The Riley Institute at Furman University
CENTER FOR EDUCATION POLICY AND LEADERSHIP
What's Working in Public Education — Expert Series Paper # 6

WhatWorksSC

expert series

An expert series building on the findings of the largest ever study of public education in South Carolina

Making Education More Individualized for Students

Not every student learns in the same way. Teachers have been saying so since schools first began to operate. The more schools and classrooms can find ways to individualize or personalize education or, in other words, to differentiate instruction, the better chance they have of helping all students learn. Individualizing education means doing different things for different students during the same time period. But, how does a state, a district, a school, or a teacher further individualize education in an era of larger class sizes, decreased funding, high-stakes testing, and increasing childhood poverty? Individualized/differentiated instruction is one of the best reforms we can make for all students. But, how do we make this happen?

This paper seeks to further explore the issue of individualized education for students. In order to frame the issue, the results of the recent Riley Institute study on public education will first be discussed, a study that convincingly points to individualized education strategies as key to improving student achievement in South Carolina. Next, Dr. Valerie Harrison, former Deputy Superintendent in of the South Carolina State Department of Education, will further introduce the issue and provide insight into why stakeholders have overwhelmingly identified a focus on this issue as important for the state. Following, a sample of statewide initiatives will be highlighted, providing tangible examples of promising strategies already in place in South Carolina. Finally, Dr. Paul Thomas of Furman University will discuss the challenges of and identify potential roadblocks to addressing individualization of education for students.

I. Background Information: Riley Institute Study

How do we know that South Carolina's stakeholders believe that focusing on individualized education strategies should be a priority? Results from the large-scale study conducted by the Riley Institute at Furman clearly show that various stakeholders from all over the state overwhelmingly support a focus on this issue.

During the course of the study, the Riley Institute project team spent more than 3,000 hours meeting with nearly 800 South Carolinians to gather their opinions on public education. The team met with businessmen and women, teachers of all levels, superintendents, parents, school board members, principals and students from every county and school district in the state - large and small, rural and urban, wealthy and poor.

Throughout the research, funded by the William and Flora Hewlett Foundation, stakeholder groups across South Carolina voiced common support for focusing on individualized education strategies. The following main ideas emerged:

1. Train teachers to utilize more personalized learning approaches based on the different learning styles of students;
2. Provide tools for teachers to better assess individual student progress;
3. Offer earlier guidance to help students select the coursework needed to achieve their personal goals;
4. Provide more choices within the public school system to meet the learning needs of each student (i.e., more select schools, magnet schools, vocational schools, and schools with a focus);
5. Develop small learning communities within schools;
6. Assess individual abilities early and develop individualized graduation plans for every public school student;
7. Within each grade level, group students into classes by ability level;
8. Expand curriculum offerings to include more arts and music, foreign language, service learning, and physical fitness;
9. Within schools, group students into classes according to mastery level instead of age or grade;
10. Change the student identification tracking system so that students are tracked more efficiently from pre-K through twelfth grade;
11. Increase distance-learning opportunities/online courses/virtual schools;
12. Offer more classes grouped by gender.

In the second phase of the research, participants were asked to further explore the highest-rated strategies and offer practical plans. Below are the findings for the strategies that were top priorities for the greatest number of groups. What emerged is a roadmap of detailed ideas and suggestions to individualize education for all students:

1. Train teachers to utilize more personalized learning approaches based on the different learning styles of students. A recurring theme in education research is that not one formula fits all. In acknowledging the need to individualize learning to meet learning styles, participants identified the need to better train teachers. They recommended the following:

- More training for teachers to better identify and understand student learning styles and to be able to tailor lesson plans and classroom methodologies to those styles;
- Revamping teacher training programs;
- Enhanced mentoring programs for teachers;
- Time and encouragement for teachers to be able to experiment with different teaching techniques and styles;
- Allowing teachers to observe and collaborate with mentor teachers who use different styles;
- Smaller class size so that teachers are better able to ascertain students' learning styles;
- Team teaching so teachers can help each other identify what helps individual students learn;
- Information banks on students, their activities, home information, etc. so teachers can avail themselves of greater resources to identify student learning styles.

2. Provide tools for teachers to better assess individual student progress:
   - Professional development and training (including online training) on informal assessment tools and techniques that can be used in the course of daily class work;
   - Time for teachers to collaborate with each other on specific student progress;
   - Smaller class size so that teachers have time to observe students more effectively and to implement effectively best practice;
   - Maximization of technology to assess on a regular basis;
   - Extra pay for teachers to spend time on assessment;
   - Creation of assessments that provide useful information during the school year;
   - Better training in assessment techniques during teacher preparation;
   - Flexibility for teachers to choose and become proficient in their preferred assessment techniques;

3. Offer guidance earlier to help students select the coursework needed to achieve their personal goals. A problem often identified in education is that students nearing the end of their high school coursework are not properly prepared to take final courses they would like or need to take. They often complete high school without having had the opportunity to explore vocational options. To address these issues participants recommended:
   - Assess student interests early in their schooling;
   - Reassess interests regularly;
   - Provide an adequate number of counselors to keep track of student progress, goals, and coursework through the years, one on one;
   - Make discussions on goals, interests, and careers part of the school year, with more access for students to participate in internships, go on field trips, visit industry, and attend camps;
   - Create teams of teachers to help plan student coursework and follow their progress;
   - Staff schools with career specialists;
   - Train teachers and counselors to help students design a "road to individual success" and to help them attain that success; invite business people and others to help students reach their goals;
   - Replace requirements by giving students more choices.

4. Provide more choices within the public school system to meet the learning needs of each student (i.e., more select schools, magnet schools, vocational schools, and schools with a focus):
   - Design school curricula with student interests in mind;
   - Assess student interests within a school or a community;
   - Provide funding so classes that interest a small number of students can be provided;
   - Allow students to attend magnet schools in other districts;
   - Provide more AP courses and more non-traditional courses;
   - Provide more vocational courses and career-specific courses in every district that are aligned with business needs;
   - Create a greater dialogue involving the business community and others to help develop curricula for schools.

5. Develop small learning communities within schools:
   - Restructure student clusters according to student interests;
   - Analyze student abilities before grouping the learning communities;
   - Provide single-gender classes;
   - Reduce class sizes at all grade levels;
   - Train teachers to utilize small learning community models;
   - Equip each small learning community within a school with its own guidance personnel, career advisors, etc.;
   - Give students ownership for their choices of coursework within the learning communities.

No child will be left behind if the individual learning needs of the child are met.

Providing more choices for students and more tools to personalize learning styles generally requires more personnel, more space, and more training. As in the case of most other strategies, in discussing the strategies listed above, participants stressed the need for funding so that programs may be implemented statewide for all children.

II. Introduction

By Dr. Valerie Harrison

South Carolina's unemployment rate for high school dropouts is four times that of college graduates (American Community Survey, 2008). The recent economic recession has dramatically impacted the state, which has the sixth highest unemployment rate in the nation (US Department of Labor, Unemployment Rates for States, February 2011).

To change the future, South Carolinians across the state know that they must increase the pace of educational progress. No child will be left behind if the individual learning needs of the child are met. Each child is unique and individualized programs can increase student success. Children have diverse learning styles, learn at different rates, have varying socioeconomic backgrounds, and have diverse intellectual strengths. The two major facets of this teaching method are learning and motivation. Both of these facets recognize and build on the uniqueness of each child.

For more than a decade, estimates have been that by 2020, at least 20% of jobs will

require a four-year degree, and 65% will require an associate's degree or advanced training (Judy, D'Amico & Geipel, 1997). In South Carolina, educational attainment is low. Many SC students live in households in which no one has attended college. Only 22.8% of the adult population in the state holds a bachelor's degree or more, and only another 12.6% has a two-year degree (U.S. Census Bureau 2007).

South Carolina educators are focused in certain areas of the state on shaping a new learner-centric, personalized system of education so that each individual – from early childhood through adolescence – is prepared for life, work, and citizenship in the 21st century regardless of his/her location, ethnicity, economic status, or other demographic factor. These efforts require understanding, as educators must understand the way today's students are motivated to learn while helping students to understand and respond to the expectations of the global, knowledge-based economy. Positive strategies implemented with strategic leadership, innovation, and collaboration with partners will enable the creation of successful models of personalized learning, using knowledge among states about what works, and build collective capacity to transform public education in sustainable ways.

These efforts require understanding and responding to the way today's students are engaged and motivated to learn while helping students to understand and respond to the expectations of the global, knowledge-based economy.

Successful individualized learning puts the needs and interests of the student at the center of a data-driven framework for setting goals, assessing progress, and ensuring that students receive the academic and developmental supports and opportunities that each needs. As South Carolina districts, schools and teachers strengthen their collective abilities to assess and understand the unique characteristics of individual learners, more comprehensive efforts to meet individual student learning needs will be commonplace in all areas of the state. Personalizing learning in the state educational context also means creating and sustaining meaningful relationships among students, those who teach and support them, and the content and skills they pursue. Through planning for personalized learning, students can develop postsecondary education and career goals, advocate for their needs, reflect on their progress, gradually assume responsibility for their own learning, and develop identity as life-long learners.

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Personalizing learning means that students gradually take ownership of their future learning and career paths; that is, success beyond the high school years and in the world of work and citizenship. Career exposure, exploration, and experience should be a core element of every next generation learner's education. Employers, schools, and communities can collaborate to introduce young people to relevance from the workplace, thereby helping them develop career ambitions that are challenging, realistic, and career-oriented rather than job-oriented. Students need to understand the education pathways and options that are available to them, what it means to be prepared, and how to identify supports and funds necessary for continuing their education.

Personalizing learning, from early childhood through adolescence, requires that educators differentiate instruction and build capacity to respond to needs for intervention on a just-in-time basis. Educators will use comprehensive data systems to explore the characteristics of learners (both academic and developmental), enable better decision-making about individuals and groups of learners, create effective learning partnerships, and test new teaching methods that match particular learning styles. Such systems will signal that a student is on track for success, or provide early warnings that intervention is needed. Planning for personalized learning is the mechanism through which educators, parents, and other adults will collaborate around the needs of individual students over the course of their education.

The learning support system begins as soon as children begin learning – at birth. All families should have the opportunity to enroll their children in high quality early childhood programs and working parents/caregivers should have access to engaging learning opportunities for their children regardless of when they work. Early education programs should support physical, cognitive, language, social, and emotional development. Personalized learning for very young children will foster positive approaches to learning, like building curiosity, persistence, motivation, self-regulation, and initiative.

Parent education, engagement, and involvement are also critical to a culture of personalized learning. Families and children will benefit from a continuum of care and stable relationships with educators and staff during the early learning years. Young children should be screened, diagnosed, and treated for health, dental, vision, and special needs conditions to remove barriers as early as possible. A more personalized system of early education will be outcomes-based, informed by ongoing assessments, and customized to offer more intensive, enriched, and expanded learning supports for children who are not demonstrably on track in their personal trajectory of early development and learning.

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III. Strategies in South Carolina: What Is South Carolina Doing to Individualize Education?

A growing number of studies from across the United States provide evidence about what needs to be done to successfully individualize education for students. The question then becomes whether or not South Carolina is taking the steps necessary to address this pressing statewide issue. In order to begin answering this question, a number of statewide initiatives will be analyzed.

The initiatives highlighted below have been identified based on information gathered from meetings throughout the state with education leaders and groups; phone calls, electronic mail and other correspondence with a variety of education and community leaders throughout the state; and from a survey sent to superintendents, principals, and education leaders statewide.

A larger list of these initiatives can be found in the WhatWorksSCsm clearinghouse, which can be found on the following website: .

Initiative #1:
INDIVIDUAL GRADUATION PLANS (IGPs)

A critical goal for South Carolina's parents, educators, and employers is, or should be, that all students in the state complete high school fully prepared for successful employment, additional specialized training, or postsecondary study. The South Carolina Education and Economic Development Act (EEDA) of 2005— represents comprehensive reform-focused legislation that addresses workforce development with a student-centered, individualized education focus. This legislation established a framework for collaborative efforts among students, parents, educators, business partners, and communities. The EEDA enables all stakeholders to take an active role in providing the best educational opportunities possible for each of the state's public school students. A central premise of the EEDA is that when students are afforded career guidance in the form of meaningful information, appropriate

assessments, and valid interest inventories. Through mechanisms established via EEDA, students are able to develop individual graduation plans (IGPs) that support their interests, abilities, and career aspirations as well as to make informed choices and sound decisions about their current and future paths.

An IGP is a student-specific educational plan that details the courses necessary for each student to prepare for graduation and to successfully transition into the workforce or postsecondary education. An individual graduation plan: 1) aligns career goals with a student's course of study; (2) is based on the student's selected cluster of study; 3) includes core academic subjects to ensure that requirements for graduation will be met; (4) includes experience-based, career-oriented learning experiences; and (5) allows change in the course of study if student interests change prior to high school graduation requirements; and (6) should be approved and monitored by a certified school guidance counselor and the student's parents, guardians, or designated individuals.

Approximately 90 percent of the state's eighth-grade students and 81 percent of the state's ninth-grade students developed an IGP during the 2007–08 academic year. According to an online survey of eighth-grade students, 88 percent of the students who participated in an IGP conference responded that they believe the conference was beneficial as they prepare to transition from middle to high school. Approximately 80 percent of the state's eighth-grade students and approximately 60 percent of the state's ninth-grade students who completed an IGP during the 2007–08 academic year were accompanied by at least one parent or parental designee during the IGP planning conference. The e-IGP system is fully functional statewide in all 85 school districts as well as the South Carolina Department of Juvenile Justice and the South Carolina School for the Deaf and Blind.

The EEDA requires personalized high school course work to match each student's career interests; students select "majors" of interest aligned with the 16 federal career clusters. Collaboration with local business and community partners help develop career related instructional modules that highlight careers in each cluster and provide human (mentors, tutors) and material (books, computers, software, etc.) resources to increase each school's capacity to meet the academic and career development needs of each student (EEDA).

Personalizing learning will require that we ensure the presence of a series of teams of caring and competent adults in every child's life. It will require strong mentoring and advising systems with sufficient capacity to meet individual learners where they are and help them to where they need to go. Such systems must be proactive rather than reactive, informed by data, and adaptive. If the learning journey is to be personalized for students, a responsive system will establish and maintain relationships with the student and their family or caregivers from year to year, school to school, and experience to experience. Such systems will not be building-based, and they will require the engagement of teams of P-12, postsecondary, community, and workplace partners. Educators and their partners will need to be prepared to function as effective leaders, team members, and collaborators, with a strong sense of shared responsibility to see that each and every child is successful in the personal learning journey.

In South Carolina public high schools, certified school guidance counselors and career specialists, under their supervision, shall counsel students during the ninth and tenth grades to further define their career cluster goals and individual graduation plans, and before the end of the second semester of the tenth grade, students shall have declared an area of academic focus within a cluster of study. Throughout high school, students must be provided guidance activities and career awareness programs that combine counseling on career options and

experiential learning with academic planning to assist students in fulfilling their individual graduation plans.

Although the electronic IGP (e-IGP) system was developed during 2006–07, the system's recent enhancements allow educators and business representatives access to reports that specify the number of students who have expressed interest in specific career clusters. This enhancement will provide higher education and business representatives with information necessary for them to anticipate the number of potential students and employers in certain career areas and to plan accordingly. Eleven virtual centers—accessible through the Personal Pathways to Success Common Portal—connect student and adult learners to the academic and career oriented information and resources that are available within specific regions in South Carolina. (EEDA)

Initiative #2:
STEM PROGRAMS

STEM programs are critical to developing high school and college graduates ready to meet the job demands of the new and emerging high tech and high wage jobs. Since 1998, engineering programs have expanded from zero sites to 157 high school and middle school sites with approximately 7,000 students enrolled. The purpose of the STEM Initiative is to develop, implement, and expand STEM into the green renewable energy curricula programs to develop a future Green STEM workforce that is emerging. This strategy is needed to prepare graduates to be college and career ready so they will be able to enter the next generation of STEM careers in the Green renewable energy cluster. The emerging jobs in this career will be developing rural, urban, and suburban areas. The Green STEM cluster supports all economic clusters.

A benefit of this focus is the expansion of the emerging economy in the Green economic cluster that will provide thousands of jobs over the next ten years. South Carolinians will be building two additional nuclear plants over the next ten years and 10,000-15,000 jobs will need to be filled in that one sector.

The major impact of STEM expansion will be preparing students in grades 9-12, as well as postsecondary, to fill these emerging jobs in renewable energy. The future workforce needs to be in the pipeline beginning in 2011 to meet the job demands in 2015-2020. It is critical to begin now to be able to meet the demand. New Green STEM curricula programs are either developed or will be developed to create a seamless P-16 pathway in the multifaceted Green STEM renewable sector.

South Carolina is already on the cutting edge through the implementation of four pilot Green STEM sites at the secondary level and will link the program to postsecondary institutions through partnerships already established. Program and credit recognition of engineering programs among 916 educational institutions have already been established along with industry support and standards.

The development and implementation of the Green STEM Initiative will be supported through the partnerships already in place with two-year and four-year institutions. In addition, various business and industry groups including the SC Chamber of Commerce and New Carolina are already focused on economic clusters, especially in the Green cluster area. The Office of Career and Technology Education worked in postsecondary with Greenville County Schools, the largest school district in South Carolina (68,000 students), to develop a

seamless STEM pathway for K16. The pathway included the A. J. Whittenberg Elementary School of Engineering (grades K-5), Beck Academy (grades 6-8), J.L. Mann Academy (grades 9-12), Greenville Technical College (grades 13-14), and Clemson University (15-16).

The pathway provides dual credit opportunities for secondary students and the engineering curricula include a memorandum agreement for credit recognition. Increased opportunities will be developed for students to earn high school and postsecondary credits at the same time through dual enrollment and other similar programs. The Commission on Higher Education (CHE) is taking a lead role in developing a web-based course articulation and transfer system that will display details on degree pathways.

Initiative #3:
CHILD DEVELOPMENT EDUCATION PILOT PROGRAM (CDEPP)

As part of the 2010-2011 Appropriations Act, the South Carolina General Assembly continued an exciting opportunity for both the state's impoverished 4-year-olds and its diverse array of early childhood providers. Budget Proviso 1A.49 enables the fifth year of a ground-breaking 4K-expansion pilot within both public school settings and high-quality private for-profit, private non-profit, faith-based and other non-school district settings. The South Carolina Child Development Education Pilot Program (CDEPP) is administered in partnership by the South Carolina Department of Education, which oversees participating public school district programs, and South Carolina First Steps for School Readiness, which oversees private and other non-district providers. This partnership helps maintain high-quality pre-kindergarten within both school district and eligible non-district settings. Programs focus on the developmental and learning supports that children must have in order to be ready for school and will incorporate research-based practices, ongoing assessment and parenting education. For more information: http://ed.sc.gov/agency/Standards-and-Learning/Academic-Standards/old/ece/ChildDevelopmentEducationPilotProgram.html

Initiative #4:
RESPONSE TO INTERVENTION

Recent educational and legislative efforts have focused on increasing the standards of achievement for South Carolina students and encouraged the use of strong, research-based instructional models at all levels of instruction. South Carolina schools are responding by monitoring student achievement more closely and by searching for appropriate interventions to help every student achieve. Response to Intervention (RTI) is the practice of using data to guide high-quality instruction and behavioral interventions matched to student need monitoring progress frequently to make decisions about changes in instruction or goals, and applying child response data to make critical educational decisions. In April 2008 SDE named a RTI Coordinator, and a RTI Guidance document was made available for district use during the 2008-2009 school year (ed.sc.gov/agency/Standards-and-Learning/Exceptional-Children/documents/GuidanceRTI.doc - 2008-10-21).

RTI is a format encouraged by the No Child Left Behind Act and by the Individuals with Disabilities Education Improvement Act (IDEA). An RTI approach to instruction requires that schools provide a research-based instructional model to all students in academic and behavior areas, identify the students who are not meeting standards, plan and provide

research-based interventions for those not achieving, closely monitor the progress of targeted students, and intervene at a higher level if students do not progress toward age-appropriate levels. RTI organizes an entire school delivery system and applies to academics and behavior. The RTI framework offers a structure for schools to raise student achievement. This guidance document provides an overview of RTI practices in South Carolina and explains the core components of RTI.

Again, RTI integrates assessment and intervention within a multi-level prevention system, beginning with the Building Leadership Team, to maximize student achievement and to reduce behavioral problems. With RTI, schools use data to identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities or other disabilities.

Eight South Carolina public schools have been selected to participate as the first Response to Intervention Demonstration/Pilot schools. The eight schools are Alma Elementary (Cherokee); Bells Elementary (Colleton); Ben Hazel Primary (Hampton School District 1); Boundary Street Elementary (Newberry); Cheraw Primary (Chesterfield); North Vista Elementary (Florence School District 1); Riverview Elementary (York School District 4); and St. Paul Elementary (Clarendon School District 1). The Response to Intervention Demonstration/Pilot Site school project is sponsored by the South Carolina Department of Education. These eight schools are receiving technical assistance in the implementation of Response to Intervention during the 2010-2011 school year.

Initiative #5:
ADVANCED PLACEMENT

Advanced Placement (AP) classes give students an opportunity to take college-level courses while still in high school. Students enjoy the challenge of taking AP courses with enthusiastic classmates and teachers; high school faculty find that APcourses enhance their students' confidence and academic interest as well as their school's reputation; and college faculty report that AP students are far better prepared for serious academic work. State regulations require teachers of AP courses to be endorsed to teach the courses by participating in summer institutes hosted by the state's colleges and universities. In 2008, nineteen institutes, funded by the South Carolina Department of Education, were offered across the state providing educators an opportunity to be endorsed as AP teachers. The number of AP exams taken in South Carolina public schools rose from 26,453 in 2009 to 28,763 in 2010 (an increase of 8.7%) and the number of test-takers rose from 16,380 in 2009 to 17,766 in 2010 (an increase of 8.5%). The six most-taken AP exams in South Carolina for 2010 were: U.S. History, English Language and Composition, English Literature and Composition, Calculus AB, U.S. Government, and Statistics.

Systems that support planning for personalized learning gather, aggregate, and update data from a number of sources, including:

- Core student information systems; classroom, district, state, and national assessments; and academic and career planning tools.
- Student-generated material such as extracurricular experiences and community service; work artifacts and feedback; short- and long-term goals; and other evidence of learning and achievement.

Initiative #6:
SLICE

The South Carolina data system is named SLICE (South Carolina Longitudinal Information Center for Education). SLICE has been developed in collaboration with the following active partners: Workforce agencies, P-12: South Carolina Department of Education and the Technology Advisory Council; the South Carolina Commission on Higher Education; the South Carolina Technical College System, the Office of Research and Statistics, and the K12 Technology Initiative Committee and South Carolina Educational Television.

SLICE houses and provides access to a wide range of data on students and educators. Those data are used to inform stakeholders and support continuous improvement in education. The student information system collects and maintains the following student-level data: student identification, demographic data, discipline and behavior indicators; grades and transcript information, student and teacher schedules enrollment information; at-risk factors related to the potential for leaving school prior to graduation; and other information related to academic status and at-risk factors, such as attendance and truancy records.

Student academic assessment results: The High School Assessment Program (HSAP) is the “exit exam” for students and includes tests for English language arts and mathematics. End-of-Course tests for English 1, Algebra 1, Mathematics for the Technologies 2, US History and the Constitution, Physical Science and Biology 1. Palmetto Academic Challenge Tests (PACT) between 2001 and 2008, now Palmetto Assessment of State Standards (PASS) results for English language arts, writing, mathematics, science and social studies.

SLICE includes the following student-level data as well: 1) student identifiers that allow linking to the data stored in the student information system, including the demographic data and the teacher of record for specific academic content instruction; the identifiers also allow the linking of assessment data across years for determining academic growth; 2) student scores by content area, including scale scores, performance levels, and other performance indicators; and 3) other assessment results: results for SAT and ACT and college and career preparation data (eIGP) from the student information system, including identifiers that facilitate linking to other data sets; course planning and resulting class grades; other data that can be used to determine readiness for college and career entry; and data that can be reported to workforce agencies.

Comprehensive Systems of Learning Supports foster students’ physical, social, emotional, and cognitive development through an adaptive, individually tailored continuum of services. A cohesive, coherent system of supports enables students to have an equal opportunity for success by removing barriers to learning, enhancing engagement and reengaging disconnected youth. Support systems convey to students that they are cared about as individuals and that what it takes to help them meet their learning goals will be done. Comprehensive systems of learning support will be tiered and will weave together the resources of school, home, and community to provide a full array of services that follow the child, rather than being building-or school-based. While education will take a leadership role in causing such systems to be created, education alone cannot and should not take on this task. A continuum of supports, in which public education and its partners collaborate to ensure that each entity does what it does best, will encompass resources, strategies, and practices that collectively create and sustain a student’s sense of hope and confidence about his or her future.

Students need safety nets along the entire the continuum of learning to address factors that interfere with their success. Learning supports are designed for all students, whether they are struggling or thriving. Students should expect to receive supports and interventions as a part of the process of learning without perceiving them as negative experiences for which they have been singled out. Learning services and supports need to reach students in unique placements and circumstances, such as those who are home-bound or hospitalized, migrant or transitory, and those who are adjudicated or enrolled in alternative schools. Every student and his/her family or caregiver should expect that public education will learn enough about individual circumstances, needs, and interests to design and make available services that are both appropriate and accessible.

Initiative # 7:
SOUTH CAROLINA VIRTUAL SCHOOL

South Carolina Virtual School Program provides high quality, standards based, online instruction to the students of South Carolina by supplementing and expanding the conventional school day with effective alternatives to deal with economic, staffing and scheduling issues, all in an effort to increase the graduation rate in South Carolina. The South Carolina Virtual School Program (SCVSP) is a part-time supplemental program that works with existing diploma-granting public, private and home schools to serve students in online courses for high school credit. Students may take up to three units of high school credit per year for a total of twelve units in a high school career with the SCVSP. The SCVSP is not a school and does not award diplomas. The SCVSP does not offer any middle-grades courses, but allows 7th and 8th graders to take courses for high school credit with the approval of their sponsoring schools. http://scvspconnect.ed.sc.gov/index.php?q=mission

Initiative #8:
CREDIT RECOVERY OPTIONS

The South Carolina Department of Education (SCDE) advocates providing a variety of options and innovative opportunities in offering credit recovery while supporting students' efforts to meet graduation requirements. Every effort should be made to offer these options and opportunities within and beyond the parameters of the "regular" school day and/or school year. The SCDE, in the interest of providing equity in student services, is also interested in supporting the most uniform and consistent delivery of credit recovery within parameters established by existing State Board of Education (SBE) regulations and guidelines.

Credit recovery options and opportunities are those provided through structured delivery systems, enabling students to recover content needed to demonstrate academic achievement and/or content mastery resulting in credit awarded for courses that students have failed or were in jeopardy of failing. Steps that can be taken to help assure credit recovery success include but are not limited to the following:

- An initial assessment of the student's strengths, weaknesses, and instructional needs should be completed where appropriate (pre-test).
- A personalized learning plan and student goal-setting initiative should be developed with parental involvement.
- Programs should operate beyond the parameters of the school day, as flexibility is

essential for meeting the needs of students.

- A certified instructor should be assigned to approve content completed by students.
- Credit recovery earned should be applied to meeting promotion and graduation requirements.

Credit recovery delivery systems include the South Carolina Virtual School; teacher-monitored, software-driven instruction; and/or teacher-led instruction. Delivery systems selected by districts or schools must provide content aligned to, not correlated with, South Carolina's academic standards. This alignment ensures that educators are providing and students are receiving instruction at the appropriate level of rigor.

A comprehensive, cohesive, and coherent system of learning supports is essential to reducing dropout rates and reengaging disconnected youth with educational opportunities that lead to high school graduation. For youth who are at the most risk of failure, collaboration between public education, community, workforce, local government, and state agencies is essential. In communities where children attend lower-performing schools, cross-sector cooperation can provide greatly-needed learning opportunities, supports that promote attendance and participation, additional time for learning, and coaching for achievement that the school alone lacks capacity or resources to provide. Situations that trigger intervention can arise inside or outside of school, so the strategic use of data systems to share information across sectors and activate early warning systems is critical.

With the development of the Potential Performance Report, South Carolina will now have the ability to objectively predict, on the basis of a combination of research-based variables, which students are at risk of dropping out of high school. The information provided in this report will also allow educators to better assess the appropriateness of programs to be implemented and the amount and/or number of resources needed Approximately 95 percent of the 1,596 students who participated in an EEDA-funded evidence-based innovative program designed to prevent students from dropping out remained in school from 2007–08 to 2008–09, and 88 percent of the students who remained in school were promoted to the next grade level. Ninety-six percent of the at-risk students who participated in Jobs for America's Graduates—South Carolina (JAG-SC) in 2007–08 remained enrolled in school during 2008–09. The SCDE partnered with the Department of Commerce to fund five additional JAG-SC sites for 2008–09.

There are many models of effective cross-system collaboration and comprehensive community-based solutions to support students. Whatever the model, public education has unique authority to change policies that are related to attendance, calendars and schedules, retention and promotion, grading, age and grade-level grouping, diploma options, access to alternative pathways, and other practices that can contribute to building comprehensive systems of learning supports that meet the needs of students.

IV. Conclusion: Individualized (Differentiated) Instruction

By Dr. Paul Thomas

Constructivism is an education theory that promotes working from the student outward...and is central to supporting individualized instruction narrowly and differentiated instruction broadly.

Building from the patterns of a diverse cross-section of stakeholders in education across South Carolina, nine themes emerged, including individualizing education for students. From that theme, twelve elements have been identified in the action plan (Section I).

While determining effective action plans to reform public education based on existing support among a diverse group of stakeholders has a great deal of merit—including raising the likelihood of generating financial and political support for implementing change and allowing those changes to reach fruition--several roadblocks to reform exist that warrant consideration.

An overarching concern is terminology. "Individualized" instruction may mean something quite different among the stakeholders identifying this reform. Wormeli (2006) clarifies the role of individualized instruction within a larger concept, differentiated instruction:

> *Differentiated instruction* [emphasis in original] is doing what's fair for students. It's a collection of best practices strategically employed to maximize students' learning at every turn, including giving them the tools to handle anything that is undifferentiated. It requires us to do different things for different students some, or a lot, of the time in order for them to learn when the general classroom approach does not meet students' needs. It is not individualized instruction, though that may happen from time to time as warranted. It's whatever works to advance the students. It's highly effective teaching. (p. 3)

In this discussion, I will consider three distinct but interconnected aspects likely captured by "individualized instruction" among the diverse group of stakeholders--individualized instruction, differentiated instruction, and constructivism.

While connected, as Wormeli (2006) explains, offering unique instruction to each child in a classroom is one way to differentiate instruction, but differentiated instruction is well supported as effected practice that addresses both individual needs as well as whole-class diversity. Constructivism is an education theory that promotes working from the student outward (distinct from behaviorism and transmitting content uniformly to all students) and is central to supporting individualized instruction narrowly and differentiated instruction broadly.

Below, the most powerful road-blocks to implementing individualized instruction as part of education reform are listed with some suggestions for addressing those roadblocks.

Roadblocks to Implementing Individualized (Differentiated) Instruction in SC

- *Lack of expertise among stakeholders.*

In the late twentieth century, the medical field experienced a significant failure from abdicating their expertise to stakeholders when patients demanded the dispensing of antibiotics when unneeded. That same failure of expertise is evident in the school choice movement, whereby offering choice to parents appears to fail because simply offering choice does not guarantee positive reform (Thomas, 2010). Some of the action plans above reflect stakeholder support for reform not supported by evidence (such as calls for more stratification of students and more efficient tracking, see below).

Before this action plan can work, stakeholders need to be better informed about the reform they have identified, and then reform plans should be driven by experts who contribute to the awareness and understanding of the stakeholders.

- *Poverty, pockets of poverty in neighborhood public schools.*

School reform tends to fail because the plans focus primarily and even exclusively on reforming the schools themselves. However, the weight of evidence shows that between about 67% to 86% of student achievement is the result of out-of-school factors (Berliner, 2009; Hanushek, 2010; Hirsch, 2007; Rothstein, 2010). Hanushek, for example, found teacher quality accounted for only 13% of reading scores and 17% of math scores, while a compilation of studies in the UK revealed school and teacher quality contributed only 14% to student outcomes (Hirsch).

In order for any school reforms to be fully effective, SC must address the following: "[S]ix OSFs common among the poor that significantly affect the health and learning opportunities of children, and accordingly limit what schools can accomplish on their own: (1) low birth-weight and non-genetic prenatal influences on children; (2) inadequate medical, dental, and vision care, often a result of inadequate or no medical insurance; (3) food insecurity; (4) environmental pollutants; (5) family relations and family stress; and (6) neighborhood characteristics" (Berliner, 2009).

- A*ccountability era (standards/ high-stakes testing) circa 1983 (A Nation at Risk), 2001 (No Child Left Behind), and ESEA reauthorization (impending).*

While the U.S. has been seeking and implementing standards and high-stakes accountability for almost three decades since 1983's A Nation at Risk, few have challenged the inherent contradiction between standardizing education and addressing individual student needs and interests. While the accountability movement has proven to be ineffective in addressing the education problems most widely identified (achievement gaps, drop-out rates), a growing body of evidence also shows that the accountability era has in fact increased the problems we face and created new ones (Amrein & Berliner, 2002; Federal policy, ESEA reauthorization, and the school-to-prison pipeline, 2011; Nichols & Berliner, 2008a, 2008b). Instead of reauthorizing NCLB, the Department of Education must support and encourage states to set aside traditional views of standardization and move toward public education that understands and honors a diverse student body and culture. While a dramatic and large shift, in order for schools to implement individualized/differentiated instruction effectively, the traditional culture of standardization and accountability must be addressed. Any reforms pursued by SC addressing individualized instruction will be impacted by federal mandates, influencing educational funding and SC's autonomy to implement any reform.

- *Traditional (transmissional/ standards) pedagogy and assessment (high-stakes/ selected response).*

Part of the allure of the standards and accountability paradigm comes from a narrow view of what teaching is and how students learn. Popular views of teaching and learning tend to focus on teachers transmitting an identified set of knowledge to relatively passive students. While this view of teaching/learning can be efficient--and conducive to large classes taught by one teacher--it runs counter to what we know about learning and best practice in teaching (Zemelman, Daniels, & Hyde, 2005) and what we believe about individual agency and autonomy.

To embrace and implement individualized/differentiated instruction, we must shift our views of teaching/learning and then provide the classroom conditions conducive to both—for example, low student/teacher ratios.

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- *Educational and social commitment to behavioral psychology v. constructivism/ post-formalism.*

Traditional classrooms are driven in instruction and classroom management by behavioral assumptions--notably the use of rewards and punishments to guide behaviors. Again, behaviorism feeds our pursuit of efficiency, but it runs counter to individualized/differentiated instruction, supported better by constructivism (Brooks & Brooks, 1999; Kincheloe, 2005).

- *Teacher preparation, professional development, and teacher professionalism/autonomy (teachers teach as they were taught v. best practice). Failure (historical) to implement genuine reform/ to evaluate reform (teachers tend to shut doors and do something different than what is official policy).*

Initial teacher certification and recertification are primarily driven by bureaucracy, which often detracts from the richness of the field. The history of teacher education reveals that a gap has always existed between the best practice taught in teacher preparation and the practices of teachers once in the field. Routman (2006) has documented the official implementation of whole language in California as that contrasts with teacher practices, which remained traditional. In short, teachers tend to teach as they were taught instead of implementing evidence-based practices unlike their own experiences as students.

Pre-service and in-service teachers need extensive instruction, reinforcement, and support in order to implement individualized/differentiated instruction.

- *Conflicting data on "learning styles" and "brain-based" teaching/learning.*

Individualized/differentiated instruction tends to be reinforced by arguments about learning styles and brain-based teaching/learning. One serious problem, however, is that research is conflicting about learning styles (Dunn, Beaudry, & Klavas, 2002; Pashler, et al., 2008; Rochford & Mangino, 2006).

Pre-service and in-service teachers need sophisticated and on-going education and support to understand the complexities and controversies regarding learning styles.

- *Student/teacher assignment (elite students with experienced/certified teachers v. struggling students with inexperienced/un-[under-]qualified teachers) and teacher turnover re: students of color, students living in poverty, ELL students, and traditional approaches to stratified and exclusionary course offerings and tracking.*

Many of the elements necessary for implementing individualized/differentiated instruction are connected with teacher preparation and experience. Evidence shows that students most in need of public education--children from poverty, children of color, and ELL students--tend to be in classrooms with un-/under-qualified teachers with little experience (Peske & Haycock, 2006).

Individualized/differentiated instruction greatly benefits all students, but is even more important for struggling students. Individualized/differentiated instruction, however, challenges experienced teachers and can overwhelm beginning and un-/under-qualified teachers. SC must address how students are assigned to teachers and how courses are leveled, especially those courses that are exclusionary.

The action plan for individualized instruction includes support for parental choice and ability grouping/tracking, but the evidence shows both are ineffective and even counter-educational (Thomas, 2010; Welner, 2001).

- *Student teacher ratios/ education funding.*

While individualized/differentiated instruction can be effectively implemented in traditional classrooms, ideally student/teacher ratios should be as low as possible to support teachers being able to implement and monitor individualized/differentiated instruction. Particularly during hard economic times, managing class sizes can threaten commitments to individualized/differentiated instruction.

- *Misguided political mandates/agendas (ex., charter schools) v. evidence from education field (teacher autonomy/expertise).*

Individualized/differentiated instruction must have full political/administrative support to be effective, but education suffers a great deal of fads and shifting commitments despite the body of evidence on effective instruction being rich in years and stable.

- *Impatience about reform outcomes (10 years minimum for reforms to show fruition).*

Politicians and the public are impatient, but teaching and learning are complex--and true reform is slow and difficult to confirm. Fullan (2001) has shown that genuine reform can take a decade, but a decade is most of any child's formal education and multiple terms for any politician.

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- *Parental expectations/assumptions for norms of schooling (i.e., misguided expectations about "fairness," common-sense views of grade retention) and misinformed public (failure of media to present education research accurately).*

Parents are powerful stakeholders in education, influencing their children directly, interacting (or not) with their children's school, and voicing their views through the ballot box As influential stakeholders, however, parents often promote practices that are familiar, but counter to needed reforms supported by evidence.

Key to implementing individualized/differentiated instruction, then, is informing and teaching parents about what is best for students and how those practices differ from what they experienced (and why they are better).

- *Traditional grading (averages, class rank, etc.).*

Like standards and accountability, traditional views of classrooms, tests, grades, and class rank force teachers to seek a narrow view of fairness over what is best for each child. Again, as Wormeli (2006) explains, "Differentiated instruction [emphasis in original] is doing what's fair for students" (p. 3), but that often means that individualized/differentiated assessment and grading do not conform to traditional views of fairness among students.
Administrators, teachers, parents, and students must be well informed in order to make this assessment shift.

Any education reform, then, must be seen as a continual process, and not as simply implementing or committing to a program or even as a fixed goal. Pursuing individualized instruction must include an embracing of education as a perpetual experiment and rise above partisan politics and simplistic views of career/college readiness.

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