



Micki Coffman, Career Specialist at T.C. Williams High School in Alexandria, introduces the speakers at the IGNITE "Women in Technology" Symposium in February.

NEWS

Virginia's six IGNITE projects now all have their websites up and running. Check them out here.

Alexandria

<http://virginia.igniteworldwide.net/alexandria/>

Arlington County, Wakefield High

<http://virginia.igniteworldwide.net/wakefield/>

Prince Edward County

<http://virginia.igniteworldwide.net/princeedward/>

Prince William County

<http://virginia.igniteworldwide.net/princewilliam/>

Roanoke County

<http://virginia.igniteworldwide.net/roanoke/>

Stafford County

<http://virginia.igniteworldwide.net/stafford/>

Virginia Beach

<http://virginia.igniteworldwide.net/virginiabeach/>

RESOURCES

Retention Strategies: 5 Easy Steps.

From the National Institute for Women in Trades, Technology & Science.

http://iwitts.com/html/retention_strategies.html

Classroom Strategies for Student Retention. From Lansing Community College in Michigan.

www.lcc.edu/cte/resources/studentretention/index.html

Why do the girls drop out? The CISCO Learning Institute site to help retain girls in IT classes.

http://gender.ciscoslearning.org/FAQ/About_Retention.html

Retention Checklist. Nontraditional Careers for Educators 101

<http://phase.arizona.edu/NONTRAD/NT101/NewLook/Retention/Rentention2.htm>

Copyright ©2008 Rector and Visitors of the University of Virginia

Keep up with recent research

Strategies for Increasing Retention: What the Research Shows

Encouraging students to enroll in a nontraditional CTE program is just the first step for increasing the number of completers in nontraditional CTE career paths. Boys will never have a chance to become teachers or pharmacy technicians unless they stick with a program and complete it. Likewise for girls, the road to a career in engineering or IT is a long one and they need support throughout the process to succeed in one of these careers. The federal Office of Vocational & Adult Education has summarized research on improving nontraditional completion. Based on their work, we have pinpointed some techniques to help you change attitudes and improve completion numbers in your school.

Strategy: Give students more exposure to nontraditional role models.

Research shows that getting to know people working in nontraditional careers is one of the best ways to help students overcome biases and raise expectations for themselves. Create opportunities for students to meet people of their own gender working in nontraditional fields—through mentoring, job shadowing, and visiting speakers. Having a mentor, a chance to talk one-on-one to someone like yourself working in the field, is especially valuable for retaining students in nontraditional programs.

Strategy: Work with peer groups.

Students are more likely to complete programs if they feel supported and part of a peer group. Whenever possible, recruit students in pairs, or greater numbers. Help students form and join groups and clubs, such as IGNITE, to provide support and encouragement.

Strategy: Support teachers in their efforts to overcome gender stereotyping and sexual

harassment in the classroom.

Teens are often quick to tease, stereotype, and even harass students who are different. Teachers need support in dealing with difficult classroom situations. They may also need support in rethinking their own ideas and approaches.

Strategy: Continuously recruit for retention as well as enrollment.

CTE courses that lead to promising high-paying careers are difficult. Students need continuous encouragement to stick with it and need to be actively recruited to return for second and third year courses. Involve your existing students in your recruitment events such as career fairs, speaker visits. Recruit them as mentors for prospective students.

Strategy: Bring guidance counselors on board.

CTE students need to take two or three courses in sequence in order to complete a program. Many students begin a nontraditional program but “drop out” when scheduling difficulties make it hard to enroll in a second or third course. Guidance counselors and administrators need to know how important it is for students to finish a sequence of courses and “complete” a program. Without their help, all other efforts to retain students are bound to fail.

Strategy: Be confident.

We need more men in nontraditional fields like nursing and teaching. We need more women in computers, engineering and trades. Students who complete these programs will reap real benefits from stepping up to this challenge.

Read more.

Office of Vocational & Adult Education
www.icpsps.ilstu.edu/projects/newlook/NTO_Root_Causes.pdf

Understanding the impact of stereotyping is key. This article shows the power of negative stereotypes:

[The negative consequences of threat - A functional magnetic resonance imaging investigation of the neural mechanisms underlying women's under performance in math.](#)

Around Virginia

Featured Events

Henry County Leads The Way With "Live Wires in Engineering"

8th Grade students in Henry County were treated to a day-long event introducing them to high school *Project Lead the Way* pre-engineering programs. "It was great!!!" says Linda Dorr, Director of Career & Technical Education for Henry County Schools. "It met all of our objectives."

Students took a field trip from their middle schools to Bassett and Magna Vista High Schools. They worked with hands-on activities with PLTW teachers – building Fischertechnics projects. Trish Clary, a woman engineer from local industry *Smart Machines*, visited both schools to meet students and encourage them to consider career in engineering.

Project Objectives:

- To raise 8th grade students' awareness about engineering as a possible career path
- To raise the female enrollment in Project Lead The Way pre-engineering courses
- To provide students with hands on activities centered around the engineering curriculum
- To have a female engineer speak to the group about education requirements, possible careers in engineering, and what a typical day is like for an engineer.
- To help students, particularly females, realize the importance of math, science, and problem-solving in every career.



CTE Teachers Mr. Rick Ramey and Mrs. Danielle Trotter, with Henry County students holding the certificates they received for participating in the Live Wires event at Magna Vista High School in March.

Wakefield High, Arlington

In the fall of 2007, when the IGNITE program was introduced to Virginia public schools, Wendy Maitland, now a second year Fundamentals of Technology teacher, volunteered to start an IGNITE Chapter at Wakefield High. Wendy is a dedicated, determined young educator and an advocate for girls. Although funding presents barriers to many activities in which she would like her girls to participate, Wendy continues to look for ways to open doors for them. This spring, the Wakefield IGNITE Chapter is having three events with speakers:

- March – an Account Executive from *3Com*
- April – an Engineer from *Space Generation*
- May – a Systems Analyst from *Northrop-Grumman*

These events will be held during lunch and the first half of the next block. Pizza and door prizes provide incentives for girls to attend. The speakers will captivate participants by telling stories and sharing the excitement of their careers. Flyers, the school newspaper, *The Chief-tain*, the club page of the school website, and the school TV network will be used to advertise each event. The objective of each event is to increase an awareness of careers in technology and encourage girls to investigate new possibilities. The girls attended Microsoft's DigiGirlz Day in March and more fieldtrips are being planned for spring and summer.

**HAVE YOU MET PJ?**

Many of you have already met PJ Dempsey, who is now Director of CTE Promotions with the Weldon Cooper Center at the University of Virginia. She has visited 12 districts this year, helping to set up nontraditional projects around the state.

PJ began her career in education in Southwest Virginia as a Special Education Teacher, and education became the focus of her life. In 2004, she moved to Bay St. Louis, MS to work developing curricula at Stennis Space Center, but *Katrina* relocated her back to Virginia. In 2005, PJ became the Clarke County Director of Instructional Technology. She joined the Weldon Cooper Center in January 2008.

In addition to her work supporting Virginia CTE coordinators and teachers, PJ is completing a PhD at UVA in Administration and Supervision.

Email: pjdempsey@virginia.edu

Tackle the Challenge**CTE EXCHANGE TEAMS: AN IDEA IS BORN**

Successful promotional strategies not only improve enrollments, they also change attitudes about CTE and they make a difference not only in your school district, but in your region. Two CTE professional from Southwestern Virginia recently met with PJ Dempsey to explore ways to promote CTE enrollment and enrich their professional development – and an idea was born: **CTE Exchange Teams** – small, regional networks of professionals working together to change the landscape for CTE in their schools and their regions. Thanks to the leadership of Assistant Principal Sam McKinney from the **Smyth Career and Technical Center**, the first Exchange Team meeting was scheduled for April – and the idea of those first two professionals has attracted participants from 11 counties. The Exchange Team movement is just the beginning. To support their efforts, PJ is introducing *Curriki*, a free, shared electronic "community" that will enable members of the Southwestern CTE Exchange Team to continue their discussions, joint efforts, and professional development throughout the year. Watch for details about this meeting, other Exchange Teams, and *Curriki* in the next *TRAILBLAZERS*.

"Education is all about being excited about something. Seeing passion and enthusiasm helps push an educational message."

— Steve Irwin, Crocodile Hunter