



VOL 1

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LET YOUR ELEPHANTS FLY FOR T&I

Walt Disney believed that most things were possible if you could just determine what motivated people. Among some of the guiding principles of the Disney Corporation were the ideals of instilling creativity, dreams, and imagination and paying attention to consistency and detail. The Disney Way, written by Bill Capodagli and Lynn Jackson, reveals these Disney's Management Principles.

One of the 10 key management principles was "Let Your Elephants Fly". In other words, dare to think the impossible, dare to do the great and accomplish what seems unbelievable. This newsletter will be a form of communication for Trade & Industrial educators in Tennessee. It will also be a mechanism of sharing classroom accomplishments, best practices, and instructional ideas.

Each month, we will look at:

1. Classroom practices
2. SkillsUSA Updates
3. News from the Division of CTE
4. Curriculum Ideas
5. New Teacher Help Desk
6. New Technologies
7. Helpful Web Sites for Educators

Do you have any ideas?

Curriculum Re-Write for T&I

T&I curriculum will be reviewed during the school year 2009-2010. During this review and re-write process, teachers from the program area will be reviewing all courses within each Program of Study to determine what changes will be made in the secondary curriculum. Along with secondary teachers, post secondary instructors from the Tennessee Technology Centers will be invited to participate in the process. It is intended that the secondary and post secondary curriculum will align when the process is completed.

There will be a meeting with business partners representing each sub cluster in T&I in October. These business leaders will review the curriculum to determine what needs to be changed in order to meet the soft skills and technical skill attainments of the labor market. Once the curriculum has been reviewed by this group, then in November, the teacher re-write committee will begin the process of change and revision. The CTE Division and T&I staff would **like** to thank all the teachers who have volunteered to work on this huge project!



Calendar

Oct. 19-20
Business Partners at TPS for curriculum re-write

Nov. 9-10
Teachers at TPS for curriculum re-write

January 5-6, 2010
Trade and Industry and Health Science
MTSU
Business and Aerospace Building
Murfreesboro, TN

Submit your photos and ideas to the newsletter by e-mail sue.tucker@tn.gov by the first of each month for publication in the following month.



QUALITY PROGRAM INDICATORS *For Carl Perkins Funding*

TO RECEIVE CARL PERKINS FUNDS (FEDERAL FUNDING), THE FOLLOWING PROGRAM CRITERIA MUST BE MET:

Indicator 1

Programs must be of such size that offer a sequence of three or more earned credits.

Indicator 2

Programs of such scope that are aligned with a state approved program of study within career clusters.

Indicator 3

Program has a certified and appropriately endorsed teacher (Note: A teacher who teaches a CTE course that substitutes for a core academic course must be highly qualified)

Indicator 4

Programs taught with the state approved curriculum standards

Indicator 5

Programs have a state approved articulation agreement for a program of study or an approved articulation agreement approved by the lead administrators of secondary and post-secondary institutions.

Indicator 6

Programs being supported by current labor market data to support high skill, high wage, high demand jobs

Indicator 7

Program teaches all aspects of an industry

Indicator 8

Program has an active advisory panel or representation on school wide panel

Indicator 9

Program has a career and technical student organization as an integral part of the instructional program.

Indicator 10

Programs promote CTE and academic curriculum integration with academic teachers.

Quality Program Indicators will be a focus of the CTE Division this year. One of the indicators will be discussed each month beginning in November to highlight the importance and enhance the understanding.

SkillsUSA Dates to Remember

Regional Competitions

Feb. 15, 2010 East TN

Feb. 23, 2010 Upper East

March 2, 2010 Middle TN

March 4, 2010 West TN

State Conference

April 26-28, 2010 Chattanooga

National Conference

June 20-26, 2010 Kansas City,

“Beauty meets science!” In today’s world, this statement is more accurate than ever. Cosmetology students cannot rely only on their artistic ability. Beauty must also be addressed through the world of science.

When most people see the word cosmetology, they associate it only with beauty, but it is so much more. Cosmetology has many different components including math, science, anatomy, physiology, and artistic ability. Rebecca Stewart, cosmetology instructor at Rhea County, incorporates all of these components in the curriculum.

Each year, students go to the chemistry lab and work with chemistry students to make various products including lip gloss, hair conditioner, hairspray, bath salts, just to name a few. In the photo, a former cosmetology student, Shauntelle Hunter, is filling a spray bottle with hair spray that she helped to create. When the students collaborate, they discuss the ingredients that will influence the outcome of the product. Some of the variables from which they have to choose are the oil consistency and the hold possibility of the hairspray.

The cosmetology students tell the chemistry students what outcome they hope to create, and the chemistry students vary the mixture accordingly. But the collaboration does not end there. (Continued page 3)

Integration Between Cosmetology & Chemistry

(Continued from page 2)

Once the students have finished formulating and packaging their product, they work as a team for using the application. When a student receives a compliment and can say “Hey I made this!” it creates success.

Ms. Stewart’s classes have worked with Mrs. Anita Pippin, chemistry teacher at Rhea County High School, for several years, and the response has been tremendous. Cosmetology students have begun a new year, and the two teachers have already met to discuss exciting new plans for this year. In the upcoming weeks, students will be collaborating on their newest formulas, one of which is their own hair gel. Since cosmetology students study the principles of hair design, it is important that they have products on which they can rely for correct hair placement. The cosmetology students will again work with the chemistry students to develop an expectation for the product. Adjustments will be made in the chemistry lab, and hopefully, when the product is applied both the cosmetology and chemistry students will be pleasantly surprised at their success! In past years, the classes have also taken this methodology one step further by collaborating with the students in the graphic design classes to create labels for packaging the products which will extend to the marketing of the creations. There are no limits! All it takes are students and teachers who are willing to work together.



Shauntelle Hunter is filling a spray bottle with hair spray that she helped to create.

Auto Industry Has Always Been Green by Joe Cruz, Ayes State Manager

When I was a kid back in Texas, some of my earliest memories of working on cars were in the “junk yards”. Little did we know that we were into recycling even then. Now, recycling and “green” technology are all the rage. With the down turn of the economy and low sales of new cars and trucks, most people are keeping their vehicles longer and using recycled parts to keep them going.

Is there a future for automotive technicians? We are a mobile society. Americans cannot live without their cars and trucks. One thing is inevitable; cars and trucks break down. Somebody has got to fix them. You cannot outsource auto repair to India or Mexico. So my answer is always “yes!”

What I’m saying is the future is good but what auto techs must understand is that the repair is getting more and more sophisticated. What we used to do with a basic set of hand tools will not work on the newer cars. The auto makers started using computers to simply control fuel mixture in 1981 with a very simple processor. Today’s vehicles have several computers (some over 25) with a very complicated electrical grid of wires or fiber optics. Now, 70% of repairs on today’s cars are electrical in nature so having a thorough knowledge of electricity and electronics is crucial. The right equipment is also key. Most technicians use laptop computers more than they use hand tools. Access to repair information and a thorough understanding of wiring schematics is a must.

In the near future, we will be driving electric powered automobiles. They will be quiet, efficient, and fast. They will be a very different type car to work on. I don’t know about you, but I can’t wait to get my hands on one!

www.STEMresources.com

At STEMresources.com Tennessee teachers can gain quick and easy access to standards-based instructional tools, quality curriculum materials, and the latest Internet materials! This is a great site to help incorporate math and science into your curriculum.