INNOVATION AT SCALE

HOW VIRGINIA COMMUNITY COLLEGES ARE COLLABORATING TO IMPROVE DEVELOPMENTAL EDUCATION AND INCREASE STUDENT SUCCESS

BY ROSE ASERA

OCTOBER 2011

Achieving the Dream
Community Colleges Count

Achieving the Dream, Inc. is a national nonprofit that is dedicated to helping more community college students, particularly low-income students and students of color, stay in school and earn a college certificate or degree. Evidence-based, student-centered, and built on the values of equity and excellence, Achieving the Dream is closing achievement gaps and accelerating student success nationwide by: 1) improving results at institutions, 2) influencing public policy, 3) generating knowledge, and 4) engaging the public. Conceived as an initiative in 2004 by Lumina Foundation and seven founding partner organizations, today, Achieving the Dream is the largest non-governmental reform movement for student success in higher education history. With 160 community colleges and institutions, more than 100 coaches and advisors, and 16 state policy teams—working throughout 30 states and the District of Columbia—Achieving the Dream helps 3.5 million community college students have a better chance of realizing greater economic opportunity and achieving their dreams.

WWW.ACHIEVINGTHEDREAM.ORG

JOBS FOR THE FUTURE

Jobs for the Future develops, implements, and promotes new education and workforce strategies that help communities, states, and the nation compete in a global economy. In 200 communities across 43 states, JFF improves the pathways leading from high school to college to family-sustaining careers. JFF leads the state-policy and capacity-building efforts for both Achieving the Dream and the Developmental Education Initiative.

WWW.JFF.ORG

MDC

MDC's mission is to help organizations and communities close the gaps that separate people from opportunity. It has been publishing research and developing programs in education, government policy, workforce development, and asset building for more than 40 years. MDC was the managing partner of Achieving the Dream: Community Colleges Count for six years and was responsible for its incubation as a national nonprofit and is the managing partner of the Developmental Education Initiative.

WWW.MDCINC.ORG

ABOUT THE AUTHOR

Rose Asera, Ph.D., is an independent researcher and evaluator. From 2000 to 2010, she was a Senior Scholar at the Carnegie Foundation for the Advancement of Teaching and Program Director of Strengthening Pre-collegiate Education in Community Colleges, a four-year action research project focused on developmental education in 11 California community colleges. Among the suite of SPECC project reports and essays, Dr. Asera is the author of *Change and Sustain/Ability: A Program Director's Reflections on Institutional Learning*. In the 1990s, Dr. Asera worked with Professor Uri Treisman as Director of Research and Evaluation at the Charles A. Dana Center, initially at the University of California at Berkeley, and subsequently at the University of Texas at Austin. In 1991-92 she was a Teaching Fulbright Scholar at the Institute of Teacher Education at Kyambogo, Uganda.

ACKNOWLEDGMENTS

INNOVATION AT SCALE:

HOW VIRGINIA COMMUNITY COLLEGES ARE COLLABORATING TO IMPROVE DEVELOPMENTAL EDUCATION AND INCREASE STUDENT SUCCESS

EXECUTIVE SUMMARY

Ten years ago, Virginia's community colleges, like most community colleges, did not place student success high on their list of priorities.

Today, improving student success is the single most important goal of the Virginia Community College System:

> The state aims at a 50 percent increase in the number of community college students who complete a degree, transfer to a four-year institution, or earn a workforce credential.

> For students from groups traditionally underrepresented in higher education, the target is a 75 percent increase.

Innovation at Scale describes Virginia's process of redesigning developmental education to increase college readiness—and student success—across the state's 23 community colleges and 40 campuses. This case study highlights the key roles of college leaders, faculty, staff, and, in particular, the chancellor and the system office as the state prepares to implement its ambitious plans.

DATA-DRIVEN, PARTICIPATORY, COMMITTED

Sweeping reform does not come about quickly. Before Virginia began redesigning developmental education, data from a variety of sources focused attention on student success in general, and on developmental education in particular. In 2004, Virginia joined Achieving the Dream and a growing movement of states taking a hard look at student outcomes data. It faced an inescapable truth: few students who enroll in community colleges are prepared for college-level academic work. And developmental education—its structures, content, and instruction—is not effective for most students.

Data analysis has helped Virginia not only identify specific problems but also pointed to potential solutions. After publishing powerful data that made the challenge visible to all, the system office organized a comprehensive, participatory process to propose how to make developmental education more effective and more efficient. And by 2009, when Virginia joined the Developmental Education Initiative, the planning for redesigning all developmental education classes at Virginia's community colleges was actively underway.

By spring 2013, the redesign will transform the way students learn and engage with their colleges. Developmental mathematics will be taught as a series of nine one-credit modules. Students will take only those modules needed, as determined by the placement test and the requirements of their academic fields. Developmental English, integrating academic reading and writing, will be taught as a tiered system. Students will place into a one-semester course of varying intensity or co-enroll in a developmental class linked to the first college-level English class.

At the heart of the work is a dramatic cultural shift. Across Virginia, community college administrators, faculty, and staff recognize that they cannot meet their improvement goals unless students who start in developmental education succeed. The state is turning its attention to helping more students prepare for college-level work.

Ultimately, Virginia's aggressive, systemwide overhaul of developmental education aims to:

> Reduce the number of students who need developmental education.

> Shorten the time spent in developmental education.

> Increase the college completion rates of those required to take developmental education before starting credit-bearing courses.

LEARNING FROM VIRGINIA

Virginia has made a significant investment in redesigning developmental education systemwide. This is not a pilot. Every college, every teacher, every student involved in developmental education–all are part of this change. And from the very beginning, the system office has made a clear commitment to action. It actively supported the participatory process and organized communication with the broader field to ensure that faculty and administrators at all of its community colleges could have input into the process.

Data were vital to recognizing and addressing the problem of developmental education, and data will continue to be vital to tracking outcomes, assessing impact, and strengthening developmental education. The system office and those directly involved in the redesign are realistic: there will certainly be bumps in the road. But as long as Virginia is committed to honest data about outcomes and continues to learn from the process, this story is sure to be instructive for innovators in other states.

MAKING STUDENT SUCCESS FOR ALL THE TOP PRIORITY

TEN YEARS AGO, VIRGINIA'S COMMUNITY COLLEGES, LIKE MOST COMMUNITY COLLEGES AROUND THE COUNTRY, DID NOT PLACE STUDENT SUCCESS HIGH ON THEIR LIST OF PRIORITIES. GLENN DUBOIS, CHANCELLOR OF THE VIRGINIA COMMUNITY COLLEGE SYSTEM, TELLS THIS STORY OF HIS EARLY DAYS AT THE SYSTEM'S HELM: SOON AFTER ARRIVING IN 2001, HE ASKED ALL 23 COLLEGE PRESIDENTS TO OUTLINE THEIR STRATEGIC PLANS. HE GOT 23 DIFFERENT ANSWERS—AND NOT ONE PUT STUDENT SUCCESS AT THE TOP OF THE LIST. THE FACT THAT ONLY ONE IN SIX STUDENTS WAS GRADUATING WITHIN THREE YEARS SEEMED NOT TO BE CAUSE FOR ALARM.[1]

TODAY, IMPROVING STUDENT SUCCESS IS THE SINGLE MOST IMPORTANT GOAL OF THE VIRGINIA COMMUNITY COLLEGE SYSTEM, FROM CHANCELLOR DUBOIS ON DOWN. THE STATE, IN ITS AMBITIOUS SIX-YEAR PLAN, *ACHIEVE 2015*, AIMS AT A 50 PERCENT INCREASE IN THE NUMBER OF COMMUNITY COLLEGE STUDENTS WHO COMPLETE A DEGREE, TRANSFER TO A FOUR-YEAR INSTITUTION, OR EARN A WORKFORCE CREDENTIAL. FOR STUDENTS FROM GROUPS TRADITIONALLY UNDERREPRESENTED IN HIGHER EDUCATION, THE TARGET IS A 75 PERCENT INCREASE (OFFICE OF INSTITUTIONAL RESEARCH AND EFFECTIVENESS 2010).

At the heart of this plan is a dramatic cultural shift. Across the Virginia system, administrators, faculty, and staff recognize that they cannot meet their improvement goals unless students who start in developmental education succeed. Like other states and colleges across the country, Virginia is turning its attention to helping more students prepare for college-level work. Virginia has launched an aggressive, systemwide overhaul of developmental education.

Virginia students will see the first major changes in the 2011-12 academic year, when colleges introduce an entirely new structure for developmental mathematics. Rather than requiring traditional semester-long courses, colleges will offer nine short "modules," or one-unit courses focused on specific content. Students will take only those modules that they need for their academic fields.

For the first time in fall 2011, each college will use a common diagnostic in addition to a common placement exam to determine whether entering students require developmental mathematics coursework and if so, which modules they need to take. By spring 2013, all 23 colleges in the Virginia Community College System will have new developmental education programs in both English and math.

A significant change in the English course is that rather than having separate reading and writing courses, developmental English classes will integrate reading and composition. Much like college-level English courses, the developmental courses will emphasize the inherent connection between academic reading and writing. And more directly for students, this will decrease the number of developmental classes they have to take. Based on placement scores, some students will take an expanded semester-long developmental English course; others will take a developmental class at the same time as college-level English composition.

VIRGINIA'S PARTICIPATORY PROCESS:
BRINGING CHANGE TO SCALE

How has such sweeping reform come about, soon to be scaled up for implementation in every college in the system?

First, it did not happen quickly. The process has taken roughly five to seven years, depending on what one considers the starting point (*see box, "Chronology of Changes" on page 4*). Second, the reforms are rooted in evidence. Buoyed by its participation in Achieving the Dream, Virginia's data analysis has helped the system identify its specific problems, as well as potential solutions. Long before convening a single task force, Chancellor DuBois and his staff began publishing powerful data that made the problems visible to all. Only then did the system office organize a comprehensive, participatory process to propose how to make developmental education more effective and more efficient. The system office coordinated the process but understood that for the effort to make any difference, those closest to the classrooms—the faculty and administrators on each campus—must participate actively in shaping as well as implementing the new approach. A broad range of voices had to be heard and incorporated into the final plans. "When we began, I held 'town hall' meetings. The faculty thought this was the next central takeover," DuBois recalled in an interview. "But I let them take over. Now they know I'm not blaming them; I'm looking to them for solutions. I couldn't stop it now if I tried."

Certainly Virginia is not alone in seeking to improve student outcomes in developmental education. It has become an inescapable truth that most students who enroll in community colleges are not prepared for college-level academic work—and that the developmental structures, content, and instruction

"WHEN WE BEGAN, I HELD 'TOWN HALL' MEETINGS. THE FACULTY THOUGHT THIS WAS THE NEXT CENTRAL TAKEOVER, BUT I LET THEM TAKE OVER. NOW THEY KNOW I'M NOT BLAMING THEM; I'M LOOKING TO THEM FOR SOLUTIONS. I COULDN'T STOP IT NOW IF I TRIED."

—GLENN DUBOIS, CHANCELLOR, VIRGINIA COMMUNITY COLLEGE SYSTEM

are ineffective for most of these students. A number of national organizations, in addition to Achieving the Dream and the Developmental Education Initiative, are actively seeking alternate approaches to traditional remediation: the Community College Research Center at Columbia University; the Carnegie Foundation for the Advancement of Teaching; and the California Basic Skills Initiative, to name a few. However, despite a growing research base on the subject, there is still no clear, singular "best practice" for improving developmental education.

The state of Virginia is demonstrating one promising way forward. This case study describes the intensely participatory process of redesigning its developmental education system to increase college readiness—and student success—across its 23 community colleges and 40 campuses. Written in summer 2011, as the system prepared to implement the recommendations of the Developmental Mathematics and English Redesign Teams, this case explains the key role of the staff of the centralized Virginia Community College System, as well as the roles of individual institutions and their staff, as the VCCS prepared for statewide implementation of the reform plans (*see box, "Centralized Governance: A Tool for Driving Reform"*). If these efforts succeed, Virginia is likely to become a model for other states.

CENTRALIZED GOVERNANCE: A TOOL FOR DRIVING REFORM

Established in 1966, the Virginia Community College System comprises 23 community colleges and 40 campuses. Some 5,000 faculty and staff provide instruction and services to more than 280,000 students in credit courses and programs.[2]

In contrast to many states, the Virginia Community College System is centralized—financially, policy wise, and academically. Fiscally, the entire system is funded as a whole: the state allocation comes through the system office and is distributed to the colleges by formula. In addition, the system office has the power of centralized negotiation for enterprise pricing of items and services, such as proprietary IT systems and the placement instrument. Academically, the system has common course numbering, with a master course file containing course descriptions used when the course is offered on any campus. A single policy manual, with policies approved by the State Board for Community Colleges, governs all 23 colleges. In addition, the system has a single student information system and a single learning management system; as a result there is a strong statewide data system.

In states with decentralized systems, there are fewer levers for common change. Colleges may have either district- or campus-level boards that set policy. Colleges may use different placement tests, course descriptions vary, and even program requirements may be different across colleges. Cheryl Thompson-Stacy, president of Lord Fairfax Community College, has worked in three states, including two governed by local boards rather than a single centralized body. "There are advantages to both approaches," Thompson-Stacy said. But "to take on this [systemwide reform], to impact the state, the centralized system has an advantage."

The Virginia State Board for Community Colleges, with 15 members appointed by the governor, is the governing body of the Virginia Community College System and has formal responsibility for standards and policies. The VCCS Chancellor's Office—also referred to as the system office—has central responsibility for vision, policy, and communication across the system.

The Chancellor's Office, situated organizationally between the state board and the colleges, manages information flow in both directions. There is a clear pathway of policy development, which engages a wide range of college perspectives. There are two advisory groups: The Council of Deans and Directors and the Chancellor's Faculty Advisory Committee. Policies then pass through the Academic and Student Affairs Council, which includes all academic and student services vice presidents, and on to the Advisory Council of Presidents before going to the board. Policies are then disseminated out to the colleges. These administrative groups meet regularly, which means they are aware of and contribute to policy development. In the case of a pressing issue, the system office may commission a task force with wide-ranging membership to highlight the issue and accelerate solution-finding.

CHRONOLOGY OF CHANGES:
THE ROAD TO DEVELOPMENTAL EDUCATION REFORM IN VIRGINIA'S COMMUNITY COLLEGES

> **1998:** VCCS convenes a Developmental Education Task Force

> **2000:** Developmental Education Task Force report recommends raising standards and outlining best practices

> **2001:** Glenn DuBois becomes VCCS chancellor

> **2003:** VCCS approves six-year strategic plan, *Dateline 2009*, with seven goals, including increasing access, affordability, and completion

> **2004:** Virginia begins participation in Achieving the Dream

> **2007:** National Governors Association-funded college-readiness study highlights academic needs of recent high school graduates enrolled in Virginia's community colleges

> **March 2008:** VCCS begins work on new six-year strategic plan

> **September 2008:** VCCS convenes a Developmental Education Task Force

> **Summer 2009:** Virginia selected as one of six states to join the Developmental Education Initiative, placing an even higher priority on the need to redesign developmental education.

> **September 2009:** Developmental Education Task Force report *The Turning Point* calls for systemwide redesign of developmental education

> **November 2009:** State Board for Community Colleges endorses VCCS six-year strategic plan, *Achieve 2015*, making student success for all its primary focus

> **August 2010:** Developmental Math Redesign Team report, *The Critical Point*, recommends modularization of all developmental math courses

> **February 2011:** Developmental Math Curriculum team publishes *Curriculum Guide for Developmental Mathematics*

> **February 2011:** First Developmental Education Annual Report published

> **Spring 2011:** VCCS pilot tested new math placement test questions with 5,000 students

> **Spring 2011:** Developmental English Redesign Team report, *The Focal Point*, recommends a more compact developmental English sequence with integrated reading and writing courses

> **Fall 2011:** First use of new placement and diagnostic instrument

> **Fall 2011:** Planned pilot of new developmental math curricula and programs at two colleges

> **Fall 2011:** Planned beginning of work of Developmental English Curriculum Team

> **Spring 2012:** Planned systemwide rollout of new developmental mathematics curriculum and courses

> **Spring 2013:** Planned systemwide rollout of new developmental English curriculum and courses

BUILDING THE WILL TO CHANGE

The redesign of developmental education in Virginia's community colleges is rooted in earlier statewide initiatives. Soon after his arrival, Chancellor DuBois began his first strategic planning process. The result in 2003 was the first six-year strategic plan, *Dateline 2009*, which had measurable graduation and retention goals to drive policy and practice.[3]

The efforts gained momentum in 2004, when Virginia was selected to join the first cohort of states participating in Achieving the Dream, a national nonprofit organization dedicated to helping more community college students, particularly low-income students and students of color, stay in school and earn a college certificate or degree *(see box, "Virginia's Participation in Achieving the Dream and the Developmental Education Initiative" on page 6)*. Evidence-based, student-centered, and built on the values of equity and excellence, Achieving the Dream is closing achievement gaps and accelerating student success nationwide.

Achieving the Dream involves both state and campus-level participation. Five Virginia colleges began their participation in the organization in 2004, with a sixth starting later. However, "We always envisioned that Achieving the Dream would impact all 23 colleges," said Susan Wood, Vice Chancellor for Academic Services and Research.

Achieving the Dream's state policy work, managed by Jobs for the Future, works with each participating state to develop a policy agenda and a cross-state network to drive improvements in student success. These cross-state conversations were invaluable, according to Donna Jovanovich, VCCS Director of Institutional Effectiveness. Virginia saw "other states wrestling with similar issues." State leaders learned from one another's experiences and quickly realized that they could borrow innovative ideas.

Recognizing the power of a vehicle to disseminate data across the system, for example, the VCCS "stole" the idea for *Student Success Snapshots* from Florida, another Achieving the Dream state.[4] Published every two months, each one-page *Snapshots* analyzes a particular issue—such as student persistence or the impact of college skills courses on student outcomes—and illustrates it with data for the system as a whole and comparable data for each college. System office staff use the *Snapshots* to facilitate conversations about student success with the state board and the Council of Presidents. Board members and presidents further distribute the *Snapshots* to their constituents. Issuing the *Snapshots* was just one of many ways that the VCCS significantly increased the system's capacity for collecting, analyzing, and distributing data, and then using that data to confront obstacles to student success.

STATE LEADERS LEARNED FROM ONE ANOTHER'S EXPERIENCES AND QUICKLY REALIZED THAT THEY COULD BORROW INNOVATIVE IDEAS.

VIRGINIA'S PARTICIPATION IN ACHIEVING THE DREAM AND THE DEVELOPMENTAL EDUCATION INITIATIVE

In 2004, Virginia became one of the first states to join Achieving the Dream. Funded by Lumina Foundation for Education and a collection of other regional and national foundations, Achieving the Dream focuses on developing a culture of inquiry and evidence to strengthen performance of community colleges. Achieving the Dream not only focuses on improving campus practices but also on changing state policy to better support student success.

Six Virginia colleges have joined Achieving the Dream: Danville Community College, Mountain Empire Community College, Northern Virginia Community College, Patrick Henry Community College, Paul D. Camp Community College, and Tidewater Community College. All have met the criteria to become Achieving the Dream Leader Colleges, a designation that recognizes institutions that have met high standards of practice and performance. The description of the Virginia Community College System's progress in building a statewide student success policy agenda is documented in *Altered State: How the Virginia Community College System Has Used Achieving the Dream to Improve Student Success*, by Kay Mills.[5]

Data from Achieving the Dream made clear what many people in the field have realized: developmental education is the major obstacle to community college student success. In 2009, Virginia was invited to participate in the Developmental Education Initiative, supported by the Bill & Melinda Gates Foundation and Lumina Foundation. The goal of this new initiative, part of Achieving the Dream, is to create, evaluate, and replicate groundbreaking remedial strategies intended to dramatically boost college completion rates of low-income students and students of color.

Now, based on a wide understanding of the essential role of data, the system regularly uses data in policy meetings, planning, and evaluation. Chancellor DuBois describes the impact of Achieving the Dream, looking back to its start in 2004: "We were tenderized by Achieving the Dream. We are not afraid to look at data," he said. "There is a level of honesty, and we are eager to improve. . . . We're not afraid to roll up our sleeves and do something."

A REMEDIAL "HEAT MAP": HOW DATA MADE NEED FOR CHANGE VISIBLE

As the VCCS was building its capacity to collect and use data, two major studies crystallized why the system had to address its weaknesses in developmental education. In 2006, VCCS published a study on college readiness as part of the National Governors Association's Redesigning the American High School Initiative (Schmidt, Jovanovich, & Downing 2007). As part of this work, the research team in the Chancellor's Office looked at remediation needs for recent high school graduates at all 23 community colleges in the system. One finding jumped out at Susan Wood: "We had a 'heat map' of the state, with the needs for remediation represented visually by the intensity of the color blue," she said. "There they were; the remediation needs were right in your face."

The state confronted an equally vivid analysis when the VCCS examined the results of the state goals in *Dateline 2009*, the system's strategic plan for 2003 to 2009. While some goals, including enrollment and affordability, were met or exceeded, student performance goals such as graduation and transfer showed the least progress. As the VCCS developed its next six-year strategic plan, *Achieve 2015*, improving student performance moved to front and center, with widespread recognition that overall graduation and transfer goals will not be met unless more students succeed in developmental education.[6]

> **"WE HAD A 'HEAT MAP' OF THE STATE, WITH THE NEEDS FOR REMEDIATION REPRESENTED VISUALLY BY THE INTENSITY OF THE COLOR BLUE. THERE THEY WERE; THE REMEDIATION NEEDS WERE RIGHT IN YOUR FACE."**
>
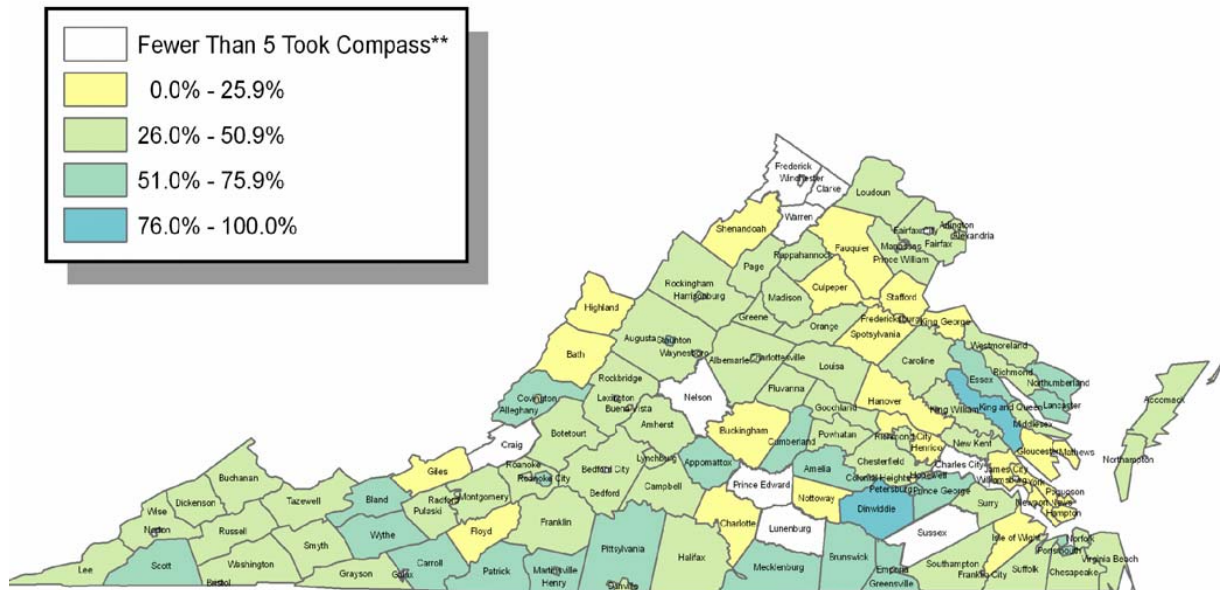> **—SUSAN WOOD, VICE CHANCELLOR FOR ACADEMIC SERVICES AND RESEARCH, VCCS**

PERCENT OF RECENT VIRGINIA PUBLIC HIGH SCHOOL GRADUATES ENTERING VIRGINIA'S COMMUNITY COLLEGES

UNDERPREPARED IN READING ACCORDING TO COMPASS PLACEMENT TESTS*, FALL 2006

* The percent of students taking at least one COMPASS test represents approximately 83 percent of incoming Virginia public high school graduates statewide.
** In several counties, other placement tests were given to high school students.
NOTE: These figures do not include students exempted from placement testing (e.g., SAT and ACT scores) and formally dual enrolled students.
SOURCE DATA: Virginia Department of Education and Virginia Community College System; prepared 8/17/2007.

PERCENT OF RECENT VIRGINIA PUBLIC HIGH SCHOOL GRADUATES ENTERING VIRGINIA'S COMMUNITY COLLEGES

UNDERPREPARED IN WRITING ACCORDING TO COMPASS PLACEMENT TESTS*, FALL 2006

* The percent of students taking at least one COMPASS test represents approximately 83 percent of incoming Virginia public high school graduates statewide.
** In several counties, other placement tests were given to high school students.
NOTE: These figures do not include students exempted from placement testing (e.g., SAT and ACT scores) and formally dual enrolled students.
SOURCE DATA: Virginia Department of Education and Virginia Community College System; prepared 8/17/2007.

PERCENT OF RECENT VIRGINIA PUBLIC HIGH SCHOOL GRADUATES ENTERING VIRGINIA'S COMMUNITY COLLEGES

UNDERPREPARED IN MATH ACCORDING TO COMPASS PLACEMENT TESTS*, FALL 2006

* The percent of students taking at least one COMPASS test represents approximately 83 percent of incoming Virginia public high school graduates statewide.
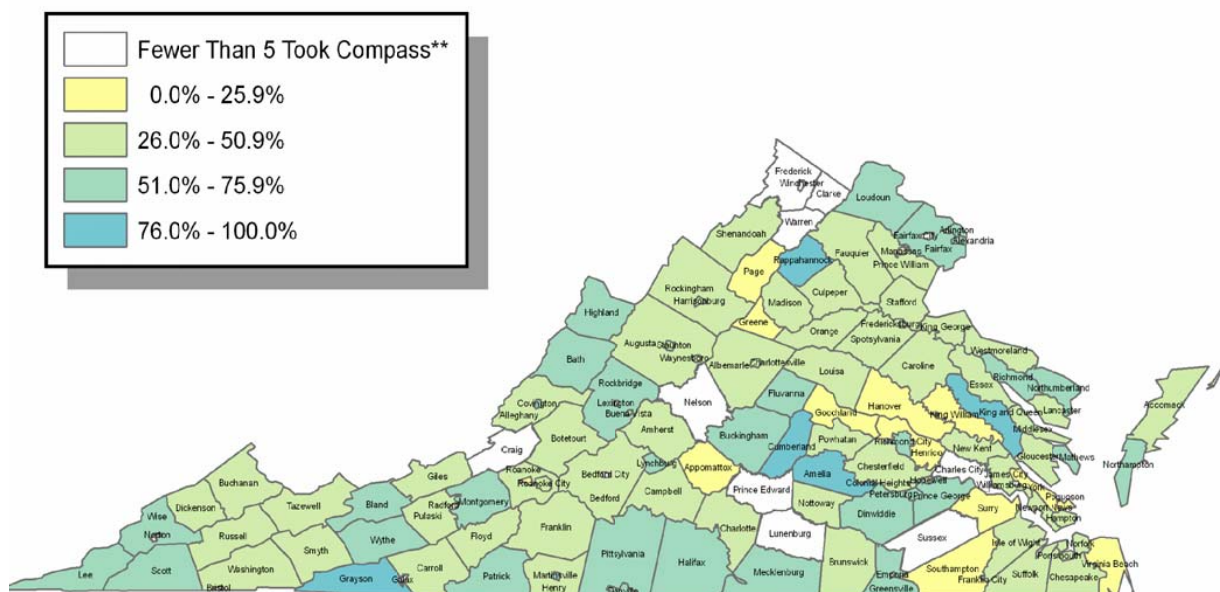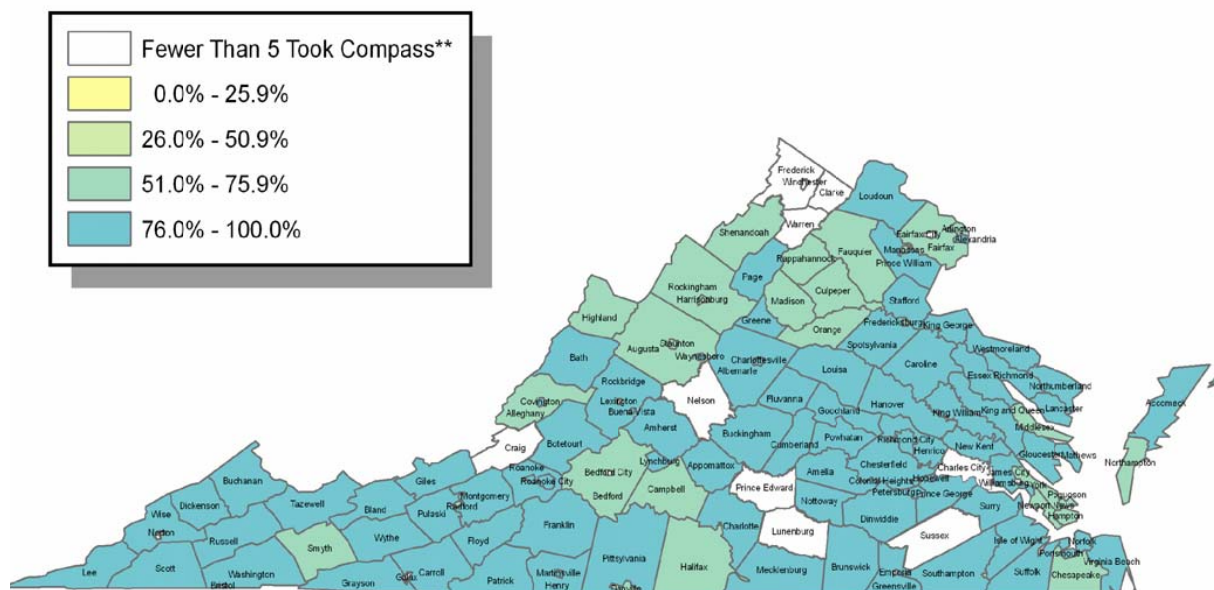
** In several counties, other placement tests were given to high school students.

NOTE: These figures do not include students exempted from placement testing (e.g., SAT and ACT scores) and formally dual enrolled students.

SOURCE DATA: Virginia Department of Education and Virginia Community College System; prepared 8/17/2007.

The systemwide use of data was reinforced in 2009, when Virginia joined the Developmental Education Initiative. The Developmental Education Initiative's state policy effort aims to support innovative policy strategies that will dramatically boost college completion rates of low-income students and students of color. Participation gave the VCCS the opportunity to build on and extend work started in Achieving the Dream, including an emphasis on using data about student outcomes to drive strategic decision making.

In addition, in fall 2009, the Community College Research Center published *Promoting Gatekeeper Course Success Among Community College Students Needing Remediation: Findings and Recommendations from a Virginia Study*, an extensive analysis of enrollment and performance in the first college-level English and mathematics "gatekeeper" courses (Jenkins, Jaggars, & Roksa 2009). The CCRC researchers followed more than 24,000 first-time students who entered the Virginia system for four years. The findings, some of which are excerpted below, made clear that students were not completing the developmental sequence and not going on to college-level courses:

> Half of the cohort enrolled in at least one developmental course, yet over one-third of those recommended to developmental education in a given subject did not take any developmental courses in that subject.

> Most students did not complete the recommended developmental sequence, both because they did not enroll in recommended courses and, to a lesser extent, because they did not pass the developmental courses that they took.

> Among developmental students, those who started at lower levels of developmental coursework were much less likely to take gatekeeper courses than those who started at the highest level of developmental coursework.

> A substantial proportion of students with high placement-test scores did not take gatekeeper courses.

> Placement-test scores in reading and writing did not predict whether students would pass gatekeeper English. Math test scores had a stronger association with passing gatekeeper math.

A TASK FORCE TAKES ON DEVELOPMENTAL EDUCATION

With a sense of urgency, the process of redesigning developmental education at Virginia's community colleges began in earnest in 2008, while the system was drafting its new six-year strategic plan. In September 2008, the VCCS created the Developmental Education Task Force, composed of a wide range of campus administrators and faculty.

The mission of the task force was clear and bold: to review developmental education practices in every college and recommend steps the system should take to increase the number of developmental students who go on to earn credentials, achieving "significant measurable change" (Developmental Education Task Force 2009). The charge to the task force was for the VCCS to become nothing less than "the premier purveyor of developmental education, in more streamlined and efficient ways, resulting in greater rates of student success."

This was not the first time the VCCS had formed a task force focusing on developmental education. A decade earlier, a task force had recommended developmental education standards and best practices, but that report sat on the proverbial shelf. The political will was not present at that time, and little changed in the state's community colleges. The experience of the new Developmental Education Task Force was completely different, as was the outcome.

According to participants and observers, data—both local data and the CCRC gatekeeper study—made a difference. Everyone who participated on the task force recognized that a lot had to change. Tinkering with courses would not improve student outcomes in developmental education. The system needed a complete overhaul—and soon.

Indeed, the first recommendation in the task force's 2009 report, *The Turning Point: Developmental Education in Virginia's Community Colleges*, could not be more explicit: "The VCCS must redesign English, mathematics and reading developmental education." As part of the redesign, the VCCS would have to consider not only the content of developmental education courses but also alternative methods of delivery.

The task force recommendations shaped the work of the developmental education redesign teams that followed, sharpening their focus to three overarching goals (Developmental Education Task Force 2009):

> Reduce the overall need for developmental education.

> Design developmental education in a way that would reduce the time to complete the developmental reading, writing, and mathematics requirements for most VCCS students to one academic year.

"WE CAN'T DO ANY WORSE THAN WE ARE DOING NOW. WE CAN'T KEEP DOING THE SAME OLD THING."

—GLENN DUBOIS, CHANCELLOR, VCCS

> Increase the number of developmental education students graduating or transferring within four years from one in four students to one in three students.

Supporting the will to change among college faculty and administrators was a commitment to change from the top of the system. Chancellor DuBois and the system office said that the state would vet, honor, and implement the recommendations. "We can't do any worse than we are doing now," DuBois said bluntly. "We can't keep doing the same old thing."

REDESIGNING DEVELOPMENTAL EDUCATION IN VIRGINIA

"We can't do any worse" became a mantra of reform. Chancellor DuBois made clear that the Developmental Math and Developmental English Redesign Teams had the responsibility to make major changes. Referring to *The Turning Point*, Jane Serbousek, of the math faculty at Northern Virginia Community College, noted, "We knew that they were looking to this group for innovative designs."

Nor did the college presidents leading the redesign teams need to convince members of their mission. At their first meetings, there was widespread recognition that developmental education was a systemwide problem. Frank Friedman, president of Piedmont Virginia Community College and the math team's co-chair, explained that there was no need to point fingers. "We know the faculty are doing everything they can," he recalled expressing at the time. The problem is "the whole system of instruction. . . . If this is the best we are getting, let's change the system."

Despite differences in their disciplines, the Developmental Mathematics and English Redesign Teams shared common structures and strategies. VCCS staff provided organization and continuity so that team members from the colleges could focus on the problem at hand—academic content, structure of classes, or placement tests—and be responsive in their deliberations. But the system office staff stayed in the background, playing a supporting role and organizing meetings, logistics, and communication. While the Chancellor's Office insisted that developmental education must change, it did not mandate the way it would change. Looking back over the process, Donna Jovanovich, Director of Institutional Effectiveness, observed, "The system office did not know what the outcomes would be at every step."

DIVERSE PARTICIPANTS INVIGORATED DESIGN TEAMS

As a measure of how seriously the VCCS regarded developmental education, Chancellor DuBois appointed college presidents to lead each redesign team.

THE PROBLEM IS "THE WHOLE SYSTEM OF INSTRUCTION. IF THIS IS THE BEST WE ARE GETTING, LET'S CHANGE THE SYSTEM."

—FRANK FRIEDMAN, PRESIDENT OF PIEDMONT VIRGINIA COMMUNITY COLLEGE

In fact, each redesign team had two co-chairs: a sitting president and a retired president, at least one of whom had a background and teaching experience in the relevant field. The retired presidents were well known and well regarded throughout the system, yet they enjoyed an important distance from the day-to-day politics and problems of college administration. Their participation increased the visibility and status of the redesign process across the system.

The chancellor appointed the chairs of the redesign team and the Vice Chancellor for Academic Services and Research appointed the remaining team members, ensuring broad representation across colleges and roles. Each redesign team had about twenty members. In mathematics, this included six faculty members, plus the chair, who not only had taught math but in retirement was an adjunct faculty member. The English team had ten faculty members in order to have representation of reading and composition. In each case, faculty from other fields also participated, as well as a range of administrators—program coordinators, deans, and vice presidents—from academics, student services, and career and technical education. All team members participated as a service, contributing their time, with financial support from their campuses for travel.

Gretchen Schmidt, then Assistant Vice Chancellor for Academic and Student Services, noted the deliberate strategy to solicit a variety of perspectives. "There were individuals from small and large colleges, faculty in the discipline and outside, and administrators," she said. "We wanted individuals who had been around, who knew the system well, but weren't just 'yes' people." Some individuals received invitations to represent critical professional organizations—for example, the former president of the Virginia Association of Developmental Education and the former and current president of the Virginia Mathematical Association of Two Year Colleges.

Coordinators from the Virginia Department of Education also served on the redesign teams, strengthening collaboration between community colleges and the K-12 system. A few members of the Developmental Education Task Force participated on the redesign teams to provide continuity.

Initially, the multidisciplinary makeup raised concerns. The biggest challenge came from math faculty across the system: they were not pleased that the team included administrators and faculty from outside the field. They felt that redesign should be a faculty responsibility. Over time, however, the math faculty on the team came to see value in this breadth. Jane Serbousek, a member of her campus Achieving the Dream team, had learned the benefits of working broadly at her multi-campus college. "We knew from Achieving the Dream that you need administrative support to make changes at the college. Without the administration to push things through, strategies don't get far." Participating faculty also came to appreciate that some campus and system implementation issues, such as financial aid and counseling, were well beyond their content expertise.

Ruthe Brown, of the Tech Prep program at Northern Virginia Community College, brought another important perspective to the math group. "I brought my own experience, and what I've observed with our students," she said. "I could put myself in the students' shoes. Math is not my favorite subject; I struggled. And most of these students are not good math students either. They take only the bare requirements for math in high school, and often put off math until the end of their college courses, so some students never graduate."

For each team, three to five system office staff members provided support and the resources to keep the process moving smoothly. The staff worked with the co-chairs to "vision" the overall process and plan meeting agendas. Staff also organized background resources, such as research articles, and made connections with exemplary programs nationally.

Balancing a desire to make the process transparent with a desire to allow the redesign teams to discuss difficult ideas candidly, system office staff oversaw two web-based "blackboard" sites. Ideas percolated on a closed one for facilitating internal team discussion. The second, for soliciting and posting public communication and commentary, included a blog that relayed news and invited feedback. The staff summarized feedback from the blog and websites for each team meeting.

STARTING WITH THE BASICS: DEFINING DEVELOPMENTAL EDUCATION

The redesign teams began their work with questions of purpose. By asking themselves about the main goal of developmental education, they could challenge commonly held assumptions, such as the belief that the aim is to repeat the high school curriculum. Instead, the teams articulated that the point of developmental education should be to prepare students to succeed in college. As simple as this may sound, changing those assumptions opened the doors to significant changes in content and structure of developmental education in Virginia.

One more observation provided leverage for change. Individuals on both redesign teams described how "eye-opening" it was to hear about the variation across the system—in the number of classes required for each developmental sequence and the cut scores on tests used to determine placement. This realization reinforced the determination of the teams that more consistency across the system would better serve students, particularly those who move between colleges.

The success of each redesign team was rooted in open discussion. Frank Turnage, retired president of Germanna Community College and chair of the Developmental English Redesign Team, described his role as facilitator: "We started with initial ground rules: speak, listen, respect; when you disagree, do not attack each other personally. Individuals seem to be fine when they have a sense they've been heard and respected. There were times I had to be firm with the process. At times I'd say, 'We discussed this. Unless there is something not yet said, we will move on.'" He recognized that the facilitator had to have knowledge and experience in group process, and be confident enough to open the floor to negative comments so that they can be defused.

COMMON QUESTIONS ACROSS CAMPUSES

Despite a variety of campus cultures, as well as differences between the math and English disciplines, the redesign teams discovered common concerns across the system. In fact, these are likely to be concerns for any community college, district, or system addressing developmental education. Part of what made the VCCS process effective was that system office staff and redesign team members anticipated potential issues, then raised and discussed them.

THE PLACEMENT PROCESS

Team members described the existing placement exam as "a blunt instrument," a tool for sorting students, while offering nothing to identify specific areas of weakness. Both teams said they needed an instrument that would be diagnostic. They recognized that it also needed to be cost effective. Since a single placement instrument is used at all 23 colleges and enterprise pricing is negotiated centrally, system office staff handled the process for seeking vendors of a new placement exam.

PART OF WHAT MADE THE VCCS PROCESS EFFECTIVE WAS THAT SYSTEM OFFICE STAFF AND REDESIGN TEAM MEMBERS ANTICIPATED POTENTIAL ISSUES, THEN RAISED AND DISCUSSED THEM.

A FLOOR IN ACADEMIC SKILLS

Community colleges are defined by their open access to any student who wishes to attend. However, after much discussion, both redesign teams decided that for developmental education to be effective, there needed to be a floor in knowledge and skills. And the placement instrument needed to make it possible to assess whether students should be referred to developmental education courses or Adult Basic Education. The redesign teams set a curricular floor, agreeing on the content that represented minimum proficiency to enter developmental education courses. The measure of the floor will be calibrated when the cut scores are set for the new placement instruments.

ARTICULATION WITH FOUR-YEAR COLLEGES

The redesign teams were concerned that changing the community college prerequisites for college-level courses—especially in math—might affect whether four-year institutions would accept credits when students transferred. To address this, Gretchen Schmidt, Assistant Vice Chancellor for Academic and Student Services, spoke with admissions and transfer personnel at regional state colleges, to which the vast majority of community college students transfer. She reassured the teams that credit transfer for the college-level gatekeeper courses would not be a problem if the curricula in the developmental sequences were revised.

FINANCIAL AID AND REGISTRATION

The connected questions of registration and financial aid are particularly pressing for the redesigned developmental math modules. College administrators have had more questions than answers so far: How many modules will a student sign up for initially? What happens if a student fails a module and has to repeat it? Because of federal requirements, students may not be able to receive financial aid if they register for a module in the middle of the term. The colleges have had a longstanding procedure for dealing with dynamically dated coursework, which includes courses scheduled outside of the traditional 16-week semester: any late start, compressed course, or short session is coded and processed differently in the information system and with financial aid. This process will be the basis for handling the developmental math modules.

COMMUNICATION

The need to communicate widely with faculty and staff at the colleges in the system was central to the redesign process. Team participants wore two hats: they brought their own expertise, and they were representatives of or liaisons to their campuses or professional groups. Their dual role was to convey the decisions and rationales to colleagues in the field and to bring back questions and concerns. This would help ensure that faculty across the system knew they had the opportunity to provide input to the process.

The system office staff quickly became aware of the strengths and limitations of the participatory team process. The team members could hear the diversity of views on a subject, and they were present when the vision was shaped and decisions were made. However, faculty back on campus heard only brief summaries of lengthy conversations, or perhaps just the final recommendations. Participation from the field needed to be expanded.

System office staff supported communication within the team and between the team and the broader field, and this led to the creation of the separate blackboard websites for redesign team members and for public discussion. There were also some intentional redundancies in communication. For example, the Virginia Mathematical Association of Two Year Colleges also organized a website for the developmental math redesign and encouraged faculty to comment.

The system office facilitated peer-to-peer communication as well. The college presidents who served as chair and co-chair of the redesign teams presented updates to the Advisory Council of Presidents; vice presidents presented to the Academic and Student Affairs Council; and a VCCS staff member (and a former campus dean) communicated with deans about the progress of redesign efforts and ways they could inform faculty members and encourage their input.

BUILDING RELATIONSHIPS WITH K-12

One of the recommendations of the Developmental Education Task Force was to decrease the need for developmental education. This can only be done in collaboration with the K-12 education system. The Department of Education's math and English coordinators participated in the developmental redesign teams, seeking ways to support the transition from high school to community college, both at the system level and by connecting local high schools and colleges.

Michael Bolling, mathematics coordinator, noted the possibility of bringing the math placement test into the high school for students so that they understand the academic expectations of community colleges. Tracy Robertson, the English coordinator, agrees: "Now I talk about community colleges and college readiness. Many high school students don't prepare for community college. They don't think about the placement process or know about the rigor." In fact, they plan to use the practice versions of the placement test as a resource for the new senior capstone classes.

DEVELOPMENTAL MATHEMATICS: TAMING THE ELEPHANT IN THE ROOM

VCCS began its redesign of developmental education in January 2010 with developmental mathematics, often referred to as the biggest elephant in room. It has been developmental math students who have fared the worst in Virginia's community colleges:

> 18 percent of those students who were recommended to take developmental mathematics graduated within four years; only 12 percent of those recommended for both developmental English and mathematics graduated within four years.

> 34 percent of those students who were recommended to take developmental mathematics graduated or transferred within four years; only 25 percent of those recommended for both developmental English and mathematics graduated or transferred within four years (Office of Institutional Research and Effectiveness 2011).

DEVELOPMENTAL MATHEMATICS REDESIGN TEAM

Until now, the system's common policies and practices required that all students pass the same developmental math courses. The chair of the Developmental Math Redesign Team, Jim Perkins, president emeritus of Blue Ridge Community College, had taught math and clearly recognized the nature of the problem. Frank Friedman, co-chair of the math redesign team, voiced concerns that he had been raising for years, "We are 'overmathing' our liberal arts students," he said. "The competencies to exit developmental math are beyond what students need in their programs, in their professions, and in everyday living."

Michael Scott agreed. As academic vice president at Dabney S. Lancaster Community College, he recalled conversations with students on this subject: "Students would ask me, 'Why are we taking all this math when we don't need it?' And there were times I couldn't answer their questions." A former English teacher who later completed a doctorate in research and evaluation, Scott's perspective crosses English and mathematics. Struck by an experience from his own teaching days, he explained the impact he saw on students: "I left a night class I was teaching. We were doing basic math and the students couldn't master it," he said. "These were students who wanted to be nurses. The students could work hard, but the system was designed to beat them down. Personally, since then I've tried to do everything differently."

Jane Serbousek, of the math faculty at Northern Virginia Community College, said she understands the fears of some instructors that a redesign would water down the developmental math curriculum. But she agreed strongly with her colleagues on the math redesign team: "Let's give students the math they need. A nursing student doesn't need the same

amount of math as an engineering student. We were taking our weakest students and expecting them to complete in one or two semesters the math they did not master in all of middle school and high school." She recognizes the dedication—and love—that math faculty have for their discipline, but to her, the curriculum is being appropriately streamlined, "Boiling it down rather than watering it down."

Initially, the Developmental Math Redesign Team focused on identifying the math skills needed to succeed in various curricula (liberal arts; career/technical education; STEM—science, technology, engineering, and mathematics; business administration). The team also discussed possible class structures, alternative delivery modes, placement decisions, student support services, and transfer issues. The members conducted their work through face-to-face meetings, conference calls, and email. Subcommittees went into more depth on each topic.

A subcommittee on content and structure recommended organizing the developmental math curriculum into a series of nine modules. A modular approach has the advantage of flexibility: students only take the math they need. While the entire sequence would be required for students interested in a STEM field, other areas of study may require only some of the modules. Students who have difficulty in a particular area do not need to wait a whole semester to repeat the class. And students who change their mind about a major can move ahead without backtracking or repeating courses.

One more recommendation was for mastery in each module. Students must take a final exam in each module and pass with a level of mastery of at least 75 percent. However, colleges may use other criteria to determine success in the course, such as homework grades, quizzes, and class participation. In addition, colleges can require more than 75 percent.

The redesign team reached consensus on several big issues, such as curricular content and the modular design. However, on a few smaller issues, the chairs yielded to the lack of consensus in the field. For example, there were various perspectives on the use of calculators, particularly for converting fractions to decimals. High schools regularly use calculators, but college placement tests typically do not allow them. In addition, some colleges prohibit all use of calculators on tests, while others allow scientific or graphing calculators. A math faculty member noted philosophically, "We could argue forever, and we wouldn't change anyone's mind." The team agreed to disagree and left the decision to each college. However, for the new placement instrument, the colleges have agreed that an embedded four-function calculator may be used as part of the exam.

The recommendations of the math redesign team, presented in *The Critical Point: Redesigning Developmental Mathematics for Virginia's Community Colleges*, have finished winding their way through the state's policy-approval process. They have been endorsed by the Academic and Student Affairs Council and the Advisory Council of Presidents, then made their way to the State Board for Community Colleges.

A MODULAR APPROACH HAS THE ADVANTAGE OF FLEXIBILITY: STUDENTS ONLY TAKE THE MATH THEY NEED.

The Developmental Math Reform Team recommended:

> The content of the developmental mathematics curriculum will be revised to reflect what is needed to succeed in college mathematics and college curricula.

> The content will be organized into precollege units that are equivalent to one credit hour (16 contact hours) of study. The VCCS will charge a faculty group with writing student learning outcomes for each unit and determining the level of mastery needed to succeed.

> The VCCS will develop and implement new web-based, adaptive placement and diagnostic instruments for use throughout the system in order to identify better which units students need to complete. In addition, practice tests with review materials will be made available to prospective students to enable them to be better prepared for placement and diagnostic testing.

PRECOLLEGE MATH PATHWAYS BY PROGRAM OF STUDY

PLACEMENT AND DIAGNOSTIC TESTS

STEM BUSINESS ADMINISTRATION → PRECOLLEGE UNITS 1-5 → PRECOLLEGE UNITS 6 - 9

LIBERAL ARTS → PRECOLLEGE UNITS 1-5

CAREER TECHNICAL EDUCATION → CURRICULUM-SPECIFIC PRECOLLEGE UNITS

CURRICULUM-SPECIFIC CREDIT COURSES
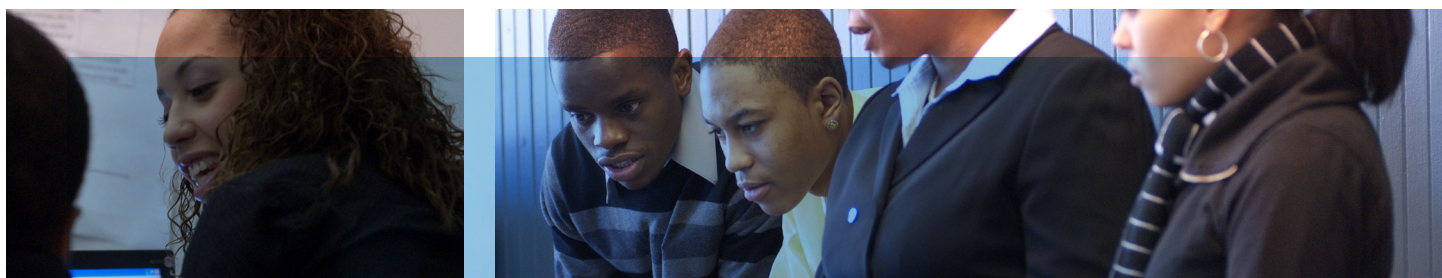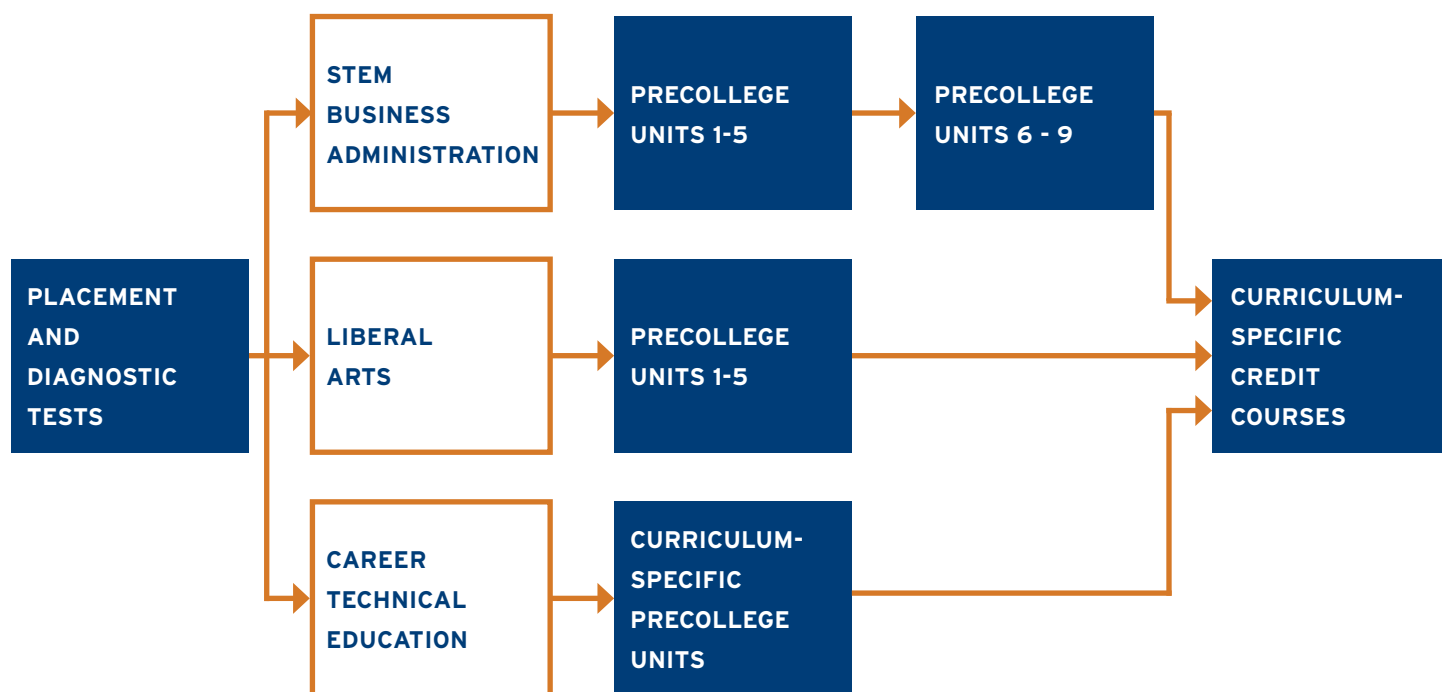
DEVELOPMENTAL MATHEMATICS CURRICULUM COMMITTEE

In spring 2011, a Math Curriculum Team of 25 faculty members convened, with one faculty member from each college (two from each of the two largest colleges). This team gave the math faculty the opportunity to dive into the details of the content. Their task was to create a curriculum guide, aligned with the redesign team's recommendations and outcomes.

In considering how to organize decision making for the Math Curriculum Team, Chair Jane Serbousek noted thoughtfully, "I had been on committees where one person gave orders. That didn't sit well. I want to be part of a decision." In consultation with system office staff, the team decided on one vote per campus, a voting process that is standard with system governance groups. Whenever a vote was needed, the team conducted a preliminary vote, then held a discussion, and then the group came back for a final vote. With satisfaction, Serbousek commented on the process, "Voting was a way to make sure that quiet people have a voice. We could be sure that everyone saw and vetted everything. It was not a rubber stamp. It was a fair process and we reached consensus."

The curriculum team had one semester to create the *Curriculum Guide for Developmental Mathematics*.[7] For each one-credit module, the guide includes a detailed course description with learning outcomes. Because the team anticipated that the format of the modules would be unfamiliar to faculty who will teach it, they also created a sample syllabus and a suggested timeline for each topic. The guide includes sample assessments and teaching tips as well.

Nevertheless, said Serbousek, "the guide should be looked at not as a final product but rather as work in progress that will be added to as the implementation moves forward. . . . The team would have liked to infuse contextual problems, but they couldn't accomplish that in the timeline." In addition, one faculty member noted that the curriculum committee wanted a tenth module, on geometry. However, the recommendations were for nine modules. Geometry will be addressed later, along with other recommendations for changes that might arise in the process of implementation.

DEVELOPMENTAL ENGLISH: INTEGRATING READING AND WRITING

The Developmental English Redesign Team followed the same process as the Developmental Math Redesign Team: a redesign team with broad cross-disciplinary participation and a subsequent curriculum team made up of faculty from the field. System office staff played the same role of support and communication.

The issues involved in redesigning developmental English differed from those for developmental math. In contrast to the low levels of success in math classes, the data showed better success rates in English classes. However, the data did show that students were not completing the first college-level English course. The challenge was to get developmental English faculty to see the big picture beyond their own classroom.

The Developmental English Redesign Team began with an examination of the current structure of developmental reading and writing. They committed to developing a sequence that would last at most one year, in compliance with the recommendations of the Developmental Education Task Force. They came up with a three-tiered structure. Students with the greatest need for remediation would enroll in an intensive six- to eight-credit developmental English course, while students in the middle range would take a three- to four-credit course. Students close to college-level placement would take a two- to four-credit "bridge" course at the same time they enrolled in college-level English.[8]

The most dramatic recommendation was to integrate developmental reading and developmental writing. Because many Virginia community colleges have separate reading and writing courses and different faculty qualifications for each, concerns surfaced not only about content but also about territoriality and job security. Despite the potential obstacles, the redesign team members reached a strong consensus that integration was the best way to go. In addition, data from colleges with an integrated reading and writing sequence showed that students in the integrated course were more likely to succeed and persisted at a higher rate than those enrolled in the traditional sequence.

Dan Lewis, who joined the system office after being a dean at Northern Virginia Community College (NOVA), noted that the English team looked widely for models, both inside and outside of the state. As it turned out, "There were colleges in Virginia—including NOVA—that were already teaching integrated reading and writing classes. So there was some DNA from the colleges in the recommendations."

The Developmental English Redesign Team, which began its work after the math redesign was underway, could build on some valuable lessons. Although the math team paid attention to communication, rumors still circulated and undermined their work. Thus, the English team began its first meeting by asking about concerns and rumors that were circulating. Laura Powell, an English faculty member at Danville Community College, said that there was a rumor that every class would have to use the same developmental English textbook. This rumor was unfounded but reflected anxiety in the field.

The English redesign team, with support from system office staff, became more assertive about communications with the field and about eliciting and addressing feedback. The staff sought out opportunities to spread awareness of the redesign, such as presenting at the statewide English Peer Group meeting.

Despite conscientious efforts to encourage faculty across the system to provide input to the redesign process, "There was an eleventh-hour response from one college," recalled Frank Turnage, chair of the English Redesign Team. "They raised a lot of questions and concerns—many of which won't be decided until the curriculum committee meets in the fall." He described how the team responded: "We allowed the college to state their views. Then I asked, 'Do we go back and revisit our decision or adopt and recommend the model?' We discussed it and brought it to a point of decision. . . . We had already vetted the model, and we decided that a last-minute objection would not derail us. If we did [go back], we would end up where we are today."

Subcommittees of both redesign teams looked at student support services. The VCCS has a required student development class, but there was no consistency in how that mandate was implemented across the system. Some students, it turned out, took that class the last semester before completing their degree, so it was not fulfilling its intended purpose. The subcommittees recommended creating a systemwide "early alert" process as part of the overall developmental redesign. There were student support members on both redesign teams; Chris Pfautz, the Dean of Student Services at John Tyler Community College, noted that this was one of the first times he felt people acknowledged that wraparound services help students learn.

"THERE WERE COLLEGES IN VIRGINIA—INCLUDING NOVA—THAT WERE ALREADY TEACHING INTEGRATED READING AND WRITING CLASSES. SO THERE WAS SOME DNA FROM THE COLLEGES IN THE RECOMMENDATIONS."

—DAN LEWIS, DIRECTOR OF EDUCATIONAL PROGRAMS, VCCS
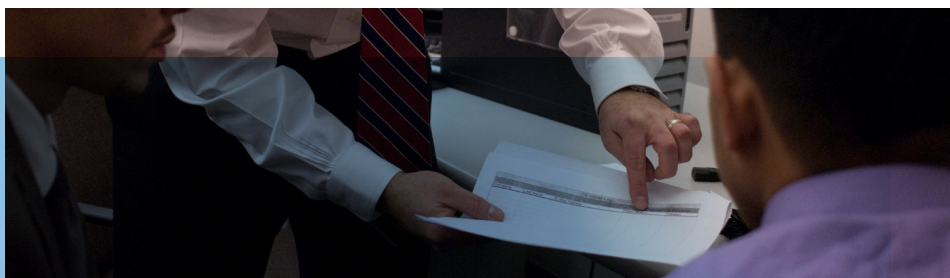
The Developmental English Redesign Team report, *Focal Point: Redesigning Developmental English Education in Virginia's Community Colleges*, recommends:

> Developmental English will be restructured as an integrated reading and writing system, with three direct pathways to ENG 111. This integrated structure will ensure that most students can complete developmental English requirements within a year.

> The VCCS will implement a reading and writing placement instrument that aligns with the integrated course structure and will be supported by systemwide placement policies addressing common placement procedures and cut scores.

Much like *Turning Point* and *Critical Point*, the English team report—*Focal Point*—recommended targeted professional development for full-time and part-time English faculty.
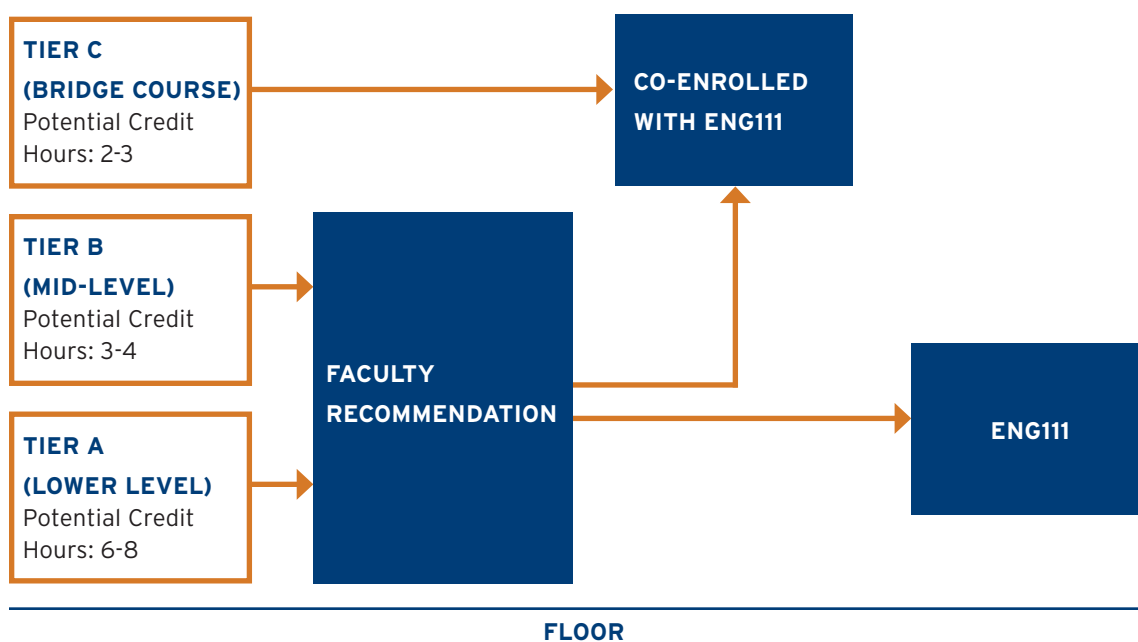
In fall 2011, the English curriculum team will meet, chaired by two English faculty members—one with a background in reading and one in writing—who were part of the Developmental English Redesign Team. To include representation of both reading and composition, the team will have 32 members. It will tackle the discipline's version of the content issues, outcomes, and proposed syllabi to give faculty a sense of what the new integrated curriculum will look like. The process will determine what goes into each of the three tiers.

Implementation will also follow the path that the developmental math redesign is taking. There will be flexibility among the colleges in how they organize the courses: they may be team-taught or taught by one instructor.

PREPARING TO IMPLEMENT THE REDESIGN OF DEVELOPMENTAL MATHEMATICS

The Developmental Mathematics and Developmental English Redesign Teams issued their recommendations in summer 2010 and spring 2011, respectively. The system is preparing to start statewide implementation of developmental mathematics. In fall 2011, Northern Virginia and Danville community colleges will pilot the new math modules. Both campuses are already using locally created modules, so faculty are familiar with the approach. The rest of the VCCS colleges are preparing for implementation in spring 2012.

Members of the math redesign and curriculum teams considered the process well organized and productive, but they recognized that some faculty members remained concerned that the new approach watered down the curriculum. This realization underscores the need for ongoing communication, the need to have a data system that tracks student outcomes, and professional development.

A NEW PLACEMENT TEST

The redesign teams determined the specifications for a new placement system that would make it possible to diagnose the needs of each student for developmental education in both math and English, along with a robust reporting mechanism, so that faculty have access to the diagnostic information. System office staff found a vendor to develop it, the same one as Florida, but specified an accelerated timeframe in order to meet the state's developmental implementation timeline.

Over six weeks, the vendor's psychometricians met with a small team of faculty, college institutional researchers, and two system office staff from Institutional Effectiveness to develop the new math placement instrument. They created the test blueprint from scratch, aligning the placement test with the student learning outcomes of the new math modules. In the last two weeks of the spring semester, the system office organized a pilot across the system, with 5,000 students participating in testing questions for validity and reliability. The vendors reviewed questions, made decisions about the number of questions for each diagnostic, and made recommendations about cut scores.

The math instrument will be ready for students to take in fall 2011 for spring 2012 placement. The test is a computer-based, adaptive instrument that first determines whether the student meets the college-ready threshold based on the new curriculum. Students who are not college ready are routed into a series of diagnostics aligned to each of the nine developmental math units. Students will place into a particular unit or be referred to Adult Basic Education.

PROFESSIONAL DEVELOPMENT

Faculty and administrators involved in the developmental redesign are clear that changing how people teach is as essential as changing what is being taught. The redesign significantly changes content and structure, but for it to be effective, faculty will have to change how they approach instruction.

Starting with *The Turning Point*, every developmental education report has been explicit that the change process must be accompanied by professional development and support for faculty. People who participated in the redesign readily acknowledged that "change is hard." Colleagues may be hesitant or unwilling to change. Some may find it difficult because they believe in what they are currently doing; others may be afraid of doing something unfamiliar.

Frank Friedman, co-chair of the Developmental Math Redesign Team, emphasized the critical role of professional development in any curriculum implementation plan. "When we are developing implementation plans, there has to be a professional development plan so that whatever changes are implemented are understood and there is buy-in, not just from one or two people. There are a lot of adjuncts and that's a challenge, how to get buy-in, how to change their teaching."

Particularly in mathematics, the issues of student learning are not only about understanding the content. Jim Perkins, chair of the Developmental Math Redesign Team, observed based on years of teaching experience that, "Teachers need to help students be self-confident. These students have been told they're not math students; they are prepared to fail. Teachers need to be able to help students gain confidence as well as understanding of content."

Even though the English redesign is at an earlier stage, redesign team members know that faculty will need professional development, particularly on integrating reading and writing.

The system hosted a Developmental Education Symposium in April 2011 for 175 developmental education faculty and administrators, focused on the developmental education redesign efforts. This annual working meeting for developmental education faculty is intended to be a prelude to the system's faculty professional development conference, New Horizons.

In preparation for implementing the developmental redesign, in summer 2011, the system office organized a one-week Chancellor's Developmental Education Institute, led by Hunter Boylan and facilitated by the staff of the National Center for Developmental Education. This institute was modeled on the nationally recognized NCDE Kellogg Institute, with a residency and a project that participants conduct at their colleges. Fifty developmental reading, writing, and mathematics faculty, representing all VCCS colleges, participated. These individuals will become campus-based leaders in developmental education. During the academic year they will conduct professional development projects on their own campuses. Follow-up activities will be scheduled throughout the 2011-12 academic year.

"In any project, there is a continuum of reaction," Frank Friedman noted. "Some early adopters are, 'Right on, it's about time.' And we need to support those early adopters—give them release time and equipment. Let them become leaders and talk peer to peer, say to their colleagues, 'Come with me.' And there are some at the other end. They're scared of change and comfortable with what they are doing. There is a group in the middle—wait and see—they need leadership and motivation, then they can move forward."

ANTICIPATING CAMPUS IMPLEMENTATION

Throughout the redesign process, participating presidents, vice presidents, and deans kept a running list of the anticipated practical concerns they would face back at their college: course scheduling; classroom availability; engaging adjunct faculty; preparing advising and counseling; and evaluating campus policies (e.g., the policy on the number of times a student can repeat a course). In addition, administrators realized that the redesigns could raise concerns about faculty workload. Implementing modular instruction in developmental math will mean a new configuration of contact hours, a change that will particularly affect contracts with adjunct faculty. This is not only because of the high percentage

of developmental math courses taught by adjunct faculty, but also because it will take a number of one-credit modules to make a teaching load that is worthwhile for adjuncts.

The VCCS has worked hard to balance system policy and campus implementation. Although policy regarding developmental education content and structure is determined centrally, the process allows for flexibility and decision making at the college level. The recommendations of the redesign teams change the content and course structure, but decisions about the delivery of instruction are made at the college level. Many colleges, for example, have chosen to deliver the mathematics modules in a computer lab-based setting; others will organize instruction in traditional classroom settings in three- or four-week blocks.

DEVELOPING POLICY: WHY A PARTICIPATORY PROCESS PAYS OFF

The participatory process organized by the VCCS system office was intentional about bringing different perspectives into policy development. Individuals who are not typically involved in policy development got to see the broader vision of policy. John Capps notes, "I have a personal bias about policy: faculty should speak the loudest. Those closest to the implementation should be part of the policy process."

Many of the individuals now in campus and system office leadership positions started as faculty. Over the trajectory of their professional lives, their understanding of policy has grown. They remember the faculty view of policy, but their perspectives changed as their roles and responsibilities changed.

Susan Wood, as vice chancellor, compared her current view of policy from the system perspective to her earlier experience as a faculty member. "Policy is the structure that leads to process and strategies. For 32 years as a faculty member, I had no clue, no idea how policy was generated. I felt autonomous. I cared about my class and my department. Faculty measure impact by the 100 or 150 students they see in their classes. With their intense focus on teaching and learning, faculty are generally unaware of the policy environment."

To John Capps, who has held a range of positions from faculty to president, "Policy creates order from chaos. . . . Earlier in my career, as a faculty member, I thought policy was written in stone, cascading from the top. It was developed by people invisible and unknown to me. Now in the system I see more collaborative and collegial policy development."

The faculty who were part of the participatory redesign process gained perspective on policy. Brent Kendrick, who came to teaching as a second career, noted, "When I came to academe, I made a very conscious decision to focus on my classroom and my students. I did not want to get involved in administrivia. I had no insight into how policy was developed in VCCS. These two experiences [the math and English redesign teams] were refreshing. Faculty were given the opportunity to redesign the curriculum." His final comment summed up his appreciation for the participatory approach: "This consultative process slows things down, but you get a better product."

Faculty may feel that policy creates constraints, but faculty rarely have to deal with the implications of lack of policies. "Without policy there can be inequalities, unfairness, student to student." Jim Perkins noted, "Policy is the consistent rule across the system. For a president, policy is the guideline, the framework to work within. Faculty see policy in terms of academic freedom, they need flexibility." The challenge for policymakers is to build a structure that can be consistently applied across the system but still leave enough flexibility to enable institutions to respond to local conditions and enable faculty to respond to the needs of individual students.

IMPLEMENTATION TEAM

The system office is assembling the individuals who will be responsible for campus implementation. The vice president at each campus has named the lead person, most likely a math faculty member, who will think about how to implement the developmental math redesign. A statewide implementation team brings together those 40 campus leads, plus the developmental education coordinators at each of the 23 colleges. Rather than meeting regularly, as do the redesign teams, this group of 63 will meet as needed to plan for the spring 2012 implementation of the math redesign. The initial meeting focused on a road map for each campus and addressed such issues as how to transition students currently in developmental math classes to the modules. System office staff will work with deans on such issues as adjunct contracts and methods for determining prerequisites for academic and career technical education programs.

# LOOKING TO THE FUTURE: TRACKING OUTCOMES

Members of the redesign team are enthusiastic about the possibilities of the developmental redesign, but they are also willing to step back and look to the data to see how well it achieves its potential to improve student outcomes. As Brent Kendrick, writing faculty member from Lord Fairfax Community College, noted, "Anytime you introduce change, there will be naysayers." Others noted that some people are sitting on the side, hoping or expecting that the redesign effort will not achieve its goals.

Jim Perkins, from the perspective of mathematics, trusts the process of learning from data and experience: "If it doesn't work, we'll adjust, we'll change. We'll follow up and figure out what works and what doesn't. Whatever we try may not be the final solution. There may be some trial and error." Cheryl Thompson-Stacy, from an English perspective, shared the same mix of possibility and willingness to question, "I hope it will work. We've made great strides. I think this is on the right track. But if not, we'll do something else."

Data clearly revealed the problem in developmental education. Data will reveal the effects of the redesign. *The Turning Point* recommended a systemwide, annual report on developmental education to track progress toward the three overarching developmental goals: decrease the need for developmental education; shorten the time in developmental education; and increase success rates of students who take developmental courses.

In February 2011, the VCCS Office of Institutional Effectiveness produced the first annual report: *The Developmental Educational Annual Report: Tracking the Fall 2006 Cohort and Five-Year Historical Trends*.[9] The report is designed to track progress toward the three goals. The analysis entails various measures developed with internal constituents and some measures developed by Achieving the Dream's Cross-State Data Work Group. The annual report provides a baseline for colleges to compare their college data to system data. The report begins by noting that "five-year trends on performance measures remained fairly flat with few exceptions, showing little change."

Looking to the future, the system office plans to create a continuous improvement team that will gather and analyze data, learn from examples in the system, organize intentional experiments, and continue to strengthen developmental education across the 23 colleges.
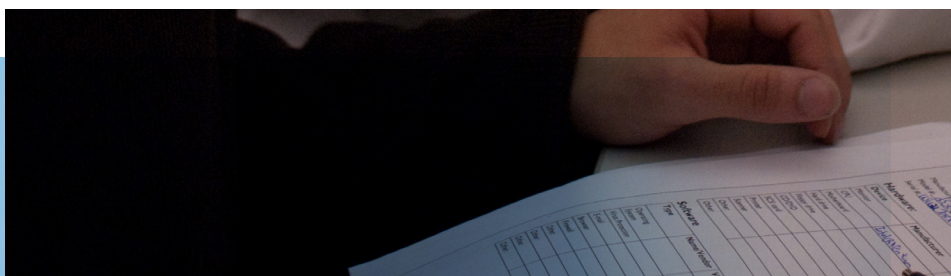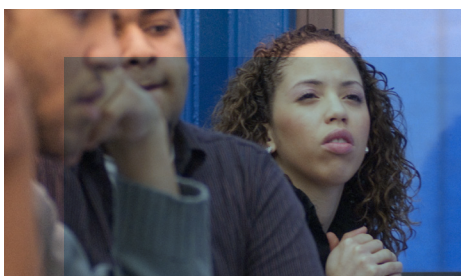
LEARNING FROM VIRGINIA

Overwhelmingly, the participants in the redesign process were enthusiastic about it and took it seriously. They appreciated the opportunity to be part of a significant change in the system and see a real possibility for change, a positive possibility for so many students (*see box, "Developing Policy: Why a Participatory Process Pays Off" on page 22*).

"I enjoyed the process and was happy to be part of it. . . . This is different from what was done in the past," said Cheryl Thompson-Stacy. "I was satisfied, and impressed with the hard work. People really took the charge to heart."

Michael Scott agreed: "I enjoyed it thoroughly. . . . The committee moved quickly and single-mindedly toward solutions. There was little issue that we were doing things poorly. We saw a path, the way to go, even before the team came together. I was stunned, frankly, amazed at the efficiency and the effectiveness of the team. I've been on a lot of committees, and heard a lot of talk."

Frank Turnage, who was attentive to the group process as facilitator, commented on the way the team reached a decision during the final session: "The recommendations were adopted by full consensus, not because they all liked all parts of it, but more a loyalty to the team and the pride they took in having completed such a difficult and important assignment."

John Capps summed up the process: "This is the most significant change I've seen in developmental mathematics in 39 years. We've done tinkering and had a continued lack of success. As an administrator, I don't really like imposing from the system level, but we have 39 years of failure. We can't be comfortable with a 30 percent pass rate."

Years will pass before the redesign's impact on student success is known. Still, it is rare for a process to run so smoothly, engender such a positive response from participants, and move so directly to implementation. Many lessons from the VCCS process are relevant to other states and settings seeking to redesign developmental education. The lessons from Virginia follow the participatory process: lay the groundwork; cast a wide net of participation; listen and communicate; implement and follow up.

LAY THE GROUNDWORK

Start with the evidence: Before directly taking on a problem, make the problem visible. The VCCS disseminated uncompromising data that showed that developmental education in its current form was not working.

Foster the will to change: Once it is clear that the status quo is not acceptable, facilitate open conversations about the depth of the problem, the need for change, and the options and solutions available. The VCCS cultivated conversations at multiple levels—to generate anticipation of change.

"THIS IS THE MOST SIGNIFICANT CHANGE I'VE SEEN IN DEVELOPMENTAL MATHEMATICS IN 39 YEARS. WE'VE DONE TINKERING AND HAD A CONTINUED LACK OF SUCCESS. AS AN ADMINISTRATOR, I DON'T REALLY LIKE IMPOSING FROM THE SYSTEM LEVEL, BUT WE HAVE 39 YEARS OF FAILURE. WE CAN'T BE COMFORTABLE WITH A 30 PERCENT PASS RATE."

—JOHN CAPPS, PRESIDENT, CENTRAL VIRGINIA COMMUNITY COLLEGE

Position the problem as a system problem: Top leaders can discuss the need for change for the greater good of the students, without blame or finger pointing. In Virginia, the redesign teams were careful to not suggest that the problem lay with faculty performance or any other component of the system.

Commit to change: Many reports and recommendations end up on the shelf; central leadership can make clear the intention to act on their proposals. When the Developmental Education Task Force undertook its work, all involved knew that the system office intended to follow through on its recommendations.

CAST A WIDE NET OF PARTICIPATION

Bring multiple voices to the table: Invite representative participants of those who will be directly involved in creating new solutions. In the case of developmental education, this means broad campus representation—faculty, student services, advising. Each of these constituencies were important for their perspectives. The content faculty were important because of expertise in curriculum and various administrators brought the perspective of campus implementation. Representatives from the K-12 system were important partners in the process.

Create agents of change: Let everyone see how the change will affect them, and how they can contribute to the change. The chancellor made the need for developmental redesign in the VCCS visible and allocated resources, including system office staff, to the effort. However, implementation depends on faculty and administrators at every college. The redesign is so different from current practice that members of the redesign teams had to consider how to prepare and engage colleagues at their campuses.

LISTEN AND COMMUNICATE

Create a setting where all voices are heard: The redesign teams operated with a basic set of ground rules that helped participants feel that their perspectives were valued. The redesign team chairs were intentional about fostering trust and mutual respect.

Communicate—Communicate—Communicate: Use a range of face-to-face and technological settings for internal deliberations and for communication with the field. Communication is multidirectional; it involves sharing news and listening to the responses, and taking expressed concerns seriously. The redesign teams were assertive about eliciting and responding to comments from the field.

Acknowledge that change at all levels can be hard: For individuals, for institutions, for systems, change is difficult. Part of the beauty of the Virginia story is that the system office allowed the individuals involved to dig into the details and air their concerns.

IMPLEMENT AND FOLLOW UP

Prepare for implementation at the system level and at colleges: Raise implications of choices made in the decision-making process. Clarify what the system is responsible for and which decisions are made by the colleges. In the VCCS, course content is determined centrally, and delivery is determined by the colleges. In addition the system office is bringing together the individuals who will lead campus implementation so that they can hear how colleagues at other colleges are planning for implementation.

Follow up with data: Track outcomes and find out what works. Adjust what does not work, or try something else. The VCCS has built the tracking of developmental education outcomes into its regular ongoing work.

The VCCS has invested in the developmental redesign systemwide. Every college, every teacher, every student involved in developmental education will be part of this change. Redesigning developmental education represents a major commitment on the part of the VCCS, and Chancellor DuBois adds, "We won't stop with developmental math and English. There are other high-enrollment/low-success courses in the system that need attention."

The system office and those directly involved in the redesign are realistic: there will certainly be bumps in the road. But as long as Virginia is committed to honest data about outcomes and continues to learn from the process, this story is sure to be instructive for innovators in other states.

SUMMARY OF LESSONS LEARNED FROM VIRGINIA

LAY THE GROUNDWORK

> Start with the evidence

> Foster the will to change

> Position the problem as a system problem

> Commit to change

CAST A WIDE NET OF PARTICIPATION

> Bring multiple voices to the table

> Create agents of change

LISTEN AND COMMUNICATE

> Create a setting where all voices are heard

> Communicate–communicate–communicate

> Acknowledge that change at all levels can be hard

IMPLEMENT AND FOLLOW UP

> Prepare for implementation at the system level and at colleges

> Follow up with data
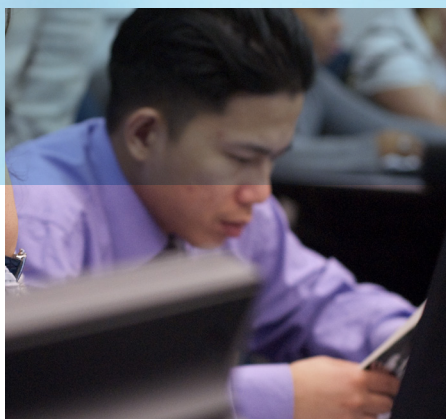
APPENDIX:
LIST OF INTERVIEWEES

These individuals were interviewed as part of the research for this report. All interviews were conducted in May 2011. Some quotes were lightly edited for clarity.

VIRGINIA COMMUNITY COLLEGE SYSTEM OFFICE STAFF

Dr. Glenn DuBois, Chancellor

Lori Dwyer, Interim Director of Special Projects

Dr. Donna Jovanovich, Director of Institutional Effectiveness

Dr. Dan Lewis, Director of Educational Programs

Dr. Susan Wood, Vice Chancellor for Academic Services and Research

Dr. Gretchen Schmidt, Assistant Vice Chancellor for Academic and Student Services (joined the JFF staff in August 2011)

MATH REDESIGN

Lori Baker, Dean of Student Services, Virginia Western Community College

Michael Bolling, Mathematics Coordinator, Virginia Department of Education

Ruthe Brown, Coordinator, Dual Enrollment, and Director, Tech Prep Consortium, Northern Virginia Community College

Dr. Frank Friedman, President, Piedmont Virginia Community College; Co-chair, Developmental Math Redesign Team

Rachelle Koudelik-Jones, Dean of Institutional Effectiveness, Mathematics Faculty, Western Virginia Community College

Dr. Jim Perkins, President Emeritus, Blue Ridge Community College; Chair, Developmental Math Redesign Team

Dr. Michael Scott, Vice President for Instruction, Student Services, and Research, Dabney S. Lancaster Community College

Jane Serbousek, Assistant Professor of Mathematics, Northern Virginia Community College

ENGLISH REDESIGN

Dr. John Capps, President, Central Virginia Community College (a vice president while on the English Redesign Team)

Dr. Brent Kendrick, Professor of English, Lord Fairfax Community College

Dr. Chris Pfautz, Dean, Student Services, John Tyler Community College

Laura Powell, Associate Professor of Reading, Danville Community College

Tracy Fair Robertson, English Coordinator, Office of Standards, Curriculum, and Instruction,
    Virginia Department of Education

Dr. Cheryl Thompson-Stacy, President, Lord Fairfax Community College; Co-chair, English Redesign Team

Dr. Frank Turnage, Former President, Germanna Community College; Co-chair, English Redesign Team

ENDNOTES

[1] See: *Dateline 2009 Moving Towards a World Class Community College System*. The three-year VCCS graduation rate of the fall 2003 cohort, as reported by IPEDS, was 16.0 percent. The "Dateline 2009 Status Report" is available at: http://www.vccs.edu/DatelineStatusReport/tabid/423/Default.aspx#graduation.

[2] For more information, see the VCCS website: http://www.vccs.edu.

[3] Available at: http://www.vccs.edu/DatelineStatusReport/tabid/423/Default.aspx#graduation.

[4] For a list of and links to VCCS *Student Success Snapshots*, see http://www.vccs.edu/Academics/StudentSuccess.aspx.

[5] *Altered State* is available on the Jobs for the Future website: http://www.jff.org/publications/education/altered-state-how-virginia-community-col/1047.

[6] *Achieve 2015* is available at: http://www.vccs.edu/WhoWeAre/Achieve2015.aspx.

[7] The *Developmental Mathematics Curriculum Guide* is available at: http://www.vccs.edu/Portals/0/ContentAreas/AcademicServices/CurriculumGuide_final_Feb2011.pdf.

[8] The bridge model is based on the Community College of Baltimore County's Accelerated Learning Project. Students placed into upper-level developmental writing are "mainstreamed" into English 101 classes that include students placed directly into college English. For more information on the project, see: http://ccrc.tc.columbia.edu/Collection.asp?cid=67.

[9] The *Developmental Education Annual Report* is available at: http://www.vccs.edu/Portals/0/ContentAreas/AcademicServices/Dev_Ed_Annual_Report_201102.pdf.

REFERENCES

Developmental Education Task Force. 2009. *The Turning Point: Developmental Education in Virginia's Community Colleges. Report of the Developmental Education*. Available at: http://www.vccs.edu/Portals/0/ContentAreas/AcademicServices/The_Turning_Point_DETF_Report_200909.pdf.

Developmental English Redesign Team. 2011. *The Focal Point, Redesigning Developmental English Education in Virginia's Community Colleges*. (forthcoming).

Developmental Mathematics Redesign Team. 2010. *The Critical Point: Redesigning Developmental Mathematics Education in Virginia's Community Colleges*. Available at: http://www.vccs.edu/Portals/0/ContentAreas/AcademicServices/The_Critical_Point-DMRT_Report_082010_pdf.pdf.

Jenkins, Davis, Shanna S. Jaggars, & Josipa Roksa. 2009. *Promoting Gatekeeper Course Success Among Community College Students Needing Remediation: Findings and Recommendations from a Virginia Study*. New York, NY: Community College Research Center. Available at http://ccrc.tc.columbia.edu/Publication.asp?UID=714.

Mills, Kay. 2010. *Altered State: How the Virginia Community College System has Used Achieving the Dream to Improve Student Success*. Boston, MA: Jobs for the Future.

Office of Institutional Research & Effectiveness. 2010. *Achieve 2015: Six Year Strategic Plan for Virginia's Community Colleges–Resource Document February 2010*. Richmond, VA: Virginia. Community College System.

Office of Institutional Research & Effectiveness. 2011. *Developmental Education Annual Report: Tracking the Fall 2006 Cohort and Five-Year Historical Trends February 2011*. Richmond, VA: Virginia Community College System. Available at: http://www.vccs.edu/Portals/0/ContentAreas/AcademicServices/Dev_Ed_Annual_Report_201102.pdf.

Schmidt, Gretchen, Donna Jovanovich, & Kristine L. Downing. 2007. *College Readiness Report: How Virginia's Community Colleges are Addressing the Academic Weaknesses of Recent High School Graduates*. Prepared for the Honor States Grant, National Governors Association. Richmond, VA: Virginia Community College System.

JOBS FOR THE FUTURE

>> union bug <<