

WIRED K-12 ACTIVITIES Piedmont Triad Partnership

SCHOOL TO WORK FORUMS

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.)

A survey of school to work practices conducted in the twelve-county North Carolina Piedmont Triad WIRED region and a “best practices” document developed showcasing the results of this audit. This document will serve as a foundational document to be used in a follow-up forum focusing on replicating and expanding current best practices and innovating new school to work activities September 26, 2007. The School-To-Work Forum is a day long conference involving over 250 representatives from the region’s school systems. The purpose of the sharing best practices between and among area educators along eight different areas from across the region. Tom Houlihan, Ed.D. from the Institute for Breakthrough Performances will serve as one of the event’s keynote speakers. Dr. Houlihan is a nationally known expert on preparing students for the workforce of the 21st century. Rita Pierson, Ed. D., a colleague of Ruby Payne, will speak about the relationship of economics to education and workforce preparedness drawing on the learnings of A Framework for Understanding Poverty.

An industry resource fair will be the focus during the afternoon, (1:30-3:00 PM) where industry representatives from healthcare, logistics and distribution, advanced manufacturing and creative enterprises and the arts will have booths and displays with materials and “subject matter” experts to speak with the educators about career opportunities, student preparation and training, career ladders and what problems they encounter in finding appropriately prepared and qualified candidates for existing and future jobs.

Attendees at Part 1 of the School to Work Forum will be administrators, career-technical directors and career coordinators and some classroom teachers from the 17 school districts in the region. Part 2 of the Forum scheduled for November/February will focus entirely on equipping classroom teachers.

A survey of the school systems, in the school year following distribution of best practices and the forum will be conducted in order to determine the degree to which best practices are replicated and to identify innovations spinning off the best practices identified.

2. What industry, if any, is the focus of the activity:
 - a. Advanced Manufacturing
 - b. Creative Enterprises/Arts
 - c. Health Care
 - d. Logistics/Distribution

3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)
 - a. Documentation of school to work activities in the region.
 - b. A forum focused on replication and innovation of regional and national best practices in school to work to expose educators to innovative practices in the School to Work arena.
 - c. Exposure to careers in target industries to provide relevancy in the classroom.
 - d. Replication of best practices and innovations based on current regional and national best practices discovered in document and forum

4. Grades of students benefiting from the activity: K-12

5. Funding status – WIRED Funds
 - a. Survey: \$10,000 contracted
 - b. Summit:\$60,000 budgeted for two-part forum involving 600 teachers and administrators from 17 districts

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
WIRED	1. Advanced Manufacturing 2. Creative Enterprises/Arts 3. Health Care 4. Logistics/Distribution	Best Practice Audit in School System Exposing Educators to innovative solutions Exposing Educators to targeted industries	K-12	\$16,000 WIRED \$10,000 Contracted \$60,000 Budgeted for two-part forum

PIEDMONT TRIAD EDUCATION CONSORTIUM RETREAT

Piedmont Triad Education Consortium's membership, the 17 public school superintendents, will hold a two-day retreat for school superintendents and other executive staff from 17 school districts to educate them about the four targeted industry clusters and give them a chance to interact with industry cluster leaders. This retreat is to be followed by superintendent-led forums in each individual district to plan implementation of information learned and to be further documented by changes in curriculum and school-to-work practices. This is a one-time event. However, based on its successful conclusion it will be offered next year to senior curriculum administration and middle and high school principals with funding from individual school districts and the Piedmont Triad Education Consortium.

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.)
- 2 .What industry, if any, is the focus of the activity:
 - a. Advanced Manufacturing
 - b. Creative Enterprises/Arts
 - c. Health Care
 - d. Logistics/Distribution
3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)
 - a. 30 executive-level education leaders participating an a retreat to learn about target industry clusters;
 - c. executive-led forums with second-tier school staff to share retreat results and propose changes in current curriculum;
 - c. documented changes in curriculum and school-to-work best practices

Timeline for Delivery: August 07-November 07
4. Grades of students benefiting from the activity: K-12
5. Funding status – \$14,000 toward a \$32,000 project with leveraged funds from the Piedmont Triad Education Consortium and the school districts which will participate (Personnel, supplies, travel and equipment).

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
WIRED/Leveraged funds	1. Advanced Manufacturing 2. Creative Enterprises/Arts 3. Health Care 4. Logistics/Distribution	Exposure of senior level educators to targeted industries with survey of curriculum changes/developments as a result	K-12	\$14,000 WIRED \$16,000 Leveraged PTEC funds

CAREER START

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.)

Winston-Salem/Forsyth County Schools are requesting funds to further develop and implement CareerStart, a middle-school career education program. Funds would be used to include WIRED targeted industry information in the 6th and 7th grade curriculum which already exists, develop 8th grade curriculum, carry out administrator/teacher training in use of the curriculum and place the curriculum on two website. Once the curriculum is fully developed it will be sustained by placement on the intranet Village Learning system and Learn North Carolina website. Once the program and evaluation tool are placed there, no further funds are needed for sustainability. Experience in Forsyth County has demonstrated that as the program is successfully used in one school system the desire is for it to be picked up by other school systems. Letters of support indicate replication desirable in the region's other school districts.

2. What industry, if any, is the focus of the activity:
 - a. Advanced Manufacturing
 - b. Creative Enterprises/Arts

- c. Health Care
 - d. Logistics/Distribution
3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)
- a. development of 8th grade curriculum to show students the relevancy of what they are learning to different jobs/careers,
 - b. expansion of existing lessons to incorporate target industries, expanded implementation of curriculum use across ten new schools;
 - c. administration/teacher training;
 - d. placement of curriculum on intranet Learning Village system and Learn North Carolina website.

Timeline for Delivery: 12/30/907-6/30/09

4. Grades of students benefiting from the activity: 6-8
5. Funding status – \$75,000 a year for 2 consecutive years toward a \$186,000 per year budget. Leveraged funds are provided by a grant from the Kate B. Reynolds Foundation, UNC Chapel Hill and WS/FC School District

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
WIRED/Leveraged funds	1. Advanced Manufacturing 2. Creative Enterprises/Arts 3. Logistics/Distribution 4. Health Care	Development of 8 th grade curriculum to expand existing lesson plans on relevancy of targeted industries	6-8 Middle School	\$75,000 WIRED \$111,000 Leveraged funds

WORK KEYS ASSESSMENT AND CAREER READINESS CERTIFICATION

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.) - please be as specific as possible

Randolph Community College, Asheboro City Schools, Randolph County Schools and Regional Consolidated Services have all indicated commitment to sustain this project and assist others in the region with replication.

Regional Consolidated Services (a Workforce Development Board) is requesting funding to work with Randolph County Schools, Asheboro City Schools and local employers to do a demonstration project around the effectiveness of using WorkKeys and Career Readiness Certification in the job placement of occupational level students following graduation. Randolph County JobLink and Community College became one of the first twelve pilot Career Readiness Certification projects in NC with adults. This is believed to be the first NC demonstration with Youth.

2. What industry, if any, is the focus of the activity: Universal
3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)
 - a. career-technical track students assessed on WorkKeys
 - b. career-ready students receiving Career Readiness Certifications based on testing
 - c. students not career-ready receiving remediation on Key Train
 - d. students receiving Career Readiness Certification after remediation
 - e. students in junior year making decision about future education based on assessment scores on CRC testing
 - f. decrease in drop-out rate as students see recognize relationship of testing scores to employment
 - f. career-ready students finding employment or choosing continuing education after graduation based on certifications
 - g. increased number of employers using Career Readiness Certification as employment requirement

Timeline for Delivery: July, '07-July, '08

4. Grades of students benefiting from the activity: Grades 11-12 High School

5. Funding status – \$61,439 toward a \$282,824 project with leveraged funds provided by Randolph Community College, the regional Workforce Development Board, Asheboro City Schools, Randolph County Schools and the Randolph Program for the Carolinas

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
WIRED/Leveraged funds	All Industries	Students assessed for career readiness, finding employment or planning future education on basis of assessment; students receiving remediation in math, reading for information and locating information; increase in number of employers using CRC as a basis for employment	11-12 High School	\$75,000 WIRED \$111,000 Leveraged funds

PROJECT BRIGHT TOMORROW

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.)

Project Bright Tomorrow will expand the state-recognized Bright IDEA program which has been piloted on a small scale in Thomasville Primary School. The intensive week-long seminar trains teachers in teaching methods that are demonstrated to lead to improved test scores and give learners critical thinking skills that are being requested by today's and tomorrow's employers. This project seeks to train 75 teachers selected from Thomasville City Schools, Lexington City Schools, Davidson County Schools, and Guilford County Schools. Davidson County Community College child care and education instructors will also be instructed in the methodology so that they can use it in instructing future teachers. The Davidson County Workforce Development Board will work with local businesses to include a presentation of the needs of employers in the four WIRED targeted cluster industries and ways the Bright IDEA behaviors relate to those employer needs.

2. What industry, if any, is the focus of the activity:
 - a. Advanced Manufacturing
 - b. Creative Enterprises/Arts
 - c. Health Care
 - d. Logistics/Distribution
3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)
 - a. 75 teachers receive Habits of the Mind training and credentials
 - b. trained teachers participate in industry-led forums in four targeted industry clusters
 - c. 5% or better increase in 3rd grade math and language arts scores at end-of-grade testing in Spring, '08 in classrooms of teachers trained in implementing Habits of the Mind
 - d. 5% or better increase in 5th grade math and language arts scores at end-of-grade testing in Spring, '08 in classrooms of teachers trained in implementing Habits of the Mind
 - e. trained teachers train others in summer '08

Timeline for Delivery: Summer 07-Spring 08

- 4. Grades of students benefiting from the activity: Grades 1-5
- 5. Funding status – \$104,533 of a \$210,585 project with leveraged funds provided by project partners: Thomasville City School, Davidson County Schools, Lexington City Schools, Guilford County Schools, Davidson County Workforce Development Board, GET REAL, and Davidson County Community College

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
WIRED/Leveraged funds	Advanced manufacturing Health Care Logistics/Distribution Creative Enterprises and Arts	Teachers trained in Habit of Mind methodology, teachers gain current information about career opportunities and preparation needed for targeted industry clusters, improvement in end-of-grade test scores in math and language arts; trained teachers train others	1-5 Elementary	\$104, 533 WIRED \$106,052 Leveraged funds

FIRST ROBOTICS TEAMS

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.)

FIRST (For the Inspiration and Recognition of Science and Technology) will collaborate with local partners who have one robotics team to establish an infrastructure of 12 additional teams to participate in state and national robotics competitions as a hands-on way of applying math, science, engineering and technology skills learned in the classroom. As well as building a robot, students will create a team website and complete an animation project. They are also expected to gain and use skills in entrepreneurship, teamwork, planning, budgeting, fundraising and project management. New teams will be created in one urban and two rural counties under the mentorship of the existing team in Guilford County.

- 2 .What industry, if any, is the focus of the activity:

- a. Advanced Manufacturing
- b. Creative Enterprises/Arts

3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)

- a. creation of 3 new FIRST Robotics teams with 100 members
- b. creation of 3 new FIRST Tech Challenge teams with 30 members
- c. creation of 3 new FIRST Lego League Teams with 15 members
- d. creation of 3 new FIRST Junior Lego League Teams with 15 members
- e. increased student interest in math, science, engineering, technology and design
- f. increased involvement of business and industry in mentoring K-12 students into STEM careers

Timeline for Delivery: July, '07 – June, '08

4. Grades of students benefiting from the activity: K-12

5. Funding status – \$67,700 toward a \$136,200 project with leveraged funds from corporate sponsors and the regional/national FIRST organization.

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
WIRED/Leveraged funds	Advanced Manufacturing Creative Enterprises/Arts	Increased STEM competencies and interest in STEM careers; increased industry participation in K-12 education	Grades 1-12	\$67, 700 WIRED \$68,500 Leveraged funds

CAMP FLAT WORLD

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.)

Camp Flat World is a residential YMCA camp for youth grades 7-10, and is designed to acquaint youth in this age group with changes in the workplace described in Thomas Friedman’s book *The World is Flat*. It will help youth understand the types of skills they will have to have to work in the world of the future. A major feature of the camp is a Career Fair set in 2015 with employers at the fair interviewing youth for the jobs that will be available in that year. This camp concept has great possibilities of being replicated nationally. Several groups in California are already expressing interest in this innovative concept being piloted here in the Triad. While unable to attend, Thomas Friedman has agreed to do a videotape endorsing the camp and answering questions submitted to him by the planning group. The Friedman tape will be used as part of the camp curriculum, and then used as we move to regionalize this curriculum and camp concept.

2. What industry, if any, is the focus of the activity:

- a. Advanced Manufacturing
- b. Creative Enterprises/Arts
- c. Health Care
- d. Logistics/Distribution
- e. Biotechnology
- f. Nanotechnology

3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)

- a. student exposure to flat world concepts, particularly globalization and technology
- b. students learning what skills are necessary for jobs of the future

4. Grades of students benefiting from the activity: 7-10

5. Funding status – PTP non-WIRED financial sponsorship to supplement primary funding by other sponsors. WIRED staff providing technical assistance in recruiting industry participation in Career Fair and in making plans to regionalize the camp for next summer

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
PTP sponsorship	Advanced Manufacturing Creative Enterprises/Arts Health Care Logistics/Distribution Nanotechnology Biotechnology	Educating students about flat world concepts and about skills needed for jobs of the future	7-10	\$3,000 PTP funds, remaining funding by YMCA, Leadership Greensboro, Greensboro Chamber of Commerce and local industries

DAVIDSON COUNTY K-14 INIATIVE

1. Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.) - please be as specific as possible

The Davidson County K-14 Partnership is a coalition of the three school superintendents, community college president, representatives of four chambers of commerce, the Workforce Development Board and Davidson Vision, an economic development agency in Davidson County. The College Foundation of North Carolina is also part of this consortium. This group has been engaged in a sustained campaign to change the conversation in Davidson County from K-12 to K-14 and to promote and make possible the idea that every child in the county needs and can obtain a 14-year education. The project has been in existence for several years and has impressive outcomes to date. WIRED has been invited to join this coalition to provide technical assistance and to help stimulate industry interest in this project.

2. What industry, if any, is the focus of the activity: Universal
3. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)
 - a. decreased drop-out rate (to date a 34% decrease in the past three years)
 - b. increased college-going rate (one high school in the county had 100% of its graduates going to college in 2006. 2007 figures not yet in)
 - c. creation of a webpage with extensive college planning and scholarship information (www.k-14.org)
 - d. every eighth grade student visiting community college campus
 - e. rents of every high school student receiving college prep and scholarship information folder (15,000 distributed last year)
 - f. training of PK-5 teachers in principles K-14 and ways to implement in grades PK-5
4. Grades of students benefiting from the activity: Grades PK-12

5. Funding status – No WIRED funding

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
Davidson County funded	All Industries	Decrease in drop-out rate, Increase in college-going, creation of website, K-14 info to parents of every high school student; college visit by every 8 th grader, teachers trained to implement K-14 principles at every grade level PK-12	PK-12	Funded entirely within Davidson County with WIRED lending technical assistance

LITERACY INITIATIVE

1, Type of activity (Examples: curriculum development, teacher prep, applied learning models, camps, etc.) - please be as specific as possible

The WIRED Literacy Initiative focuses on two primary projects: it will map literacy assets in the 12-county PTP region and create a space on the WIRED website for use by literacy providers and the public seeking literacy services and it will design and carry out a lifelong learning and educational attainment campaign designed to create public awareness about the importance of literacy and learning across the lifespan.

6. What industry, if any, is the focus of the activity: universal

- 7. What is the outcome anticipated for the investment (Examples: exposure to careers in target industries, more students entering STEM careers, achievement of industry credentials for students, promoting an education pathway to a specific career pathway, students becoming more entrepreneurial, etc.)
 - a. mapping of literacy assets and creation of public web space to access assets
 - b. public awareness of skills and education needed for the jobs of the future
 - c. public awareness of relationship of education to employability, earnings and job retention
 - d. public awareness of resources in the region for literacy and lifelong learning
 - e. increased public use of literacy services

Timeline for Delivery:

- 8. Grades of students benefiting from the activity: PK-12
- 9. Funding status – March, '07 – January, '08

FUNDING STATUS	INDUSTRY FOCUS	OUTCOMES	GRADES	FUNDING STATUS
WIRED	All industries	Mapping of literacy assets; creation of web-based data bank; public awareness campaign	PK-12	\$80,000 contract with DCA of Boston MA