School-to-Work Impact in Georgia Schools
Testing and Remediation

Findings from the Georgia School-To-Work Project

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This brief describes implementation of **testing and remediation** strategies by five Georgia STW partnerships to strengthen student achievement. Implementation highlights, positive outcomes, challenges, and lessons learned are presented.

Overview of School-to-Work

The federal School-to-Work Opportunities Act (STWOA) was enacted in 1994 to create coherent systems that link *school-based learning* characterized by career awareness and exploration, high academic standards, and career majors to *work-based learning* including planned programs of work experience, workplace mentoring, and programs of study that lead to industry-recognized credentials. STWOA provided a framework and seed money for states and localities to use to expand existing programs, add new programs and initiatives when needed, and link them to create more powerful, comprehensive school-to-work systems at the state and/or local level.

Georgia received a five-year STWOA grant in 1998 and, through extensions, continued to fund some partnerships with representatives typically from public schools, technical and other colleges, community agencies, and business and industry throughout the state through 2005. To build on promising strategies identified in Planning Grants (1999-2001), developed in STW Implementation Grants (2001-2003), and further refined and evaluated in 22 Demonstration Grants (2002-2005), the Georgia School-to-Work Office awarded 12 Transition Strategies Grants to begin in August of 2004 and to be completed by September, 2005.

Purposes of the Transition Strategies Grants

During the first five years of STW implementation in Georgia, many partnerships built demonstration models based upon sound theoretical principles, selected models to fit their community's existing needs, or adapted research-based "best practices" from existing models. Staff from the Georgia School-to-Work Office evaluated these demonstration models and also studied other Georgia models or initiatives that seemed to be successful in transitioning high school students to postsecondary education and/or workplaces. Based upon the results of an evaluation of the various models, the following strategies were considered to be successful, replicable, and sustainable in other School-to-Work partnerships:

Strengthening Student Achievement

1. Testing and remediation in high school – particularly targeted to assist students to meet postsecondary college admission standards in fields they are interested
2. Teen Prep – targeted to both high school drop outs and at-risk youth

Increasing Career Awareness

3. Programs of study – at least 6 years, freshman year through two years of postsecondary
4. Career transition for middle and high school students and related parent information
5. Counselor training

Employer Involvement in Education

6. Educators/teachers in industry
7. Business-educator exchanges
8. Strengthening Student Achievement
9. Increasing career awareness
10. Employer involvement in education

The Georgia School-to-Work Office awarded 12 Transition Strategies grants to 11 partnerships (one partnership received two grants) to replicate effective, tested strategies in one or more of the above categories with its identified strategies model(s).

Testing and Remediation in High School

Five partnerships were awarded grants to strengthen student achievement through testing and remediation strategies. They were:

- ***Coastal Georgia STW Partnership***
- ***Flint River STW Consortium***
- ***Greater Chattahoochee Education to Career Initiative***
- ***Northeast Georgia Corner Connections STW Consortium***
- ***Northeast Georgia Youth Opportunities Council***

According to funding guidelines, testing was to be done by the area technical college using a college placement/entrance test (i.e., ASSET or COMPASS) and the remediation (e.g., software use, such as PLATO or WIN) was to be a cooperative effort with the high school and college. Pre and post test data should show student progress. Superintendents and/or school boards approved the proposed strategies and STW funds were leveraged with local school funds to accomplish project goals.

Highlights of Funded Projects

The five funded projects were unique in that they were tailored to the needs in the service area and their students, although there were some common components.

Coastal Georgia STW Partnership

- Using existing school guidelines at-risk students in Camden, Glynn, and McIntosh counties were identified and tested using a combination of COMPASS, e-COMPASS, ASSET, and PLATO Fast-Track. PLATO was used for credit redemption, credit recovery, and remediation. Student progress was measured by PLATO, and this served as the post test measure.
- Initial project planning projected that 180 at-risk students, including some students who had dropped out of school, would participate in the testing and remediation. The actual number of participants was much higher. Final reporting on the project indicated that 1,059 students (including 581 identified as at-risk) in grades 9-12 participated, but out-of-school youth were not included because personnel resources were not available to coordinate the higher than expected number of in-school participants.
- Over 600 of the students completed pre and post career awareness questionnaires, and career awareness presentations including flyers, activities, and tours were made available to students.
- Final evaluative test data for all participants were not compiled, but individual student results were used at the school level resulting in student remediation plans and credit recovery student contracts.
- As part of the project 155 PLATO units for secondary schools and 15 units for GED programs were purchased, and educators were trained as PLATO facilitators. Further, the project coordinator was able to negotiate with PLATO for an in-kind donation of 15 additional units.
- All high schools continued to use PLATO the following school year and information about the project was shared with other interested school systems.

The project did face challenges including obtaining individual school licenses for COMPASS, limited computer server capabilities in some schools, class periods not always being long enough to complete tests, and finding time for students to participate in remediation during the school day. A success of the project in the large numbers of students participating also presented a challenge for the administrators to be able to collect and analyze larger amounts of student data. The partnership utilized feedback from some of the PLATO facilitator training to identify training delivery weaknesses, which were later rectified.

Flint River School-To-Work Consortium

- Administered the ASSET to 380 11th grade students in three area high schools. One-third of the students were deemed as "program ready" and two-thirds were identified as needing remediation. Individual student results were shared with the home high schools. No information was provided on post test results, but at least 107 students did later retake the ASSET.
- Provided career guidance during the initial testing session and provided students with a copy of the guidance booklet *Guide to High School and Beyond*.
- Provided WorkKeys training for educators in participating schools.
- Project planning anticipated that the high schools would provide remediation in areas where students demonstrated weaknesses using Georgia high school graduation tests preparation, remediation resources, and WorkKeys. Remediation plans were devised for students needing remediation, but there was no follow-up on whether or not the schools provided the remediation.
- Early reported outcomes of the project included more students who tested program ready enrolling in a dual enrollment program, and students expressing an interest in the technical college as an option upon graduation.

The ***greatest challenge faced by this project*** was the loss of the project coordinator early on resulting in limited follow-up on implementation and results. One school experienced some computer problems effecting installation of WorkKeys, but they were able to work with Key Train personnel to resolve the issues. Teachers experienced difficulty incorporating WorkKeys into their lessons with other demands and curriculum requirements. It is not known if teachers successfully overcame this challenge and to what extent students received appropriate remediation.

Greater Chattahoochee Education to Career Initiative

- Worked in four area high schools and pre-tested 312 students using primarily WorkKeys, provided opportunities for those in need to remediate using Key Train, and post-tested using WorkKeys and the ASSET.
- An objective of this project was to align WorkKeys assessment levels with the COMPASS and the ASSET. Through work with the developers of KeyTrain (Thinking Media), a partial linkage chart between the instruments was developed that would allow KeyTrain assessments to be used as a pre-test indicator of student success on the ASSET and COMPASS.
- The project provided guest speakers to inform students about job skills and employment opportunities.
- As a result of the project, six high schools in the project area committed to initiate or sustain KeyTrain the following school year; working on KeyTrain became a prerequisite to students enrolling in dual enrollment courses.
- Columbus Technical College designated KeyTrain as the pre-test for the Economic Development Division of the college

The following table shows the project goals and student outcomes related to testing.

Indicators of Student Success on WorkKeys	Student Goal	Student Results
Level 3 on 3 assessments	100%	61%
Level 4 on 2 assessments	15%	57%
Level 5 on 2 assessments	5%	25%

The project encountered challenges early on including insufficient computer hardware, computer firewalls in the schools, software/network issues, the inability to test students online (paper and pencil tests were made available as necessary), and keeping school personnel in the two schools initially identified for the project interested. Two additional schools were later added to the project in order to reach the project goal of 300 participating students. Other challenges included students trying to shortcut the KeyTrain remediation by taking the post-test prior to working through the curriculum. As a result, recommendations were made to facilitators to limit the number of tests students could attempt and to increase student monitoring.

Northeast Georgia Corner Connections School-To-Work

- Pre-tested 937 9^{th}-12^{th} grade students in eight school systems using the ASSET or COMPASS. The students also completed a pre career awareness questionnaire.
- Students were informed of their pre-test scores and given a career planner developed as part of the project that included descriptions of credit programs of study, information on Tech Prep and articulated courses, dual enrollment options, financial aid information, a career pathways planning template, access information to online career planning tools, and options available to students to remediate areas of weakness identified in the pre-test.
- The project raised the awareness of secondary educators as to their role and responsibility in helping students make wise career choices.
- The testing project, including the distribution of the career planner, is being sustained and the Pioneer RESA has committed to assist with test administration without further compensation.

The major challenge for this project related to scheduling the testing into already very busy high school schedules. The project did not collect information to determine impact of the pre-testing and did not document student participation in remediation activities. The partnership communicated that the test results and shared career information would serve as the impetus for students to make better postsecondary choices—including knowing options, required qualifications, and remediation needed in order to reach their goals.

Northeast Georgia Youth Opportunities Council

- 403 at-risk students (9^{th}-12^{th} grade) in 4 area high schools were pre-tested using the ASSET and participated in remediation activities.
- This project differed from the other projects in that, from the beginning, the expectation was for all identified at-risk students to participate in testing ***and*** some remediation. The most at-risk students—approximately 130—were targeted for all project activities including an individual plan for improvement, frequent parental involvement, and regular monitoring of remediation activities, discipline, and school attendance. Remediation teams at each school monitored and tracked student progress.
- Remediation software included KeyTrain and Plato; teachers were provided with software training when needed.
- Discipline referrals and absences for the targeted at-risk students decreased, and 85% of the targeted students improved their grade point average.
- Approximately half of the targeted students improved their test scores.
- The majority of the participating students completed pre- and post- career awareness questionnaires. Comparison of pre- and post answers revealed that students believed themselves more knowledgeable after the project on how to choose postsecondary

options, which careers would need more people in the future, and the career fields where the best jobs would be in the future.

- The project is being sustained. The school systems committed to continue close monitoring of the participating students until they graduate, school tutoring programs are continuing, area businesses committed to continue to provide project-based learning opportunities, Lanier Technical College will continue to administer the ASSET upon request of the school systems, and dual enrollment opportunities are being expanded. The schools have more remediation software, and the software is available at the satellite technical college campus.
- Unanticipated outcome of the project was that the Retired Teachers Association members in one county became involved as tutors.

This project proceeded with minimal challenges and according to the proposed plan. As a result of testing, directed remediation, and close monitoring, overall student achievement for the targeted students improved.

Positive Outcomes, Challenges, and Lessons Learned

Positive outcomes of testing and remediation projects included:

- ✓ Some individual students in each project made gains—students recovered credit, improved test scores, and learned about postsecondary options and requirements. Some students obtained access to college through dual enrollment.
- ✓ Materials, such as career planners and questionnaires, were developed and can continue to be used to broaden student knowledge.
- ✓ Through training opportunities educators became more proficient in using remediation software such as PLATO, NovaNet, and WorkKeys as instructional tools.
- ✓ Increased and continued availability of testing and remediation software in the schools

Common challenges that emerged across the projects included:

- ❖ Problems with technology ranging from insufficient server capacities to firewall restrictions and limited lab access. Technical colleges trying to work with vendors to obtain high school site licenses was also cumbersome.
- ❖ Coordinating high school calendars to accommodate project activities including time to test students, time for educators to receive training on remediation software, and adequate time for students to participate in needed remediation.
- ❖ Sufficiently collecting and analyzing cumulative data in order to evaluate overall project outcomes for students.

Partnerships planning to implement testing and remediation activities should consider the following:

- ❖ Success of the testing and remediation projects depends on solid collaboration and communication between the school systems, including the high school educators, and the technical college.
- ❖ It is important to **collaboratively** identify expected project outcomes, develop a plan for collecting and analyzing pertinent data, follow established guidelines, and evaluate goal achievement.
- ❖ Buy-in to the project goals by the high school educators is vital in order to schedule and implement project activities, in particular providing needed remediation opportunities for students.
- ❖ Targeted students need to be identified as early in the project as possible so that schedules can be developed to accommodate project activities, including time to **participate in remediation**.
- ❖ Successful project activities can be sustained through collaboration with local entities such as RESAs, area employers, school systems, and technical colleges.

Further Information

This brief has been prepared by Jana Thompson and Grace Thornton of the Occupational Research Group in the College of Education at the University of Georgia, under contract with the Georgia Department of Technical and Adult Education, Office of School-to-Work. Principal Investigator on the STW evaluation and assessment project at UGA is Richard L. Lynch. The content of this brief has been extracted from information gathered from August 1, 2004 through September 30, 2005 from the project directors, October 2004, January 2005, April 2005, and July 2005 quarterly reports, the final project reports, and ORG mid-term and final status reports. Further information about STW in Georgia may be obtained at http://www.dtae.org/gastw