s Public Schools,” and present a photo exhibit documenting what is happening in Kentucky schools. The exhibit will be on display at the History Center for one week before touring the state during the spring, summer and fall. The tour will include the Kentucky State Fair.

In addition, a department-produced 30-minute video documentary narrated by National Public Radio’s Bob Edwards will premier on KET April 24 at 10:30 p.m.

The report and the video documentary will be available after April 11. The report will be free while a limited supply lasts; the video will cost $15. To order, visit “Publication and Video Sales” on the Department of Education’s Web site (www.kde.state.ky.us); phone Windy Newton at (502) 564-3421, or send an e-mail request to wnewton@kde.state.ky.us. The report will also be available on the Department of Education’s Web site.

For more information about the department’s anniversary activities, contact Armando Arrastia by phone at (502) 564-3421 or by e-mail through the KETS global list or at aarrasti@kde.state.ky.us.

We’ve come a long way, but we’re not ‘there’ yet

The Department of Education’s report on 10 years of education reform includes data that indicate both progress and a need for continued improvement. Here is a sampling of information from the report.

• School funding is far more equitable than it was before reform. The per-pupil spending gap between the wealthiest and poorest districts decreased from $1,199 in 1989-90 to $757 in 1998-99.

• State test results show gains in achievement levels by all demographic groups of Kentucky students.

• Kentucky students are performing better than ever in comparison to their peers nationally, according to the National Assessment of Educational Progress (commonly known as “the nation’s report card”).

• According to the nationally administered Comprehensive Test of Basic Skills, some of Kentucky’s highest-achieving schools are also among its highest-poverty schools.

• Scores on the national ACT have remained basically flat, but many more Kentucky students are taking the test and aspiring to higher education. Core courses known to result in higher ACT scores are now high school graduation requirements in Kentucky.

• Kentucky is a national leader in education technology.

• The state dropout rate, which is near the national average according to the National Council for Education Statistics, has not improved significantly since 1990.

• Race and gender achievement gaps have not been eliminated.

• Public opinion surveys show broad and growing support for Kentucky’s system of education and for local public schools.

“Results Matter: A Decade of Difference in Kentucky’s Public Schools,” Kentucky Department of Education, April 2000.
Employees persevere despite charges against trusted administrator

By Kevin Noland
Interim Commissioner of Education

Jan. 6 was a difficult day for educators throughout Kentucky, especially for those who work here at the Department of Education. On that day, we learned that federal and state authorities were investigating Deputy Commissioner Randy Kimbrough for misuse of education funds.

The seriousness of the allegations left me no choice but to secure her resignation immediately. As the investigation continues, stories about her continue to appear in the media. Like me, you probably have been hearing comments and questions from people in your community. To help you deal with those comments and your own concerns, I want to let you know what is happening here in the department.

Most importantly, the people here feel the full extent of any problems and then find the best procedures for fixing them. To that end, I recommended an independent audit as a “second opinion.” The Legislative Research Commission is hiring an independent auditor to review the department’s finances. The auditor will provide a full report of any irregularities and offer definitive, external advice on what procedural changes need to be made.

At the department’s request, the state auditor is looking at the financial transactions between the department and education cooperatives. However, I think this independent audit, like a second opinion after a diagnosis of serious illness, will provide additional perspective and help identify ways to improve internal financial controls.

In the meantime, new financial controls are already at work in the department, and I have taken several steps toward recovering any education funds that investigators determine were misappropriated. Like you, all of us here at the department want those dollars to be used for their intended purpose: student achievement.

As the investigation continues, the employees of the Department of Education are staying focused on the real values of education and on the real work at hand, which is to help improve teaching and learning. We continue to work hard to support local districts, schools, educators and students.

’Take the Test’ materials available on the Internet

Anyone who wants a taste of the state tests Kentucky students will take this spring can “take the Test” using materials available on the Internet. The Department of Education has posted a sampling of questions from last year’s Kentucky Core Content Tests on its Web site. Also posted is general information about the Commonwealth Accountability Testing System (CATS), which measures the effectiveness and progress of all Kentucky public schools and holds them accountable for their results. The information covers the reasons for testing, an overview of the testing process and guidelines for interpreting test results.

Individuals can go online to read the information and take the test in their own homes. The site will offer one open-response question and four multiple-choice questions from the middle school level in each of the four main subject areas tested: reading, mathematics, science and social studies. Scoring information is included.

Organizations and groups can use the online materials to develop their own Take the Test Day events similar to those hosted by the Department of Education last year in eight Kentucky cities. The site features an idea bank at which groups may withdraw or deposit ideas for planning presentations and boosting parent and community understanding of the tests.

To view or download the packet of Take the Test Day materials, go to the Department of Education’s Web site (www.kde.state.ky.us), look under “Headlines” and click on “Take the Test.” The materials are also available in printed form. Pam Clemons, a consultant in the department’s Division of Community Relations, is available to answer questions and help customize presentations to large groups. For information, printed materials and assistance, phone Clemons at (502) 564-3421 or send e-mail to pclemons@kde.state.ky.us.
Several important CATS components are now in place:

- An interim assessment and accountability program. The audit team would recommend steps the district take to improve teaching and learning at the school.

Several regulations have been proposed to address these additional HB53 mandates:

- Scholastic audits to help low-performing schools;
- Bringing Kentucky’s special education regulations in line with federal requirements;
- District accountability (see story on this page).

The Kentucky Board of Education is preparing to review parents’ feedback on another HB53 mandate, the school report card, which was piloted statewide this year. The law requires a school report card to provide parents and communities academic and nonacademic information about each school and district in Kentucky. The board is considering a regulation that would detail the report card requirements each school and district must meet. The proposed regulation would address issues and concerns raised in the feedback process and during this year’s “trial run.”

Since education reform began in 1990, Kentucky teachers have called for measures that hold instruction accountable, it will distribute student accountability, it will distribute

Proposal addresses district accountability

The Kentucky Board of Education has scheduled a public hearing on a proposal that would hold school districts accountable for providing appropriate instructional leadership and support to schools. The hearing will begin at 10 a.m. May 26 in the State Board Room of the Capital Plaza Tower in Frankfort. Under the proposal, districts in which all schools are progressing or meeting goals and also meeting the dropout prevention criteria would qualify for rewards under the state’s testing system in 2002.

In contrast to past procedures, this regulation would not permit strong performance by one school to compensate for lack of performance by another,” said Scott Trimble, associate commissioner of the Kentucky Department of Education’s Office of Assessment and Accountability.

In the process of drafting the proposal, the department addressed school district superintendents’ concerns about the assignment of school accountability for student dropouts. Under this proposal, students who drop out from alternative and assistive schools would count in the dropout rates of the schools’ districts. However, the districts would have the option to examine student data and reassign accountability to the schools that would have served the students had they not attended the alternative or assistive schools.

Any district in which a school has an accountability index in the lowest third of all Kentucky schools below the assistance line would have to modify the district consolidated plan to include specific support for improving academic achievement. If the school remained at that level for two consecutive accountability cycles, an audit team would review the district’s implementation of the plan and the assistance provided to the school. The team would focus on the instructional support factors over which a district has control — factors such as instructional leadership, financial services and support, safe and secure instructional facilities, and an effective certified employee evaluation program.

The audit team would recommend steps the district can take to improve teaching and learning at the school. The team could recommend a full management audit.

The state board will consider public comments and determine whether to make changes in the proposal before submitting it to the Administrative Regulation Review Subcommittee and the Education Committee for consideration. If the proposal becomes a regulation, it will take effect with the accountability cycle that ends in the spring of 2002.

The text of the proposed regulation is available on the Department of Education’s Web site at www.kde.state.ky.us/legal/reg/default.asp. Click on the regulation number 703 KAR 3:30. Persons wishing to express opinions about the proposal can get information about the public comment process at that site or from the Office of Legal Services at (502) 564-4474.

www.kde.state.ky.us

March 2000 • Kentucky Teacher
Something fishy is going on in these two science classes!

Students put Periodic Table to practical use

By Bill Walter
Barren County Schools

Editor’s Note: Bill Walter is director of personnel and public relations for the Barren County Schools district. When he wrote this story about Karen Branham’s successful teaching strategy, Branham was teaching at Barren County High School. She now teaches at Glasgow (Independent) High, where she is using the same strategies for teaching chemistry and advanced biology.

Is it possible to learn and actually use the infamous Periodic Table of Elements — that 2000-year-old pile of 103 basic building blocks of all matter known to man — and even enjoy doing so?

In Karen Branham’s classroom, the answer is yes. Students in Branham’s 9th-grade science class at Barren County High School learn about chemistry by being exposed to the ocean. Well, it’s not really the ocean. It’s a huge 75-gallon salt-water aquarium, a replica of the underwater environment found in the Pacific Ocean. Branham’s aquarium is complete with salt water, live coral and rock, a sea anemone and various tropical fish.

While fresh-water aquariums are much easier to sustain, salt-water aquariums can be more effective for teaching. Salt-water environments require all sorts of planning, skill, knowledge and care. Toxins must be filtered from the salt water by a protein skimmer in a separate tank, called a sump, located below the aquarium. The water is filtered, heated, aerated and circulated from the sump to the aquarium. These aquatic miracles help students appreciate the delicate balance that keeps millions of species alive and well in the oceans of the world.

“The students do all of the work to maintain the aquarium,” Branham said. “They use several different chemical tests and measuring instruments to maintain the aquarium. That involves accurately charting each measurement, conducting an analysis of the data, understanding the complementary interactions of various chemicals and initiating corrective action to keep it all in balance.”

During a science class, student Alana Orr tested to see how much salt was in the water. “The specific gravity must be maintained between 1.022 – 1.023,” she said. When the specific gravity is low, she explained, there is not enough salt. When it is high, there is too much salt.

Matt Goodrum used various chemicals and a wide-range indicator to test the pH level. “Anywhere between 8 and 10 is considered a weak base, and ideally you want the water to be a little alkaline,” he stated with confidence. Goodrum charted his results and compared them to previous data.

Adam Medley tested for nitrates, a form of nitrogen that can be fatal to fish. Fortunately, the students know how to convert nitrates to nitrites. “A nitrite spike is really bad,” Medley explained. “You have to blast a lot of oxygen into the water to convert the nitrates to nitrites. When we had a nitrite spike in the aquarium, we immediately knew we had a potentially lethal situation for the fish. We were able to determine the cause: a decomposing sea snail.”

Diana Huff checked for ammonia. Mixing chemicals and salt water in test tubes, she skilfully determined if the ammonia level was in the acceptable range of 0 to .5 parts per million. “An ammonia spike is actually part of the cycle, and it tells you that the water is ready for fish,” she explained.

In the beginning of the project, students tested the water every day. Once they stabilized the salt-water environment, they could reduce the testing to once a week.

Branham said the project has given students hands-on experience in using and mixing chemicals and manipulating intricate measuring instruments.

“The students have taken this project very seriously,” Branham said. “They are highly motivated and enjoy applying their knowledge of chemistry in this way.”

The students know that nine beautiful tropical fish, one colorful starfish, one sea anemone and brilliant living coral specimens depend on them. The students’ knowledge and application of chemistry and other sciences sustain the salt-water environment and the creatures within. The lessons learned go far beyond the chemistry classroom and the Periodic Table hanging on the wall.

To these students, getting an “A” on a chemistry test must pale in comparison to using their science knowledge to maintain life.

Editor’s Note: Establishing and maintaining a large salt-water aquarium can be an expensive undertaking, but Karen Branham and her Barren County students accomplished the feat with community support. The same is happening now that Branham is teaching at Glasgow High School. In fact, Branham’s students have completed an in-depth dissection analyzing the anatomy and physiology of a dogfish shark to complement their activities with the salt-water aquarium. Branham is also preparing to take students to the Florida Keys for a marine biology camp. For information on how to set up a salt-water aquarium and make it an effective teaching tool, contact Branham by phone at (270) 651-8801 or by e-mail at kbranham@glasgow.k12.ky.us (or through the KETS global list).
especially in Franklin County, Bowlds said. “Most farmers today, to be scientifically challenging.

Billiter wanted the subject matter aquaculture students could relate to. Another reason for choosing aquaculture, Billiter said, was the help and support offered by Kentucky State University’s Aquaculture Research Center. “The people at the center help us with materials, and they come over to help us,” she said. “We visit the center several times a year.”

One of the main supplies KSU provides is a blue-gill-type fish called tilapia. Billiter said the fish are extremely hardy and can withstand just about any conditions except severe cold. The entire class keeps check on the project’s main tank. Each class day they clean the filter system and analyze the water for acidity and ammonia content. They record all readings and correct any abnormalities. Just keeping the fish alive isn’t all there is to aquaculture. Like farmers who till the soil, these farmers must prepare fields, select feed and harvest their crop, and they have to do it profitably.

Sophomore Shawn Gillispie and junior Jessica Reynolds check the results of a water test they performed on the fish tank.

During the school year’s first semester, students work in teams preparing the tanks and designing filter systems. “The first semester is basically getting ready,” Billiter explained. “They learn about the fish, what type of environment the fish like, what they eat and what they need to live and grow.” In the second semester, teams of students become responsible for producing profitable crops. Billows sees this as valuable experience for the entire class, especially for those who will someday be directly involved in agriculture.

“There are probably six or seven in the class who will someday derive a portion of their income from agriculture,” Bowlds said. “Right now they’re planning on growing tobacco, but who knows how long that will last.” Two students already involved in farming aren’t sold on the practicality of aquaculture. “The initial start-up costs would be a hard on a small farmer,” said sophomore Ross Thompson agreed. “Even if they made it cheap to get started, you still have to sell your crop.” Bowlds concedes that even though the tilapia is growing in popularity as a food fish in Frankfort-area restaurants, the students make valid arguments. “But what we’re doing is just a small part of aquaculture,” she adds. “To be profitable, you have to grow several species together, like tilapia and fresh-water shrimp, for example.” While they may doubt aquaculture’s current viability, students Fannin and Thompson said they find the research challenging and the course worthwhile. Other members of the class agreed that the course was a worthwhile learning experience and fun as well.

For more information about teaching through aquaculture, contact teachers Kathy Billiter and Terry Bowlds at Franklin County High School, (502) 695-6750, or by e-mail through the KETS global list or to tbilliter@franklin.k12.ky.us or tbowlds@franklin.k12.ky.us. For information about assistance available through the Kentucky State University Aquaculture Program, contact one of these specialists: • In central Kentucky — Bill Durborow, (502) 227-6581 or bdurborow@gwmail.kysu.edu; • In western Kentucky — Bill Wynne, (606) 677-6185 or bwurts@ca.uky.edu; • In eastern Kentucky — Forrest Wynne, (606) 677-6185 or fwyne@ca.uky.edu.
Six schools and five school districts are now participating in the first or second year of Kentucky’s Equitable Schools Institute Program. Those in the first year of the two-year grant period receive start-up funding and technical support to address individual school and district equity needs. Second-year recipients use grant funds to build on their first-year successes.

Program sponsors include the Southeast Equity Resource Center, the Kentucky Chapter of the National Association for Multicultural Education, Appalachia Educational Laboratories and the Kentucky Department of Education.

The Equitable Schools Institute Program supports Kentucky’s consolidated planning system, says Faith Thompson, program consultant with the department’s Division of Equity. “Teams of 12 are created at the building or district level to address equity and diversity issues in the consolidated plan,” Thompson said. “The team planning process is geared toward initiating long-term systemic change.”

Each team includes the principal, a district staff person, two teachers, a parent, one or two community advocates, two high school students or two parent/school advocates for elementary or middle school, two college professors and one other member of the team’s choice.

The Department of Education provides technical assistance and resources and, upon request, performs a cultural audit to collect feedback on local needs. School and district teams attend a one-day institute where each is paired with a member of the National Association for Multicultural Education. Participants are involved in a needs assessment, goals identification and action planning. They must submit an action plan and a detailed final grant proposal.

A showcase each spring provides insight for schools just coming into the program or considering application. Schools that have been in the program for two years share ideas and present information about their planning, processes and accomplishments.

Educators in the Logan County school district, recipient of funding in both the first and latest round of two-year grants, will work to continue what they call “significant progress.” Ann French, director of special programs for the district, sees the program as “a wonderful opportunity … to promote an awareness of equity concerns and … understand why students are not achieving and how we can assist them.”

Logan County reports these results from their participation in the Equitable Schools Institute Program:

- Twenty-seven teachers trained in the Teacher Expectation and Student Achievement program (a research-based program validating improvement in student achievement through the use of equitable environments);
- An increase in teachers’ awareness of equity issues and the implementation of new instructional strategies to address multiple intelligences, thinking skills, differentiated instruction, etc.;
- Continuing research into a model for systematically collecting and monitoring demographic data;
- Establishment of a collection of equity-focused resources (articles, videos, magazines, etc.) for use by students, teachers and community members.

French says the program’s approach to solving equity issues provides myriad opportunities for improving educational achievement. “Networks are established with other schools where ideas, strategies and techniques are shared, resources are discovered and growth can be realized,” French said. “You also develop relationships outside of your school community — such as the college community — that lead to assistance, resources and ideas.”

The Division of Equity plans to award Equitable Schools Program mini-grants this fall to eight more teams, one from each education region. The next opportunity for school and district grants will be the fall of 2001.

For information, contact Faith Thompson at (502) 564-2703 or by e-mail at fthomps@kde.state.ky.us or through the KETS global listing.
Two primary teachers ‘take the plunge’ to integrate arts into their teaching

By Diana Fleser and Jan Thornton
Wilmore Elementary School Teachers

By studying art prints, after a literature-based art and music history theme to primary students for nine weeks? It sounded so outrageous that at first we were afraid to tell people we were going to do it! But ask our 7- to 9-year-old students and their parents to identify which studies in our class had the greatest impact on them, and they will more than likely say it was art and music appreciation.

In 1992 we started integrating art and music into our teaching at Wilmore Elementary in Jessamine County. Resources were scarce, but we found enough material for a mini-study to sandwich in between our more “serious” units. Every two years since then, we’ve expanded the unit and rewritten it until today we consider this nine-week study of the arts the most significant content we teach.

We are convinced that the primary years are the best years to begin a formal study of the arts. Here’s why:

• The arts are cool! Primary students have not yet connected the arts with the words “nerdy” or “boring.”

• Primary students have acute sensory perception. They are unhindered in movement, and they have a fine eye for seeing detail and a keen ear for remembering what they hear.

• Knowledge of the arts is powerful. When children start discussing Van Gogh’s life and work at dinner or recognize Beethoven’s 9th symphony playing in the mall, parents take notice. Being able to impress adults is empowering to young students.

• Art and music feed the soul. Suddenly a child can hardly wait to play the violin. A girl wants a copy of the Mona Lisa for Christmas. Students ask to see a favorite art print again or hear a certain piece of music once more. Long after the unit is over, children continue to integrate their feelings and knowledge about the fine arts into other areas of learning.

• Parents’ attitudes and behaviors change. A year after one group of students completed the unit, we surveyed their parents. The parents told of taking their children on trips to major art museums. One mother said she now tunes in the classical music station on the car radio while chauffeuring her children around town. “I realized after the class study,” she told us, “that I had a responsibility to intentionally expose my children to the arts.”

We encourage other teachers to take the plunge into the arts, either by designing an interdisciplinary unit around the arts or integrating the arts into another theme. Neither of us had any particular talent in this area, but we knew our way to the library, and we tapped many talented people as resources. The art and music appreciation unit has been life changing for our students and their parents. Along the way, our own lives have been enriched in ways we never imagined. We can’t wait to teach the unit again!

The following activities have been especially effective in our integrated approach to arts and humanities instruction.

• We read aloud from children’s biographies of Michelangelo, Bach, Van Gogh, Handel, Mary Cassatt, Picasso, Duke Ellington and others. We placed these musicians and artists at the appropriate places on a history timeline, from Renaissance through the present.

• We studied art prints. After only a short time, students could match artists with their paintings and categorize paintings by style.

• We practiced listening to selections of classical music and identifying the pieces by title and composer.

• We danced to Schubert and acted out the story of “The Bremen Town Musicians.”

• We did science experiments to study how sound travels.

• We mixed colors and experimented with prisms and color wheels.

• Area artists shared their portfolios with us.

• We visited the University of Kentucky art museum, where students wowed the guides with their questions.

• We played instruments and made our own from recycled trash.

• We wrote a biographical sketch of Grandma Moses, a report on Beethoven and new lyrics to Stars and Stripes Forever.

• We drew self-portraits in the style of Serrat, and painted with string in the style of Van Gogh, created pointilism in the style of Serrat, and painted with string in the style of Jackson Pollock.

• We went to a virtual museum on the Internet, and each student printed a copy of a favorite painting.

• Students scanned pieces of their own art into the computer and put them on virtual exhibit in our “Wilmore Metropolitan Art Museum.” To see the art, go to http://170.181.46.148:web/...
Kentucky schools are moving the arts and humanities out of the realm of the elite and into the lives of children of all socio-economic levels and intellectual abilities. It's not a natural fit for many teachers, and it is, perhaps, a stretch for some schools. But the benefits are indisputable. Jimmie Dee Kelley, arts consultant for the Kentucky Department of Education, points to the research. "Very often, an arts-integrated curriculum results in children from low socio-economic environments making greater academic gains than those from higher socio-economic levels," she said. "Research is also revealing that the use of the arts in teaching at-risk children results in higher achievement."

Kentucky's standards in arts education are quite high, Kelley said, and the criteria for assessing student performance may seem daunting. She emphasizes that focus is the key. "Assessment is only a by-product of what we are trying to do, not the focus. The focus is making sure each individual child has the opportunity to reach his or her highest level of achievement."

Schools throughout Kentucky are doing just that: providing opportunities for learning, connecting the arts and humanities with other subjects, and doing it despite the challenges of time and funding. On these two pages, visit three schools, all in rural settings and all with limited resources, that are succeeding in that effort.

Arts education
breaks down barriers
opens doors to learning

By Sharon Crouch Farmer
Kentucky Department of Education

Trapp Elementary, Clark County
Arts education is not isolated at Trapp Elementary. It is part of a 5th-grade mathematics class and the study of African-American culture. It gets parents involved and motivates teachers. It is the philosophy of the school. Third-grade teacher Erin Smith leads the school's arts education and integration efforts. She also co-teaches a 5th-grade visual arts class. The music teacher covers drama, and dance is covered in physical education class. Even without tools such as collaborative planning times and an arts education budget, everyone at Trapp considers the arts to be imperative for learning.

"The arts help children express how they feel, not just how they think," said Principal Lewis Willian. "The arts open doors into a child's mind that cannot be reached through paper and pencil on a test."

The teachers at Trapp are not trained in arts education. How do they overcome that barrier? They concentrate on all subjects, including the arts, but they don't try or expect to become art teachers; they strive to be teachers who use the arts when teaching other subjects.

"Every concept we learn, we use," said music teacher Nancy Smith. "For example, we learned that a teacher does not force-feed but, instead, enables students. We know that students are doers by nature; if they can demonstrate something, they usually understand it."

Teacher Ida Parsons and parent

Crittenden County Middle School student Matt Morris paints freckles on Drew Hopkins, who plays the nerd in a skit about two boys who are caught cheating.

Corey Hensley concentrates on an art project at Trapp Elementary. Teachers at the Clark County school use the arts when teaching all academic subjects.
The integration of the arts also provides each student with a unique and artistic design. The presentation to Parsons' 5th-grade class. LaDonna Duvall teamed up for a presentation to Parsons' 5th-grade class. "[Teachers] communicate a lot through e-mail and through grade-level teams," West said. "The teaching team here is responsive and committed to using all available means to help students succeed."

Planning is the other key to the school's successful arts integration. "Children can do wonderful things with limited resources and materials," she said. "Plan where and when to dress your content using the arts."

West not only integrates other academic content into her arts and humanities classes, but takes it a step further: She uses the same methods to familiarize other teachers with using the arts in their instruction. "I present materials visually, orally and kinesthetically. Lecturing is brief and is accompanied by transparencies so they see and hear," West said, "then we do a hands-on project." She does not ask the teachers to take notes but provides a guidebook they can augment. She shares copies of famous works plus benchmark pieces from former students.

West plans and implements lessons that allow students to be role-players. "When we are studying elements and principles, I ask students to teach me using their own work, or I assign them other responsibilities," she said. "At the end of the unit, the class develops the test according to my rubric." The test must be comprehensive and edible: a color-wheel cake, a brownie pyramid, a dish with salsa for texture, a piece of gingerbread architecture.

High school arts electives include four sections of visual art. Band, choir and an independent study in visual art are offered throughout the school year. Janis Traveny teaches visual arts to middle and high school students, and she prominently displays the students' work. Murals blanket the walls in corridors and multi-use areas of the school. The walls of the local community center bear student-produced murals, and local businesses frequently display student art in storefront displays and advertisements.

The district supports arts education financially as well. "That money allows us to expose our children to the arts beyond this classroom and our community," said Traveny. Nearly Cumberland College has been what the district calls an "arts saver" as well. Students regularly attend arts events at the college. High school teachers enjoy having student teachers from the college in their classrooms and access to the expertise of the college faculty.

Students with special needs often take "special" roles at the high school. "Any art-related activities can be very rewarding to these students," said Traveny. "We expect them to participate according to their abilities."

Teacher collaboration and teamwork might be expected in Williamsburg's single P-12 school building. In reality, team planning is almost impossible, especially for the high school teachers.

"We don't have blocks of planning time together because we have to cover classes," Traveny said. "We have to take other measures to collaborate with and support each other toward integrated instructional strategies."

The growing interest in arts and positive attitudes of students is evident that the collaboration is succeeding. "[We have] the perfect environment for encouraging student responsibility and respect for others, as well as promoting self-expression," said Traveny. "[We see] a growth in confidence that carries over to all academic areas," Colgrove added.

For more information, contact Janis Traveny at (606) 549-6046 or by e-mail through the KETS global list or at traveny@wburg.k12.ky.us.

LaDonna Duvall teamed up for a presentation to Parsons' 5th-grade class. The assignment to the students: design a quilting square. The students began by examining the patterns of quilts brought to class by Duvall. Their discussion included mathematics, cultural diversity, history, color, geometry, algebra, music, language, skill crafts and artistic design. The presentation demonstrated effective integration of the arts into other academic areas.

Parents and teachers working together in the classroom is a common sight at Trapp, according to Erin Smith. "We don't have a lot of artists in our community, so parents who have artistic hobbies or interests often share with the students," Smith said.

Trapp Elementary begins portfolio work with each entering primary student. "We don't want the children to have to start from scratch in 4th grade when all the pressures of testing begin," Erin Smith explained, "and it's never too early to begin developing basic skills in any area."

The integration of the arts also helps children with special needs express themselves when words, paper and pencil won't work. "These students see and hear things in artwork that others don't," Smith said, "and in sharing that new perspective, they open doors for other children."

For more information, contact Erin Smith by phone at (606) 744-0027 or by e-mail through the KETS global list or at esmith@clark.k12.ky.us.

Crittenden Middle School

At Crittenden Middle School, all 8th-graders are required to take an arts and humanities class. That fact, in part, reflects how the Crittenden County school views the arts. For the rest of the story, look into any classroom. The curricular philosophy at Crittenden Middle states that programs should "provide each student with a wide variety of meaningful experiences in which basic knowledge and skills are provided to help each student function responsibly in society."

They use the arts every day to accommodate get to high school, the arts are as

Students with special needs are given the same opportunity to succeed as others in the classroom. "I give a variety of types of tests during each unit and provide a variety of opportunities for participation," West said. For example, one test might ask students to match statements about the arts; another might require drawing an example of a type of artwork or playing a sample of some genre of music.

For more information, contact Carol West by phone at (270) 965-5221 or by e-mail through the KETS global list or at cwest@crittenden.k12.ky.us.

By the time students in the Williamsburg Independent school district get to high school, the arts are as much a part of their day as lunch. Arts and humanities are introduced in first-year primary and integrated with other subjects through the years.

Choral director Donna Colgrove teaches the school's two sections of the required high school arts and humanities class. The class includes students of various ages and grade levels. "By the time students reach my classes, they already know many of the arts terms that are used daily," said Colgrove, "I don't have to spend a lot of time teaching basics; we move on."

Williamsburg High School

By the time students in the Williamsburg Independent school district get to high school, the arts are as
The ‘Art’ of Creating a Successful Work Force

When this business executive hires, she looks for people who have arts training and experience on their resumes. Here’s why.

By Kathleen A. Dore
President, Bravo Network

Editor’s Note: This article is condensed from the October 1999 issue of Bluegrass Music News, published by the Kentucky Music Educators Association. The article first appeared in BusinessWoman Magazine and is reprinted in Kentucky Teacher with permission from the editors of both publications. Dore is an executive with Bravo, a cable television network.

When we think of artists in the traditional sense, we think of people with vision who use the raw materials around them to create something new. We think of people who take risks, question the norm, think outside of the box, strive for innovations and excellence, and pursue their goals with passion, purpose and a strong sense of self combined with a sensitivity to the world around them.

Couldn’t the above description fit the kind of managers and workers we need to attract and retain to compete successfully in a high-speed digital age? Research is proving that an arts education for all young people, certainly for the sake of our continuing cultural heritage, but also, very practically, for the sake of our businesses.

The arts foster a keen sensitivity to the world around them.

The ever-changing nature of human interaction.

The arts continue to outperform their nonarts peers on the SAT. (In 1996), preschoolers with piano training performed 34 percent higher on tests measuring the brain functions that are essential to mastering mathematics, engineering and science than preschoolers with just basic computer training (Neurological Research Journal, February 1997).

Let me share some interesting facts:

1. Ability to articulate a vision — I look for people who can see the big picture, who talk easily about goals and have a road map for reaching them.
2. High tolerance for ambiguity — This trait may be the single most important determinant of success in this age of rapid change. It enables people to accept uncertainty and move forward responsibly without having all the answers.
3. Orientation toward results — The process of creating that — a finished work — and, just as significantly, the process of creating that product — even a very young one — first-hand experience with ambiguity.
4. Spirit of collaboration and empathy — Successful managers must care and understand how to integrate diverse points of view and skill sets in an environment of mutual respect. The arts foster a keen sensitivity to the artist’s effect on those around him or her, as well as insight into the dynamics of human interaction.
5. Sense of play — This is an ability to punctuate the everyday with passion and fun. It is a necessary part of the artist’s success and, I maintain, just as necessary a part of a productive and fulfilling work environment.

Time and again I have found these traits to be key predictors of an individual’s success and satisfaction in today’s business environment. We must ensure that young people learn these skills. It’s time to support arts education for all young people.

— even a very young one — first-hand experience with ambiguity.

The best engineers and technical designers in the Silicon Valley industry are, nearly without exception, practicing musicians (Grant Venereable, “The Paradox of the Silicon Savior,” as reported in “The Case for Sequential Music Education in the Core Curriculum of the Public Schools,” The Center for the Arts in the Basic Curriculum, New York, 1989). Innovation, creativity and the ability to deal with people and change are critical qualities in all new employees.

I personally look for five key characteristics in any new hire. I have come to believe that each of these traits is very clearly fostered and developed by early participation in the arts.

1. Ability to articulate a vision — I look for people who can see the big picture, who talk easily about goals and have a road map for reaching them.
2. High tolerance for ambiguity — This trait may be the single most important determinant of success in this age of rapid change. It enables people to accept uncertainty and move forward responsibly without having all the answers.
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4. Spirit of collaboration and empathy — Successful managers must care and understand how to integrate diverse points of view and skill sets in an environment of mutual respect. The arts foster a keen sensitivity to the artist’s effect on those around him or her, as well as insight into the dynamics of human interaction.
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Time and again I have found these traits to be key predictors of an individual’s success and satisfaction in today’s business environment. We must ensure that young people learn these skills. It’s time to support arts education for all young people, certainly for the sake of our continuing cultural heritage, but also, very practically, for the sake of our businesses.
Core Content Test Development Process

Department invites educators to take part in setting student performance standards

The Kentucky Department of Education is seeking teachers and other educators to participate in the process of setting performance standards for the Kentucky Core Content Tests. Educators interested in taking part in the process must apply by May 14, 2000.

The six-step standards-setting process began in November 1999 and will continue until spring of 2001, when recommendations will be made to the Kentucky Board of Education. The completed product will include a detailed set of descriptors for novice, apprentice, proficient and distinguished student work and set the cut scores that define the performance levels.

Critical steps of the process require the involvement of approximately 1,000 educators, primarily practicing teachers, working in content-area committees. Those working on Step 2 of the process will follow the research-based Jager-Mills method to examine student responses from the spring 2000 Kentucky Core Content Tests and establish whether the responses are of novice, apprentice, proficient or distinguished quality. Those involved in Step 3 will work on a CTB Bookmark team, examining a sample test booklet and determining which items students could answer at each of the four performance levels.

Step 2 participants will convene for four days in October. Step 3 participants will meet for four days in December. The state's testing contractor and the Department of Education will facilitate the work sessions, which will probably take place in Louisville. If the sessions occur on school days, the department will reimburse districts for the cost of hiring substitute teachers; if the meetings fall on days when schools are closed, the department will reimburse districts for the cost of hiring substitute teachers; if the meetings fall on days when schools are closed, the department will reimburse districts for the cost of hiring substitute teachers.
Can you imagine high school students willingly forming a human spiral on the front lawn of the school in full view of passing motorists on a busy thoroughfare? Can you imagine them doing it with interest and enthusiasm?

That’s just what happened one brisk February day at Gallatin County High School as students and faculty left the building to create a DNA molecule as part of the kick-off to a week-long integrated study of biotechnology. “We made a spectacle of ourselves,” said biology/chemistry teacher Sharon Parker. “But biotechnology is cool, so we didn’t care too much.”

Being a part of the DNA “spectacle” got students involved in the buildingwide study, “Biotechnology in our Society.” The project is the result of a workshop Parker and agriculture teacher Tony Jury attended last fall. Northern Kentucky University conducted the workshop as a project funded by the Department of Education on integrating academics and vocational education. Jury is a first-year teacher, and Parker is his supervising teacher in the Kentucky Teacher Internship Program.

At the two-day workshop, Parker and Jury devised a plan for the school-wide project. Once back at school, they presented the idea to the faculty. Content teachers agreed to connect the biotechnology theme to their subjects. Teachers were given these guidelines:

- assign portfolio pieces;
- assign on-demand writing;
- display what your class does in hallways and during parents’ night;
- encourage peer teaching, group learning and career exploration.

Everyone had a part in the week’s activities. Principal Raymond Spahn greeted students during morning announcements with a trivia question from the week’s curriculum. The daily school TV program offered biotechnology information and a look at what various classes were studying.

Parker’s senior special topics biology students taught DNA and DNA extraction to selected 8th-graders from Gallatin County Middle School. Jury’s agriculture students studied bioengineering of crops and the implications...
Justin Beers, a member of the senior special topics biology class, uses a diagram to explain DNA molecules to Gallatin County Middle School student Adam Payton during a peer teaching project.

First-year agriculture teacher Tony Jury (left) helps students add vegetable oil to the fuel tank of a tractor as they discover if and how efficiently the engine would run on the oil instead of diesel fuel. The activity was part of the school’s Biotechnology Week at Gallatin County High School.

it has on farming and the food supply. The small-engine class even used vegetable oil to fuel a tractor engine!

Social studies students conducted a survey prior to the week to gauge student knowledge and opinions about biotechnology. Mathematics students charted and interpreted the survey results. Spanish students translated information from the survey and produced a brochure for the community’s Hispanic population.

Sophomore social studies students also debated the use of cloning and biotechnology in the production of consumer goods. An English class scored the debate. Another English class watched the movie “Charly,” which is based on the novel “Flowers for Algernon,” and answered an open-response question about the ethics of performing surgery on the main character.

Technology and business students helped teach computer presentation skills to other students. They also explored career opportunities in biotechnology.

By Friday, the success of the schoolwide integration project was evident. Teachers said they had learned a lot about biotechnology and working together as a team. Students said they were more aware of the connections among their classes.

“I could have been in the building for three years without knowing all the members of the faculty,” said Jury, the first-year teacher. “We’ve all spent time after school working together on this, and I’ve really gotten to know everyone.”

U.S. history teacher Mary Beth Wilson also appreciated working closely with other teachers. “We pulled from what every teacher is doing. It wasn’t like we had to do it from the ground up on our own” she said. “With the whole staff working together, it helped the students make connections and figure out how one subject can be approached across the content areas.”

“We’re using all our resources,” said business teacher Joan Glass. “Everybody’s learning from everyone else. It’s been really neat.”

Glass and Jury also were excited about the extra exposure the schoolwide project gave their classes. Glass taught computer presentation skills to several students not enrolled in business or technology courses. “I’ve seen students I’d never see,” she said.

“Projects like this build interest in your program,” Jury said. “I’ve gotten to teach every student in the school something about agriculture this week.”

“This project has encouraged me to get out of my comfort zone,” said Parker, the biology teacher. “My weakest point is technology.” As part of the biotechnology project, Parker worked with Spahn, the principal, to get videoconferencing equipment installed in the school. It allowed students to teleconference with professors at the University of Kentucky Biotechnology Department.

“This week has shown students how one topic relates to everything we study,” said senior Jade Maxwell. “It’s showing us that all the classes work together and really benefit us in the end.” Maxwell and Kris Mayhew, also a senior, won the regional Family, Career and Community Leaders of America technology presentation in early February. They will present their biotechnology project, which is linked to the school’s weeklong study, at the state competition.

For more information about the Gallatin County High School integrated project, contact Sharon Parker or Tony Jury at (606) 567-7901. Parker’s e-mail address is sparker@gallatin.k12.ky.us, and Jury’s is tjury@gallatin.k12.ky.us. Both are on the KETS global list.
New resource clarifies history of American Indians

The Kentucky Native American Heritage Commission has produced a new resource for Kentucky teachers. The book, *Teaching About American Indians: Stereotypes and Contributions*, includes information, bibliographies and research references appropriate for all grade levels.

The book, published by the Kentucky Native American Heritage Commission, contrasts stereotypes with facts about American Indians and outlines the contributions of American Indians to the nation’s development and culture. It also provides ideas for classroom teaching and learning activities.

Copies are available to teachers free of charge from the Department of Educational Regional Service Centers. For the address and phone number of the center serving your school or district, call (502) 564-9850.

Consolidated planning has new home on the Web

Attention, frequent visitors to the Department of Education’s Web page on consolidated planning: The page has a new address. Change your bookmark to www.kde.state.ky.us/olsi/conspl/default.asp.

The site is also accessible through the “Consolidated Planning” link in the drop-down menu on the home page.

Teachers needed to write curriculum for new cardiovascular health program

Kentucky’s “Healthy Hearts = Healthy Futures” program is recruiting teachers to write units of study on cardiovascular health for middle and high school students. Kentucky’s program, created by a federal grant to address cardiovascular disease, is the only one in the country to contain both education and public health elements.

Two state agencies coordinate the program. The Department for Public Health is focused on the development of a statewide cardiovascular disease prevention plan, while the Department of Education’s focus will be cardiovascular disease education and prevention in schools.

The Department of Education hired four cardiovascular health coordinators to implement the program. With a focus on the risk factors of tobacco use, poor nutrition and lack of physical activity, the coordinators plan to offer P-12 teachers innovative ways of addressing cardiovascular health through curriculum, assessment, technical assistance, professional development and education with schools, families and communities.

The education program is already piloting six short P-5 units on tobacco, nutrition and physical activity. Cardiovascular health is the focus of two larger P-12 interdisciplinary unit pilots.

Teams of teachers will write a standards-based unit of study on cardiovascular health for middle and high school students during one week in July. Coordinators and science consultants from the Department of Education will facilitate the writing. Participating teachers will receive a stipend for their work.

Teachers interested in participating or getting information about the cardiovascular curricula, professional development and technical assistance may contact the cardiovascular health coordinators in the Department of Education’s regional service centers:

- Regions 1 and 2 — Keena Miller, (270) 442-3785
- Regions 3 and 4 — Jennifer Embry, (502) 485-6463
- Regions 5 and 6 — Joyce Swetlick, (606) 783-5373
- Regions 7 and 8 — Jim Tackett, (859) 351-STAR

Hardin County Challenger Center opens

Simulated missions into space began launching on a regular basis at the Challenger Learning Center of Hardin County in early March. The center, on Hwy. 313 in Radcliff close to Interstate 65, is one of more than 30 in the nation and the second in Kentucky. The Challenger Learning Center of Hazard opened last spring.

Challenger Learning Centers are extensions of the Challenger Center for Space Science Education, a not-for-profit organization committed to promoting science literacy. Activities at the center also help foster interest in mathematics, technology and space-related careers.

The Hardin County center serves central Kentucky and targets 6th-grade students. Prior to bringing students to the center, teachers participate in a one-day training to learn about the flight simulation. They receive materials to take back to the classroom to prepare students for the visit. The center offers the professional development sessions for teachers each month.

When 6th-graders arrive at the center, they go to a briefing on their mission, “Rendezvous With a Comet.” They then take their posts in the space station or mission control and work in one of eight teams: medical, life support, isolation, remote, probe, navigation, communication and data.

To learn more about the center’s educational programs and dates for professional development sessions, contact Doris Clore, senior flight director, at (270) 351-STAR; by fax at (270) 352-0354; or by mail at PO Box 519, Radcliff, KY 40169-0519.

**Edu cation Reform**

**A Decade of Difference**

**Monday, April 24 at 10:30/9:30 pm CT on KET2**

**Tuesday, April 25 at 9:00/8:00 pm CT on KET2**

Ten years ago, the General Assembly enacted the Kentucky Education Reform Act of 1990 — the most comprehensive education reform package ever conceived. Find out what a decade of change has meant for our children and our public schools. Join Kentuckian and National Public Radio’s Bob Edwards for this special documentary and see the improvements inside Kentucky schools.

For more information about Kentucky schools visit [http://www.kyschools.ky.us](http://www.kyschools.ky.us)
**The Bulletin Board**

By Lisa York Gross
Kentucky Department of Education

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**New book explains testing and accountability**

The Prichard Committee for Academic Excellence has published a new book on school testing and accountability in Kentucky. "Each and Every Child: Your Guide to Testing and School Accountability in Kentucky" answers basic questions about the statewide assessment and accountability system and provides step-by-step guidance on how parents and citizens can help Kentucky students achieve at high levels.

The book’s audience includes parents, school volunteers, teachers, administrators, school board members, school-based decision making council members and anyone concerned about education in Kentucky.

The author of the book is Susan Perkins Weston, executive director of the Kentucky Association of School Councils.

The book is available at bookstores or from the Prichard Committee for $19.95 plus tax and shipping. Call (606) 233-9849 for details, or place an order online at [www.prichardcommittee.org](http://www.prichardcommittee.org).

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**Grants available for elementary schools seeking counselors**

Competitive grants are available to elementary schools that want to establish or expand their school counseling programs. The grants will be awarded to schools that demonstrate the greatest need and propose highly innovative and promising approaches that show the greatest potential for replication and dissemination.

The federal Elementary School Demonstration Act will provide $20 million in grant money. The American Counseling Association has prepared a packet to help schools apply for the grants. Information about the packet is available on the Kentucky Counseling Association’s Web site at [www.kyca.org](http://www.kyca.org).

For applications and additional information, e-mail Loretta Riggans at Loretta_Riggans@ed.gov or go to the U.S. Department of Education’s Web site, [www.ed.gov/ offices/OESE/SDFS](http://www.ed.gov/offices/OESE/SDFS).

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**Teachers write book to make parents ‘school-savvy’**

Three Kentucky teachers have collaborated to produce a book, "The School-Savvy Parent: 365 Insider Tips to Help You Help Your Child." Teachers Beth Vachon, Rosemarie Clark and Donna Hawkins offer basic information and practical guidance for parents. The information can also be helpful to teachers who seek parental involvement and support.

The book may be ordered through most bookstores, on the Internet at [www.amazon.com](http://www.amazon.com) or from the publisher. CONTACTS: Beth Vachon, k.vachon@worldnet.att.net; Nancy Robinson, Free Spirit Publishing, (800) 735-7323.

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**Early Childhood conference scheduled for June 19-21**

The 14th annual Early Childhood Summer Conference, "Looking to the Future, Learning From the Past," will be June 19-21 at the Galt House in Louisville. The general focus will be language and literacy development in young children. Participants will have a choice of 90-minute sessions, three-hour workshops and five-hour institutes within five strands: social competence, curriculum, IDEA/administration, technology and family literacy.

Among the conference presenters will be John Maag, nationally recognized consultant on managing resistance and controlling emotions and behavior; Carolyn Brown, author of Breakthrough to Literacy; Jean Feldman of the Society for Developmental Education; and Chris Smith, national presenter on embedding language and literacy across the curriculum.

Sponsors are the Kentucky Early Childhood Regional Training Centers, the Kentucky Department of Education and the Cabinet for Families and Children.


CONTACT: Karen Chapman, Berea Early Childhood Regional Training Center, (800) 343-2859; fax (606) 986-1839; e-mail kchapman@berea.k12.ky.us.

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**Award recognizes excellence in teaching**

Murray State University is accepting nominations for its fifth annual Kentucky Outstanding Teacher Award. A full-time teacher at each of three education levels — primary/elementary, middle school and high school — will receive a $1,000 award. Judges will select winners on the basis of demonstrated excellence in teaching, contributions to parental involvement in learning and commitment to his or her school’s excellence.

Letters of nomination must be no more than two typed pages and must include one double-spaced paragraph on each of the three criteria. When nominating, also include your own name, title, address, phone number and relationship to the nominee.

Nominations are due April 14. Mail them to Dean’s Office/Education, Murray State University, PO Box 9, Murray, KY 42071-0009.

CONTACTS: Terry Waltman, (270) 762-3832; Linda Beane, (270) 762-3817.

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For applications and additional information, e-mail Loretta Riggans at Loretta_Riggans@ed.gov or go to the U.S. Department of Education’s Web site, [www.ed.gov/offices/OESE/SDFS](http://www.ed.gov/offices/OESE/SDFS).
“This is an important time — a time to reflect on why Kentucky took unprecedented steps to improve public education and a time to look at how far we’ve come. It’s also a time to realize how far we have yet to go.”

Interim Commissioner of Education Kevin Noland, on the 10th anniversary of the Kentucky Education Reform Act. See Page 1.