



VIRGINIA DEPARTMENT OF EDUCATION

LEGISLATIVE STUDY

**The Shortage of  
Qualified Teachers in the  
Commonwealth of Virginia and  
Recommended Strategies for  
Addressing the Shortage**

**JANUARY 4, 2016**

***DIVISION OF TEACHER EDUCATION AND LICENSURE  
VIRGINIA DEPARTMENT OF EDUCATION***

## ACKNOWLEDGEMENTS

*The Virginia Department of Education expresses appreciation to the individuals and professional organizations contributing their invaluable time and input into this study.*

**Dr. Beth Ackerman**, Associate Dean of Assessment, School of Education, Liberty University; and President, Virginia Association of Colleges of Teacher Education (VACTE)

**Ms. Sandra Barnstead**, Specialist, Office of Teaching and Learning, Virginia Education Association (VEA)

**Ms. Jane Brooks**, President, Virginia Parent Teacher Association (Virginia PTA)

**Ms. Donna Eagle**, Senior Professional in Human Resources (SPHR), Director of Human Resources, Winchester Public Schools

**Dr. Lyle Evans**, Assistant Superintendent for Human Resources and Administrative Services, Chesterfield County Public Schools

**Dr. Tameshia V. Grimes**, Assistant Director of Student Support Services, Chesterfield County Public Schools; and Board Member, Virginia Association of Secondary School Principals (VASSP)

**Ms. Meg Gruber**, President, Virginia Education Association (VEA)

**Dr. Jane Huffman**, Associate Professor, University of Mary Washington; and Past-President, Association of Teacher Educators in Virginia (ATE-VA)

**Ms. Pamela Johnson**, Principal, Falling Creek Elementary School, Chesterfield County Public Schools; and 2015 National Distinguished Principal, representing the Virginia Association of Elementary School Principals (VAESP)

**Ms. Kirsten Nelson**, Director of Communications and Government Relations, State Council of Higher Education for Virginia

**Dr. Monica Osei**, Assistant Director for Academic Affairs and Student Programs, State Council of Higher Education for Virginia (SCHEV)

**Ms. Jaclyn Roller Ryan**, Teacher, Signal Knob Middle School, Shenandoah County Public Schools; and Virginia Teacher of the Year 2015

**Mr. Andy Stamp**, Associate Executive Director, Virginia Association of School Superintendents (VASS)

**Dr. E. Herbert Thompson**, Professor Emeritus, Emory and Henry College; and President, Association of Teacher Educators in Virginia (ATE-VA)

**Mr. Donald Vale**, Principal, Thomas Harrison Middle School, Harrisonburg City Public Schools; and Board Member, Virginia Association of Secondary School Principals (VASSP)

**Dr. Roy H. Walton, Jr.**, Assistant Superintendent, Nottoway County Public Schools; and representative from the Virginia Association of School Personnel Administrators (VASPA)

**Ms. Camilla Washington**, Chairman, Fluvanna County School Board; and representative of the Virginia School Boards Association (VSBA)

**Mr. Vern Williams**, Teacher, Longfellow Middle School, Fairfax County Public Schools; and executive board member of the Advisory Board on Teacher Education and Licensure (ABTEL)

***VIRGINIA DEPARTMENT OF EDUCATION***

**Dr. Steven R. Staples**

Superintendent of Public Instruction

**Mrs. Patty S. Pitts**

Assistant Superintendent

Division of Teacher Education and  
Licensure

**Dr. Cynthia A. Cave**

Assistant Superintendent

Division of Policy and Communications

**Dr. Kendra Crump**

Director of Licensure and School Leadership

Division of Teacher Education and  
Licensure

**Ms. Susan B. Williams**

Director of Policy

Division of Policy and Communications

**Dr. Joan Johnson**

Director of Teacher Education

Division of Teacher Education and Licensure

***CONSULTANT***

Dr. Linda M. Wallinger

## Table of Contents

Executive Summary .....	10
Background .....	15
The Need for Teachers Across the Nation .....	15
Characteristics of Teachers Who Change Schools and/or Leave Teaching .....	17
Turnover among Beginning Teachers .....	17
Impact of Teacher Turnover .....	18
The Changing Student Population in Virginia .....	19
The Critical Shortage Teaching Endorsement Areas in Virginia .....	20
Prescribed Methodology for Determining Critical Shortage Teaching Endorsement Areas in Virginia .....	21
Legislative Action in Other States to Address Teacher Shortages .....	22
Programs to Address Teacher Shortages in Virginia .....	23
Virginia’s Plan to Address Teacher Equity .....	25
Teacher Equity Gaps .....	26
Teacher Preparation .....	27
Teacher Recruitment .....	28
Working Conditions .....	29
Professional Development .....	30
Out-of-Field Mathematics Teachers .....	32
Out-of-Field Foreign Language Teachers and ESL Teachers .....	33
Performance Objectives .....	34
Recommendations on Strategies to Address the Shortage of Qualified Teachers in the Commonwealth of Virginia .....	35
References .....	40
Appendix A .....	41
House Joint Resolution No. 558 .....	41
Appendix B .....	43
Top Ten Critical Shortage Teaching Endorsement Areas in Virginia .....	43

Appendix C .....	44
Legislation Enacted in Other States to Address Teacher Shortages .....	44
Appendix D .....	48
Approved Teacher Educator Programs in Virginia – April 29, 2015 .....	48
Appendix E .....	54
Teacher Recruitment and Retention Initiatives at Virginia Institutions of Higher Education .....	54
Averett University .....	54
Shining Stars .....	54
Extended Satellite Campuses for On-Ground and Online Student Access .....	54
Aggressive Marketing Strategy .....	54
Averett Open House Events .....	55
Targeted Advising .....	55
Bluefield College .....	55
Master of Arts in Education with Teacher Licensure .....	55
Bridgewater College .....	56
Steps to Improve Existing Programs .....	56
Teaching Fellows in Education .....	57
Christopher Newport University .....	57
Meetings to Recruit Students to the STEM and ESL Teacher Preparation Programs .....	57
The College of William and Mary .....	58
Noyce Scholars .....	58
Preparing Inclusive Educators .....	58
English as a Second Language Partnership for Preparation .....	59
Eastern Mennonite University .....	60
Programs to Encourage and Support Students to Pursue Teaching .....	60
Emory and Henry College .....	60
Initiatives to Address Critical Shortage Areas .....	60
Ferrum College .....	62
Plan to Seek Approval to Offer a Middle Grades Teaching Endorsement .....	62
George Mason University .....	63
Tuition Discount for Virginia Educators .....	63
Cohort Outreach Programs .....	63
Bachelor’s/Accelerated Master’s Programs .....	64
External Funding to Support Critical Shortage Areas .....	64
Hampton University .....	64
Routine Recruitment Efforts .....	64
Hollins University .....	65
Review of Recruitment Practices .....	65
James Madison University .....	65
James Madison University Online Educational Technology Graduate Programs .....	65
Post-Baccalaureate Program in K-12 Special Education and in K-12 Early Childhood Special Education .....	66
Inclusive Early Childhood Education Program .....	66

K-8 Mathematics Specialist .....	67
Additional Information .....	67
Liberty University .....	68
Barlow Scholarship .....	68
Teacher Education Access for Minorities (TEAM) Scholarship .....	69
Longwood University .....	70
Institutional and Program-Level Recruiting .....	70
Call Me Mister! .....	70
Professional Education Council (PEC) of Longwood University .....	71
Southside Recruiting Initiatives .....	71
Expansion of Single/Multiple Endorsements through Internal Recruiting .....	71
Elementary/Middle (LSTB) Recruiting .....	72
Special Education Graduate Program Recruiting among LSTE, Art PK-12, and Secondary Programs .....	72
SOLSTICE .....	73
Support of Area School Divisions and Teachers .....	73
Region VIII Professional Development Council and Superintendents' Network .....	73
Comprehensive Early Childhood Center .....	73
Laboratory Schools .....	74
PEx3 .....	74
Institute for Teaching Through Technology (ITTIP) .....	74
Lynchburg College .....	74
Collaborative Work with School Divisions, Other University Programs, and Central Virginia Community College .....	74
Mary Baldwin College .....	75
Encouragement to Seek Multiple or Dual Teaching Endorsements .....	75
Marymount University .....	75
English as a Second Language (ESL) in PDS (Professional Development School) .....	75
Four-Year Undergraduate Degree Leading to Teacher Licensure .....	76
Evening/Weekend M.Ed. for Career Switchers .....	76
Undergraduate Student Information Sessions .....	76
Articulation Agreements .....	77
Norfolk State University .....	77
Partnership for Military Cognizant Child and Youth Programs Contact .....	77
Old Dominion University .....	77
MonarchTeach .....	77
Bachelor of Science Undergraduate Interdisciplinary Studies with Initial Licensure in Special Education Early Childhood Special Education and Adapted Curriculum K-12 and in Special Education General Curriculum K-12 .....	78
Teachers-In-Residence (TIR) – Norfolk Program .....	78
Radford University .....	79
Teacher Preparation and Professional Development, and Scholarships for Teachers in Hearing Impairments PreK–12 .....	79

Virginia Consortium for Teacher Preparation in Special Education Adapted Curriculum: Supporting Students with Severe Disabilities and Autism (ACSD Consortium) [renamed May 2015].....	80
Virginia Consortium for Teacher Preparation in Visual Impairments.....	80
Virginia Consortium for Teacher Training in Early Childhood Special Education .....	81
Sped End Pro 15 877 Radford University Special Education: General Curriculum K-12 Traineeship Grant .....	81
Project MERGE .....	82
Radford University Special Education Teacher Pipeline (for ELED and DHH Majors) .....	82
Add-On Endorsements in Gifted Education and in English as a Second Language (ESL).....	83
Virginia Secondary Mathematics Professional Development Center at Radford University.....	83
Randolph College.....	84
Science and Math Summer Institute .....	84
Kids in College Mentoring Program.....	86
Science Saturdays .....	86
One-Year Master of Arts in Teaching for Initial Licensure .....	87
Meeting the Needs of Diverse Learners/Summer Camp Initiative.....	88
Randolph College Education Department Ideas in the Developmental/Exploratory Stage.....	88
Randolph-Macon College.....	89
Proposed Program: Randolph-Macon College Noyce Teacher/Scholar Program.....	89
Regent University .....	90
Traineeships for Education of Special Education Personnel .....	90
Roanoke College.....	90
Teaching in the Diverse Classroom .....	90
Teaching Mathematics and Science Marketing Campaign.....	91
Shenandoah University .....	91
Meetings with School Division Superintendents.....	91
Sweet Briar College .....	92
Tri-College Consortium for Clinical Faculty and Mentoring: Collaborative Practices (Serving Region 5) .....	92
Pathways to Science, Institute for Broadening Participation, Building Partnerships to Support Diversity in STEM, Explore Engineering.....	92
University of Mary Washington .....	93
Professional Development Weekend Courses .....	93
Teachers for Tomorrow .....	94
Superintendents’ Forums .....	94
Facilitated Transfer Program .....	95
Makerspaces – STEM Education.....	95
Environmental Education Makerspaces.....	96
Chesapeake Bay Trust Partnership .....	97
Special Education Teachers Support Grant .....	97

Clinical Faculty Grant, “Pathways to Excellence” .....	98
Mathematics Science Program Grant .....	98
University of Richmond.....	99
MSI: Richmond (Math/Science Investigators at Richmond).....	99
Dual Endorsement Programs .....	100
University of Virginia.....	100
Curry Teaching Fellows.....	100
University of Virginia Robert Noyce Teacher Scholarship and Stipend Program .....	102
University of Virginia’s College at Wise.....	103
Robert Noyce Teaching Scholarship Program (Wise-Scholars).....	103
Virginia Commonwealth University.....	104
Richmond Teacher Residency Program.....	104
VCU Noyce Initiative and VCU Noyce II.....	104
Virginia State University .....	105
G.R.O.W.S. (Gaining Real Opportunities With Students) .....	105
Virginia Tech .....	106
Virginia Tech, Robert Noyce Scholarships .....	106
Distance Learning for Provisionally Licensed Science Teachers.....	106
Physics Teacher Education Coalition (PhysTEC) .....	107
Virginia Union University .....	107
STEM EnRichmond.....	107
Master of Arts in Curriculum and Instruction (New Program).....	108
Virginia Wesleyan College.....	108
School Service/Community Outreach.....	108
Washington and Lee University.....	109
Establishing Connections to Promote Teaching.....	109
Appendix F.....	110
Teacher Recruitment and Retention Initiatives Provided by the Virginia Department of Education .....	110
Clinical Faculty Programs (Teacher Preparation Programs) .....	110
Mentor Teacher Program.....	110
National Board Certification Incentive Award.....	112
Special Education Teacher Recruitment and Retention Initiatives (Federally-Funded Programs).....	116
Consortium of Institutions of Higher Education in Virginia in Severe Disabilities (George Mason University) .....	117
Traineeship for Special Education Personnel: A Distance Model for Endorsement in Special Education: General Curriculum (DCOP) (George Mason University).....	117
Consortium of Institutions of Higher Education in Virginia in Visual Impairments (George Mason University) .....	118
Traineeship for Special Education Personnel: The Commonwealth Special Education Endorsement Program (CSEEP) Endorsement Program (Old Dominion University) .....	118



Radford Teaching Preparation Project: Hearing Impairments PreK-12  
(Radford University)..... 118

Virginia Early Childhood Special Education (ECSE) Consortium  
(Radford University)..... 118

Special Education Teacher Recruitment and Retention Initiatives  
(State-Funded Programs) ..... 122

Speech-Language Pathologist Retention and Recruitment Initiatives..... 123

    Continuing Education ..... 123

    Distance Learning in Virginia Education for Speech-Language Pathology  
(DLVE-SLP)..... 124

    Virginia Incentive Program for Speech-Language Pathology (VIP-SLP)..... 124

Science, Technology, Engineering, and Mathematics (STEM) Teacher Recruitment  
and Retention Incentive Awards..... 125

Teacher Residency Program ..... 127

TeachVirginia Educator Recruitment Project..... 127

Teacher Recruitment Preparation Pilot Initiative (MonarchTeach)..... 128

Virginia Career Switcher Program..... 130

Virginia Middle School Teacher Corps ..... 132

Virginia Teachers for Tomorrow Program ..... 134

Virginia Teaching Scholarship Loan Program ..... 135

# **The Shortage of Qualified Teachers in the Commonwealth of Virginia and Recommended Strategies for Addressing the Shortage**

## **Executive Summary**

The 2015 Virginia General Assembly passed House Joint Resolution 558 (see [Appendix A](#)), which requested that the Virginia Department of Education (VDOE) and the State Council of Higher Education for Virginia (SCHEV) examine shortages of qualified teachers generally and in certain teaching endorsement areas and recommend strategies for addressing these shortages. The Virginia Department of Education reviewed the data on teacher shortages in Virginia from 2010-2011 through 2015-16 ([Appendix B](#)) and conducted research on initiatives and strategies other states have used to address the shortage of qualified teachers. The Department gathered information from the Virginia institutions of higher education offering teacher preparation programs and assembled information from the various offices within the Department of Education that provide support to teachers and school divisions in the areas of teacher recruitment and professional development.

Finally, the Department convened a group of Virginia stakeholders to review the legislation and initiatives and strategies in place to enhance teacher recruitment and retention and make recommendations on strategies to address the shortage of qualified teachers. Based on reviewed practices from other states, information provided by Virginia's institutions of higher education, and input from the stakeholder group, the following recommendations are offered:

### **Teacher Preparation Programs**

- As SCHEV continues to review data and develop strategies to implement its 2014 Strategic Plan (available at <http://www.schev.edu/schev/StrategicPlan.asp>), particular attention should be devoted to encouraging Virginia's colleges and universities to remain aware of the changing environments in Virginia's K-12 schools and seek options in their teacher preparation programs to meet these needs, especially in areas such as:
  - Diverse needs of at-risk students;
  - High-minority and/or high-poverty student populations; and
  - Experience in different grade levels for teacher candidates in PreK-12 endorsements, such as fine arts, foreign languages, health and physical education, etc.

- The teacher preparation programs in Virginia’s institutions of higher education should:
  - Be challenged to pursue innovative practices to attract teacher candidates into teacher preparation programs in Virginia;
  - Work with local school divisions to offer tuition discounts to ease the financial burden of extra coursework required for credentialing in teaching shortage areas;
  - Identify and apply for grants to provide targeted training to teachers that address content-specific knowledge;
  - Strengthen teacher preparation coursework so the clinical and practical experiences help all educators develop an understanding of the needs of 1) schools in diverse settings, and 2) different subgroups of students, such as students in poverty, English language learners, and students with disabilities; and
  - Collaborate with the career placement offices at their institutions to promote teaching as a profession and provide information and assistance as needed.

### **Funding and Resources**

- The Virginia General Assembly should continue to provide incentive funding for programs to attract teaching candidates to areas that are hard to staff. Consideration may be given to provide funding to expand programs that have drawn particular interest from potential teaching candidates or that have demonstrated particular success, such as:
  - Mentoring and clinical faculty programs for beginning teachers;
  - MonarchTeach at Old Dominion University, an innovative teacher preparation program that allows students majoring in mathematics, science, or technology to receive teacher licensure while earning a baccalaureate degree in their content area rather than having to continue in a master’s degree program;
  - Teacher Residency Programs that include a residency year devoted to combined roles of co-teacher in a classroom under the guidance of mentor teachers and university faculty and full-time graduate student, earning a master’s degree, followed by a commitment to teach in a hard-to-staff school;
  - The Science, Technology, Engineering, and Mathematics (STEM) Teacher Recruitment and Retention Incentive Awards;
  - The Virginia Middle School Teacher Corps;
  - The Virginia Teaching Scholarship Loan Program;
  - Leadership development programs for challenged schools and school divisions; and
  - Programs to enhance the profession (such as, the development of a public service campaign to highlight the positive aspects of the teaching profession and school successes in Virginia).

- Virginia should consider ways to support teacher candidates, such as:
  - Providing student loan forgiveness;
    - [Allow teachers to cancel a percentage of their student loans for each year they teach in a critical shortage area or challenged school.]
  - Developing higher education programs (perhaps online) to meet professional studies requirements for alternate route teachers;
  - Funding the Department of Education to contract for professional studies requirements for alternate route teachers aligned with training specific to school needs, such as challenged schools;
  - Providing academic support for teacher candidates in rigorous academic majors;
  - Paying fees for teacher candidates to take assessments required for a teaching license in Virginia, such as Praxis tests and the Virginia Communication and Literacy Assessment; and
  - Paying for or subsidizing child care for teacher candidates to allow them to complete classroom observations, practicums, and/or student teaching.
- Virginia should consider ways to attract and retain licensed teachers, such as:
  - Increasing total teacher compensation, including both direct and indirect compensation, such as contributions toward health insurance and retirement;
    - A 2015 report by the Rutgers Graduate School of Education<sup>1</sup> noted that in 2012, the average 25-year-old teacher in Virginia made only 69 percent of the salary of a non-teacher in the same labor market who is of similar education, hours worked, and age – the lowest in the nation. The same report noted that the average 45-year-old teacher made 60 percent of the salary of a non-teacher under the same conditions – tied for lowest with Arizona.
  - Offering additional retirement credit to attract individuals to teach in critical shortage areas or in hard-to-staff schools;
  - Offering retirement benefits to part-time teachers;
  - Expanding programs that focus not only on *recruiting* teachers to the profession, but *retaining* them in the classroom, such as funding support for induction, coaching/mentoring, and increased professional development;
  - Rewarding teachers for mentoring/coaching and providing professional development to veteran teachers on how to serve as effective mentors/coaches;
  - Providing additional funding to support signing bonuses or differential compensation for teachers in critical shortage areas or challenged schools;
  - Providing relocation bonuses to help teachers relocate to a Virginia school division;

<sup>1</sup> Rutgers Graduate School of Education. (spring 2015). *Is School Funding Fair? A National Report Card*, <http://schoolfundingfairness.org/>. Retrieved September 3, 2015.

- Providing assistance with housing, such as funding for a down payment on a first home, providing grants to purchase and refurbish an urban house, or identifying housing options in rural areas, perhaps with subsidized rent for beginning teachers;
- Providing career paths for teachers to become instructional leaders without leaving the classroom, i.e., establishing lead teacher positions rather than teachers having to become school administrators to increase their compensation;
- Reviewing licensure options, such as an adjunct license for career and technical education; and
- Providing classroom materials and resources to teachers so they do not feel compelled to purchase instructional items with their personal funds.
- Virginia should consider ways to provide a program for paraprofessionals to become licensed teachers.

### **School Divisions**

School divisions should consider:

- Implementing strategies noted above that could be effective in their localities;
- Increasing the number of “Grow Your Own” programs that promote teaching as a career to middle and high school students;
- Establishing “Teachers for Tomorrow” programs that identify, train, and nurture high school students interested in a teaching career, with the opportunity to earn dual enrollment credit at an institution of higher education;
- Providing differential compensation and bonuses; and
- Seeking innovative ways to provide flexibility in the teaching schedule, such as position sharing.

### **Collaborative Initiatives**

- The Virginia Department of Education, the State Council of Higher Education for Virginia, Virginia’s school divisions, and other partners should continue implementation of Virginia’s Teacher Equity Plan. Virginia’s complete plan, including research background and action steps, is available online at <http://www2.ed.gov/programs/titleiparta/equitable/vaequityplan060115.pdf>. Areas of particular interest include:
  - Reducing the equity gaps among high-poverty versus low-poverty schools and high-minority versus low-minority schools, especially in the areas of out-of-field teachers in:
    - Mathematics;
    - Special education; and
    - English as a Second Language; and

- Continued use of TeachVirginia, Virginia’s online statewide recruitment tool.
- The Virginia Department of Education and the State Council of Higher Education for Virginia should continue to collaborate in determining priority areas for the use of federal State Agency for Higher Education (SAHE) Teacher Quality Funds, including the possible addition of adding an equity component as a priority to be included within the request for proposals from institutions of higher education.
- The four-year colleges and universities and the community colleges should work together to strengthen preparation for teaching majors at the community college with joint advising and agreements to ensure that students transferring from the community colleges have completed sufficient higher-level content courses to be able to enter the teacher preparation programs at the four-year institutions.

### **Policies**

- The Virginia Department of Education should highlight for school divisions and institutions of higher education provisions within the *Licensure Regulations for School Personnel* that offer pathways for already licensed teachers to become licensed in additional areas of need. A special focus might include:
  - Establishing teacher preparation programs that allow students to complete a college major and earn a teaching license within four years rather than having to pursue a master’s degree to obtain a teaching license;
  - Taking a prescribed Board of Education test to add an endorsement area;
  - Seeking an add-on endorsement in Algebra I;
  - Qualifying for multiple endorsements, such as Elementary Education PreK-6 and special education, or Middle Education 6-8 and Algebra I;
  - Exercising provisions within the recently revised *Licensure Regulations for School Personnel* (effective September 9, 2015) such as:
    - A provisional license for career and technical education teachers who have not attained an industry certification credential in the area in which the teacher seeks endorsement; and
    - Recognizing that teachers with an undergraduate degree may pursue license renewal options other than college credit-bearing coursework to renew their teaching licenses.
  - Pursuing the add-on endorsement in Special Education - General Curriculum proposed in revisions to Virginia’s *Licensure Regulations for School Personnel*.
- Additional policy actions might include:
  - Reducing the number of years of full-time work experience (currently five years) required to enter Virginia’s Career Switcher Program or to become eligible for the experiential route to licensure; and

- Adding additional tests that would allow teachers to take a test to add an endorsement area, such as English as a Second Language.

## **The Shortage of Qualified Teachers in the Commonwealth of Virginia and Recommended Strategies for Addressing the Shortage**

### **Background**

The 2015 Virginia General Assembly passed House Joint Resolution 558 (see [Appendix A](#)), which requested that the Virginia Department of Education and the State Council of Higher Education for Virginia (SCHEV) examine shortages of qualified teachers generally and in certain teaching endorsement areas and recommend strategies for addressing these shortages. The Virginia Department of Education reviewed the data on teacher shortages in Virginia from 2010-2011 through 2015-16 ([Appendix B](#)) and conducted research on initiatives and strategies other states have used to address the shortage of qualified teachers. The Department gathered information from the Virginia institutions of higher education offering teacher preparation programs and assembled information from the various offices within the Department of Education that provide support to teachers and school divisions in the areas of teacher recruitment and professional development.

Finally, the Department convened a group of Virginia stakeholders to review the legislation and initiatives and strategies in place to enhance teacher recruitment and retention and make recommendations on additional strategies to address the shortage of qualified teachers. The stakeholder group included teachers, principals, superintendents, school personnel administrators, central office administrators, and representatives of school boards, institutions of higher education, the State Council of Higher Education for Virginia, and the Virginia Department of Education.

### **The Need for Teachers Across the Nation**

Virginia is not alone in its search for qualified teachers. A 2014 report, *Seven Trends: The Transformation of the Teaching Force*, by Ingersoll, Merrill, and Stuckey notes that America's teaching force is becoming larger, grayer, greener, more female, and more diverse. The report also states that the teaching force is remaining consistent in academic ability and becoming less stable. Using seven cycles (25 years) of longitudinal survey data from the National Center for Education Statistics (NCES), specifically the Schools and Staffing Survey (SASS) and its supplement, the Teacher Follow-Up Survey (TFS), the researchers explored how the characteristics of the teaching force in the United States changed from 1987-1988 to 2011-2012.

The report provides some interesting analyses. Briefly, researchers found the teaching force to be:

- **Larger**  
The number of teachers has increased faster than the number of students. While the total K-12 student enrollment increased by 19.4 percent from 1987-1988 to 2011-2012, over the same period, the teaching force increased by 46.4 percent.
- **Grayer (Older)**  
The teaching force has become older, and teacher retirements have increased. However, this trend appears to be largely over, with the most common age of teachers (41 in 1987-1988) increasing to 50 by 2007-2008 and decreasing to 30 in 2011-2012. The number of teacher retirements peaked in 2004-2005 and has been decreasing.
- **Greener (More Inexperienced)**  
As the proportion of veteran teachers has increased, so has the proportion of beginning teachers. In 1987-1988, the modal school teacher had 15 years of teaching experience, decreasing to one year of experience in 2007-2008. The economic downturn beginning in 2007-2008 resulted in a number of layoffs, usually of beginning teachers, thus slowing the “greening” effect, with the modal teacher having four to five years of experience by 2011-2012.
- **More Female**  
Both the number of women entering teaching and the proportion of teachers who are female have increased. The change in the male-to-female ratio is not due to a decline in the number of males entering the profession, which also has grown, but to the increased number of females entering teaching.
- **More Diverse, by Race-ethnicity**  
Despite efforts to recruit minority teachers, teaching remains a largely white workforce. Since the teaching force has grown dramatically in number, *numerically* there are more minority teachers than before. “Growth in the number of minority teachers outpaced growth in minority students and was over twice the growth rate of white teachers. So, although the proportion of minority students is still far greater than the proportion of minority teachers, the teaching force has rapidly grown more diverse.” (Ingersoll, R., Merrill, L., & Stuckey, D., Updated 2014) The data also show that the rate at which minority teachers leave schools is significantly higher than that of white teachers, increasing by 28 percent from the late 1980s to 2008-2009.
- **Consistent in Academic Ability**  
The researchers used Barron’s six-category ranking of colleges and universities attended by beginning teachers as a measure of academic ability. Based on the selectivity or competitiveness of their undergraduate institutions, they found that about a tenth of newly hired first-year teachers come from top-tier institutions of higher education, about



20 to 25 percent come from the bottom two categories, and about two-thirds come from middle-level institutions. While some fluctuation exists from year to year, the researcher found little long-term change in recent years.

- **Less Stable**

The rate of attrition among teachers (those leaving the profession entirely) is similar to that of police officers, higher than that of nurses, and far higher than turnover in fields such as law, engineering, architecture, and academia. Annual attrition from the teaching force has increased from 6.4 percent in 1988-1989 to 9 percent in 2008-2009.

## **Characteristics of Teachers Who Change Schools and/or Leave Teaching**

Ingersoll, Merrill, and Stuckey (updated 2014) disaggregated the data further to find that overall data mask differences in turnover among different types of teachers and different locales. Teacher departures are not distributed equally across states, regions, school districts, and schools. For example, in 2004-2005, 45 percent of all public school teacher turnover took place in just one quarter of public schools – those that were high-poverty, high-minority, urban, and/or rural.

Additionally, the rates of teachers who both move between schools and who leave teaching altogether differ by the race/ethnicity of the teacher. Minority teachers have significantly higher rates of turnover than white teachers, with the gap widening in recent years. Data indicate that minority teachers value positive school working conditions, in particular, the degree of autonomy and discretion teachers are allowed in the classroom and the level of faculty influence over schoolwide decisions that affect teachers' jobs. Minority teachers often begin teaching in hard-to-staff schools that have less desirable working conditions, and low student performance often contributes to the implementation of programs that offer less autonomy, discretion, and influence to teachers.

## **Turnover Among Beginning Teachers**

Beginning teachers, regardless of race/ethnicity, have the highest rates of turnover of any group of teachers. In 2003, Ingersoll estimated that between 40 and 50 percent of those who enter teaching leave teaching within five years. More recent reports show a decline in the number of new teachers leaving the profession. In 2013, using national longitudinal data, Perda provided an updated estimate that approximately 41 percent of new teachers leave teaching within the first five years. The most frequently cited reasons for leaving teaching included dissatisfaction with school and working conditions, salaries, classroom resources, student misbehavior, accountability, opportunities for development, input into decision making, and school leadership. Following the 2007-2008 school year, a significant number of new teachers (20 percent) also were laid off or terminated, presumably due to the economic downturn.

In September 2014, after the report by Ingersoll, Merrill, and Stuckey (Updated 2014) cited above was published, the United States Department of Education released data from a 2012-2013 follow up study, which the Center for American Progress (CAP) analyzed for a report issued in January 2015. Hanna and Pennington (2015) analyzed four years of data, from 2003-2004 through 2006-2007, and found that after five years of teaching, about 70 percent of teachers remained in their original schools, 10 percent had changed schools, and only 17 percent had left the profession. Furthermore, they found that beginning teachers in high-poverty schools were staying at statistically similar rates as all beginning teachers. The researchers pointed out that there were few major changes in the teaching profession during that time, with teacher salaries growing by less than the rate of inflation and the economy strong during that time, which was prior to the economic downturn. They also noted that national numbers mask local differences.

In spring 2015, Richard Ingersoll responded to the findings in the Center for American Progress (CAP) report (Brown, E., 2015), since the turnover estimate calculated by the CAP researchers differed substantially from findings in his own research. He noted that the figures in his studies were an estimate, a “crude approximation.” He also pointed out that his estimate was based on data from both public and private school teachers, while the new data included only teachers in public schools. His research reported on attrition occurring after the fifth year of teaching while the new data reported on attrition after the fourth year of teaching. Neither Ingersoll’s nor Hanna and Pennington’s research contained substantiated reasons why the degree of teacher turnover might seem to be decreasing, leaving those answers for future study.

### **Impact of Teacher Turnover**

Regardless of inconsistencies in the research, turnover is clearly an issue in the teaching profession. Some degree of turnover is expected in any profession. Retirements, illnesses, career changes, and family circumstances such as moves among employees are inevitable. A certain degree of turnover helps to mitigate stagnancy in an organization. However, high employee turnover can signal underlying problems in an organization and can result in high costs and other negative consequences.

Some of the consequences, both positive and negative, of teacher turnover include:

- Loss of teachers before they peak professionally  
Evidence supports the fact that teachers’ effectiveness increases significantly during their first several years on the job as they gain more experience, not only in content areas, but also in addressing student behavior problems, students with diverse backgrounds and abilities, communication with parents, etc.

- Continued teacher shortages in specific areas  
Data indicate that in the areas of mathematics and science, in particular, the main source of staffing inadequacies is pre-retirement voluntary departures of licensed teachers.
- Lack of veteran teachers  
Veteran teachers play an important role in schools as they serve as mentors and role models for younger or beginning teachers and use their experience and expertise in leadership roles.
- Costs to high-needs schools and school districts  
Teacher turnover is disproportionately high in high-poverty, high-minority, urban, and/or rural schools and school districts. These schools and districts use a large amount of their available funds to recruit, hire, and provide professional development over and over again to each new set of beginning teachers rather than directing these funds to other instructional programs for their benefit.
- Other financial implications  
A teaching force with a large number of beginning teachers is less expensive. Also, a large number of beginning teachers entering the profession are contributing to the retirement systems. However, because such a large number of teachers are exiting the profession after fewer than five years of experience, those leaving early will never withdraw funds from their pension plans.

## **The Changing Student Population in Virginia**

According to the *Enrollment Projections for Virginia Public Schools, 2009-10 to 2014-15* from the Demographics and Workforce Group at the University of Virginia's Weldon Cooper Center for Public Services, enrollment in Virginia's public schools has increased steadily for the past 10 years, and projections for the next five years indicate this trend will continue. Total student enrollment increased from 1.21 million to 1.27 million students in the 2014-2015 school year alone. [However, enrollment growth in three school divisions – Fairfax, Prince William, and Loudoun – accounts for 90 percent of the total increase projected for the next five years.] Consequently, focus on efforts to recruit, retain, and support effective educators for the growing demand is critically important.

Additionally, Virginia's public schools are challenged by changing demographics that indicate an increasingly diverse student population. Virginia's Teacher Equity Plan (Virginia Department of Education, 2015), prepared for the U.S. Department of Education, notes important demographic trends that indicate where increased attention may need to be focused in terms of teacher needs:

- English language learners (ELLs) – In Virginia, the ELL population has almost quadrupled since 1998. In 1998-1999, the number of ELLs was 26,525. By 2013-2014, that number had almost quadrupled to 93,746.
- Economically disadvantaged students – The economically disadvantaged student population has grown significantly from 331,088 in 2003-2004 to nearly 510,054 in 2013-2014.
- Students with disabilities – The number of students with disabilities has increased slightly, from 157,929 in 2003-2004 to 161,538 in 2013-2014.

### The Critical Shortage Teaching Endorsement Areas in Virginia

The top five critical shortage teaching endorsement areas have remained unchanged in Virginia for the last six years. In order of greatest need, they are:

1. Special Education
2. Elementary Education PreK-6
3. Middle Education PreK-6
4. Career and Technical Education
5. Mathematics Grades 6-12 (including Algebra I)

For the 2014-2015 school year, the following chart provides the number of unfilled positions, the number of personnel teaching with provisional licenses, and the number of licensed individuals teaching out of subject area for each of the top five critical shortage areas. The source of the data is the 2014-2015 Instructional Personnel Data Report (supply and demand); the information is reported by public school divisions.

Rank	Assignment Area	Unfilled Positions	Licensed Provisionally (FTEs rounded)	Licensed but Teaching Out of Subject Area (FTEs rounded)
1	Special Education	167	1,306	148
2	Elementary Education PreK-6	117	1,106	38
3	Middle Education Grades 6-8	56	638	63
4	Career and Technical Education	44	349	132
5	Mathematics Grades 6-12 (including Algebra 1)	64	295	69

Shortage areas six through ten have fluctuated over the years. In order of frequency, the following subject areas have moved in and out of the last five spots:

- School Counselor PreK-12
- Foreign Languages PreK-12

- Health and Physical Education PreK-12
- English Grades 6-12
- Science Grades 6-12
- History and Social Sciences (Secondary)
- English as a Second Language PreK-12

[Appendix B](#) contains a table showing Virginia’s critical shortage teaching endorsement areas from 2010-2011 through 2015-2016.

### **Prescribed Methodology for Determining Critical Shortage Teaching Endorsement Areas in Virginia**

The *Appropriation Act* requires the Department of Education to report annually to the General Assembly on the critical teaching shortage areas in Virginia. In response to this requirement, the Department has obtained data from the Supply and Demand Survey for School Personnel and the Instructional Personnel Data Collection sent by the Department to each of Virginia’s school division superintendents in October of each year, to determine qualifications for teachers and administrators. Information requested on the survey is based on school data reports as of October 1. These data are used to determine critical shortage teaching endorsement areas in Virginia.

In Virginia, “critical shortage” may be defined in two ways: (1) shortages by subject matter as designated from the top ten academic disciplines identified in an annual survey of school divisions; or (2) a school personnel vacancy for which a school division receives three or fewer qualified candidates for a position. Determination of critical shortages in specific teaching endorsement areas and their rankings are dependent on the method of calculation used. As such, specific shortage areas identified will differ among school divisions (i.e., geographic regions) and statewide analysis of subject matter designations.

The top ten critical shortage teaching endorsement areas identified statewide are determined based on method number one as noted above and the prescribed methodology for designation of teacher shortage areas outlined by the U.S. Department of Education. The top ten critical shortage teaching endorsement areas are reported to the Virginia Retirement System and are used to determine candidate eligibility for the Virginia Teaching Scholarship Loan Program. Endorsement areas are ranked according to the most severe academic teaching shortage areas.

The ranking is based on an aggregation of the following: a) total number of teaching positions that are unfilled, b) teaching positions that are filled by provisionally licensed teachers; and

c) teaching positions that are filled by teachers who are licensed, but teaching in academic subject areas other than their area of preparation.

Data analyses include calculated rankings in the three areas noted as of October 1, as reported in the Supply and Demand Survey for School Personnel and the Instructional Personnel Data Collection. All 132 school divisions respond to the survey. A total of 96,147 full-time equivalent (FTE) teachers as of October 1, 2013, were reported for SY2013-2014 in the Instructional Personnel and Licensure annual data collection for school divisions. Rankings were totaled and the resulting sum ranked to determine critical teaching area shortages.

### **Legislative Action in Other States to Address Teacher Shortages**

The Virginia Department of Education reviewed legislation that other states have enacted over the last 10 years to address the need for teachers. [Appendix C](#) contains a comprehensive listing of these strategies, noting the state and year of enactment. These strategies fall generally into the following categories:

#### Licensure

- Alternative licensure programs
- Fast action to approve licenses in critical shortage areas
- Provisional licenses
- Reciprocity with other states

#### Funding

- Loan assistance and forgiveness programs
- Grace period for repayment
- Scholarships and fellowships
- Tuition reimbursement
- Community college transfer guarantees

#### Mentoring and Support

- Mentoring and coaching required
- Funding provided to support mentoring
- Funding provided to support National Board certification

#### Teacher Preparation

- Scholarships to teacher candidates
- Summer institutes to help earn college credits in critical shortage areas
- Funds to take prep courses, tutorials, and support to take the Praxis

- Incentive awards to undergraduate and graduate mathematics and science students to teach

#### Hiring of Specific Populations

- Re-employment of retired teachers, police officers, and/or state employees
- Employment of veterans

#### Salaries

- Payment of signing bonuses and moving expenses
- Deviation from pay scale to increase salary offer
- Premium payments to teachers serving in leadership roles
- Salary supplements to mathematics and science teachers
- Stipends to special education teachers for extra work days to fulfill complex reporting requirements
- Performance/merit pay

#### Special Programs

- Teach for America
- Grow Your Own
- Visiting International Faculty

#### Employment Policies

- Online job posting system
- Employment retention priority may not be based solely on tenure or seniority

#### Other

- Provision of housing options for employees
- Home ownership grants of up to \$5,000 to purchase a primary residence
- Receipt of service credit for non-school employment (speech-language pathologists, nurses, social workers, counselors, occupational and physical therapists, etc.)
- Financial incentives for teachers to relocate to low-performing schools in disadvantaged areas

### **Programs to Address Teacher Shortages in Virginia**

Thirty-six (36) public and private colleges and universities throughout Virginia offer programs of study for aspiring educators and continuing education opportunities for veteran teachers. All of these programs address one or more of Virginia's areas of critical teaching shortage. A complete list of Virginia institutions of higher education that offer educator preparation programs, along with the areas in which they provide preparation, is included in [Appendix D](#). Even though

programs are offered, the number of completers for some of the programs is small and is not sufficient to meet school divisions' staffing needs.

Over the years, the Virginia Department of Education, Virginia's school divisions, and Virginia's institutions of higher education also have undertaken a number of specific initiatives to recruit and retain teachers. Comprehensive lists of current initiatives are available in [Appendix E](#) (institutions of higher education) and [Appendix F](#) (Virginia Department of Education).

The initiatives and strategies implemented by Virginia's colleges and universities generally include:

- Scholarships
- Special programs
- Adding endorsement preparation programs
- Tuition discounts
- Accelerated master's degree programs
- K-8 mathematics specialist programs
- Four-year degree with content major and teacher licensure preparation
- Articulation agreements
- Teacher residency programs
- Special education programs

The initiatives and strategies implemented by the Virginia Department of Education include:

- Clinical Faculty Programs (Teacher Preparation Programs)
- Mentor Teacher Programs
- National Board Certification Incentive Awards
- Special Education Recruitment and Retention Initiatives (both state and federally funded)
- Speech-Language Pathologist Recruitment and Retention Initiatives
- STEM Teacher Recruitment and Retention Incentive Awards
- TeachVirginia Online Recruitment System
- MonarchTeach
- Virginia Career Switcher Program
- Virginia Middle School Teacher Corps
- Virginia Teachers for Tomorrow Program
- Virginia Teaching Scholarship Loan Program



## Virginia's Plan to Address Teacher Equity

In November 2014, the United States Department of Education notified states that by June 1, 2015, they were to submit a State Plan to Ensure Equitable Access to Excellent Educators (State Plan) that ensures “poor and minority children are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers.” The Virginia Department of Education (VDOE) conducted extensive data analysis and convened a broad stakeholder group that engaged in in-depth discussions related to teacher equity issues. Following is a description of the groups that were invited to participate in the initial external stakeholder engagement meeting, along with 11 VDOE staff members from across several offices:

- Virginia Association of Elementary School Principals (VAESP);
- Virginia Association of Secondary School Principals (VASSP);
- Virginia Association of School Superintendents (VASS);
- Virginia Parent-Teacher Association (Virginia PTA);
- Virginia Education Association (VEA);
- Virginia State Special Education Advisory Council (VSSEAC);
- Virginia English as a Second Language Supervisors' Association (VESA);
- Virginia Association of Science Teachers (VAST);
- Virginia Council of Teachers of Mathematics (VCTM);
- Virginia Association of Teachers of English (VATE);
- Virginia Teachers of English to Speakers of Other Languages (VATESOL);
- Virginia Council for Exceptional Children (VCEC);
- Virginia State Council of Higher Education for Virginia (SCHEV);
- Teach Plus Teaching Fellows; and
- Higher Education and Teacher Preparation Programs.

School division representatives in each of the state's eight superintendents' education regions were comprised of people serving in the following functions:

- Content Specialists/  
Instructional Directors;
- Teacher Coaches;
- Human Resource Directors;
- Federal Programs Directors;
- Superintendents;
- Teachers;
- Principals;
- Special Education Directors;
- ESL Specialists; and
- New Teacher Mentoring  
Coordinators.

## Teacher Equity Gaps

The stakeholder group analyzed “equity gaps” between high-poverty and low-poverty schools and high-minority and low-minority schools in a number of areas including:

- Student academic achievement in meeting the federal Annual Measurable Objectives (AMOs) in reading/English, mathematics, and the federal graduation indicator;
- Highly Qualified Teachers, according to the federal definition;
- Inexperienced teachers;
- Out-of-field teachers;
- Teachers endorsed in English as a Second Language (ESL); and
- Teachers endorsed in special education.

The stakeholders identified five “teacher equity gaps” in Virginia:

1. School divisions with a large proportion of minority students have *more first-year teachers* than low-minority school divisions.
2. School divisions with a large proportion of minority students have a greater proportion of *out-of-field mathematics teachers* than low-minority school divisions.
3. School divisions with a large proportion of low-income students have a greater proportion of *out-of-field foreign language teachers* than high income school divisions.
4. School divisions with a large proportion of low-income students have a greater proportion of *out-of-field ESL teachers* than high income school divisions.
5. School divisions with a large proportion of low-income or minority students have a greater proportion of *out-of-field special education teachers* than low-minority, high income school divisions.

**Table 1. Teacher Equity Gaps in Virginia**

<b>High-Minority Schools Have More . . . Than Low-Minority Schools</b>	<b>High-Poverty Schools Have More . . . Than Low-Poverty Schools</b>
First-year teachers	Out-of-field foreign language teachers
Out-of-field mathematics teachers	Out-of-field ESL teachers
	Out-of-field special education teachers

Members of the stakeholder group discussed root causes, reviewed current/ongoing initiatives, and recommended potential strategies in several areas that cut across all the gap areas to address the equity gaps, including teacher preparation programs, teacher recruitment, working conditions, and professional development. They also addressed specific gap areas such as out-of-field mathematics, foreign language, and ESL teachers.

### **Teacher Preparation**

#### ***Root Causes***

- Additional teacher preparation in the following areas may be beneficial:
  - Diverse needs of at-risk students;
  - High-minority or high-poverty populations; and
  - Different grade spans.
- Insufficient numbers of teacher candidates are becoming licensed or endorsed in high-needs content or specialty areas.
- Teacher demographics do not reflect student demographics in high-needs schools.
- Teacher preparation programs at institutions of higher education (IHEs) are of disparate quality.

#### ***Current/Ongoing Strategies***

- The VDOE periodically revises the *Licensure Regulations for School Personnel* and the *Regulations Governing the Review and Approval of Education Programs in Virginia* to ensure that these standards reflect current needs of Virginia’s teaching work force.
- The VDOE continually works to strengthen the teacher preparation approval process.
- The Virginia Teaching Scholarship Loan Program provides scholarship funding for pre-service teachers to enter a high-needs school.

***Potential Strategies Recommended by Stakeholders***

- IHEs should strengthen alignment of teacher preparation programs, such as clinical experience, and practical classroom experiences. They should consider placing teachers in a variety of schools to gain experience in diverse settings.
- IHEs should strengthen diversity education in teacher preparation coursework so that all educators have an understanding of the needs of different subgroups of students such as students in poverty, English language learners, and students with disabilities.
- The VDOE should strengthen regulatory oversight of teacher preparation programs to ensure consistent program delivery across the state.
- The VDOE should strengthen preparation of teacher candidates to better prepare them for working in challenged schools.

***Action Steps***

As a result of these recommendations, the VDOE and IHEs are committed to convening a workgroup to recommend short- and long-term goals and action steps relating to teacher preparation, including discussions about clinical experiences, diversity training, and better preparation for working in challenged schools.

**Teacher Recruitment*****Root Causes***

- The teaching profession is not afforded prestige and respect by the public.
- Many rural school divisions are unable to:
  - Attract enough qualified candidates to meet demands;
  - Offer competitive salary packages and other incentives in comparison to more urban or affluent neighboring divisions; and
  - Offer an attractive quality of life to younger teachers.

***Potential Strategies Recommended by Stakeholders***

- The VDOE and school divisions should initiate a public service campaign to highlight the positive aspects of the teaching profession and school successes, such as “I Am the One” for special education or the former “Teachers Rock” campaign.
- The VDOE should make an online statewide recruitment tool available as a resource to recruit teachers.
- School divisions should use a variety of hiring strategies to attract teachers to hard-to-fill positions. For example:
  - Host regional job fairs;
  - Advertise through career centers at regional IHEs;

- Revise hiring timeline to be able to provide “early contract” options;
- Provide signing bonuses; and/or
- Offer loan forgiveness incentives or highlight existing loan forgiveness options.

### ***Action Steps***

As a result of these recommendations, the VDOE and IHEs committed to convening a workgroup to recommend short- and long-term goals and action steps for development of a campaign to highlight the teaching profession. Additionally, the VDOE issued a contract to continue a statewide teacher recruitment database, and the VDOE and school divisions committed to develop opportunities to highlight effective hiring strategies from successful high-poverty or high-minority school divisions (e.g., webinar series, conference presentations).

## **Working Conditions**

### ***Root Causes***

- Many teachers experience stress or “burnout” due to intensive demands and expectations, such as:
  - State or federal documentation requirements for instruction to certain subgroups;
  - State or federal school improvement requirements; and
  - Uncompensated duties such as remediating students or tutoring.
- Some school divisions do not provide sufficient support for school administrators.
- Many teachers feel they do not have enough leadership opportunities or voice in decision making.

### ***Current/Ongoing Strategies***

- The VDOE provides targeted assistance to school divisions with schools required to implement state or federal school improvement requirements to identify achievement gaps and improve academic achievement.
- The state School Leaders Licensure Assessment measures whether entry-level school administrators have the relevant knowledge necessary for competent professional practice.
- Regional Principal Coaching Initiatives strengthen school leadership through development of targeted mentoring programs for school administrators.
- A variety of state leadership conferences are hosted for school administrators through the Virginia Association of Elementary School Principals, the Virginia Association of Secondary School Principals, and the Virginia Association of School Superintendents.
- Specialized leadership training initiatives in the area of special education provide valuable training for school and division leaders:

- The Aspiring Special Education Leaders Academy is a yearlong program designed for educators who aspire to be in a leadership position and who are not currently a special education director.
- The New Special Education Directors Academy offers seminars throughout the year addressing relevant in-depth topics for new special education directors.
- Recent funding appropriated by the General Assembly is targeted for leadership development in high-needs schools and school divisions.
- Virginia was awarded over 13 million dollars in two five-year federal grants to support school climate transformation efforts and improve mental health services for students. “Project Aware” will provide training to teachers across the state to respond to mental health issues in students, while the “School Climate Transformation” grant augments funding appropriated by the Virginia General Assembly to expand training for teachers to implement “Positive Behavioral Interventions and Support” (PBIS) training.

***Potential Strategies Recommended by Stakeholders***

- School divisions should strengthen school leadership in high-needs schools by placing accomplished principals at these schools. School divisions also should provide division-level support to principals and other school leaders to ensure they are able to properly support teachers.
- School divisions should consider conducting a working conditions survey to accurately identify sources of stress for teachers that impact long-term stability in employment.

***Action Steps***

The VDOE committed to continue implementation of its school leadership training series and to conduct a webinar highlighting effective uses of working conditions surveys by school divisions.

**Professional Development**

***Root Causes***

- Some school divisions lack comprehensive training and support programs for teachers, including:
  - Ineffective induction and mentoring programs;
  - Lack of job-embedded coaching in content areas;
  - Lack of collaborative work groups or professional learning communities to address high-needs subgroups; and
  - Insufficient teacher preparation or professional development on instructional strategies to address content gaps.

***Current/Ongoing Strategies***

- The VDOE provides targeted assistance grants to high-needs regions for professional development. The Region VIII Education Center for School Improvement is an example of an effort to provide funding for professional development intended to support academic improvement in one of the state's most impoverished and rural regions.
- Technical Training and Assistance Centers (T/TAC) provide professional development support for special education through regional offices in each of the state's eight superintendents' education regions.
- State Agency for Higher Education (SAHE) Teacher Quality Activities grants fund professional development opportunities in high-needs schools. The state may explore the idea of adding an equity component as a priority to be included within the request for proposals.
- Co-teaching demonstration sites showcase general and special education teachers sharing responsibility for the achievement of all students in the general education classroom through co-teaching, collaboration, and implementation of inclusive and research-based practices. The VDOE selected 27 middle and high school classrooms to serve as co-teaching demonstration sites during the 2014-2015 school year and plans to continue the initiative into the 2015-2016 school year.
- The VDOE Content Teaching Academies offer high quality professional development that includes in-depth studies in a range of content areas. In addition, each Academy is designed to engage participants in critical dialogues of practice with instructional sessions conducted by scholars and master teachers who understand the challenges associated with today's classroom in working with diverse learners.
- The VDOE offers extensive professional development to educators working with ELLs at no cost. These offerings include trainings on English language development standards and lesson planning and effective instructional strategies for content area instruction for English Language Learners (ELLs).
- The Title III Statewide Consortium Conference is a two-day conference for Title III (English as second language) program coordinators and other key instructional staff participating in Virginia's Title III Statewide Consortium. The conference provides information related to creating effective Title III programs, examining best practices, ensuring compliance and implementing instructional strategies to address the needs of ELLs, particularly in school divisions with low numbers of ELLs. National experts, as well as local practitioners, are invited to present at the conference.

***Potential Strategies Recommended by Stakeholders***

- School divisions should establish pre-service and in-service division-level support structures that include:
  - Quality mentorship programs with tiered support;

- Job-embedded coaching for content or specialty areas;
- Appropriate induction and ongoing support; and
- Collaborative working groups or professional learning communities to share interdisciplinary approaches to instruction and address high-needs subgroups. The VDOE can support these efforts by highlighting divisions with effective practices.
- School divisions should collaborate with regionally-based IHEs to enhance professional development support for teachers. They should:
  - Negotiate tuition discounts to ease the financial burden of extra coursework for teachers interested in taking courses to strengthen their classroom management, content area knowledge, or pedagogy; and
  - Identify and apply for partnership grants to provide targeted trainings to teachers that address content-specific knowledge.
- The VDOE and school divisions should promote and encourage regional collaboration for joint professional development offerings.

### ***Action Steps***

The VDOE and school divisions committed to develop a plan to highlight effective professional development models from successful high-poverty or high-minority school divisions (e.g., webinar series, conference presentations).

## **Out-of-Field Mathematics Teachers**

### ***Unique Root Causes***

- Because of the demand for mathematics majors to enter other professions, most school divisions are unable to offer salaries that are competitive with the private non-education sector of the work force.
- Teachers who enter the profession through an alternate route to licensure do not complete student teaching, which may contribute to greater challenges in the classroom.
- Elementary teachers of mathematics may not have the content area expertise needed for effective instruction.

### ***Current/Ongoing Strategies***

- The Virginia Middle School Mathematics Teacher Corps places qualified, experienced mathematics teachers in challenged middle schools.
- Mathematics and Science Partnership (MSP) grants fund professional development opportunities in high-needs schools.
- The VDOE Mathematics Content Institutes provide in-depth content training to teachers to enhance content knowledge and instructional strategies.



- STEM Teacher Recruitment and Retention Incentive Awards provide incentives to attract and retain teachers in STEM content areas to work in high-needs schools.

### *Potential Strategies Recommended by Stakeholders*

- Encourage IHEs to develop a pilot program designed to prepare pre-service mathematics teachers to work in high-needs schools.
- School divisions should design “Grow Your Own” programs to increase diversity in the mathematics teaching force. One example is the “Call Me Mister” program at Clemson University which recruits young black males to the teaching profession. Another example is to create a “teacher cadet” program at local high schools.

### *Action Steps*

The VDOE and IHEs committed to convening a workgroup to develop recommendations and develop action steps regarding pilot pre-service preparation programs for mathematics teachers. The VDOE and school divisions committed to developing opportunities to highlight effective grow-your-own strategies from successful high-poverty or high-minority school divisions (e.g., webinar series, conference presentations).

## **Out-of-Field Foreign Language Teachers and ESL Teachers**

### *Unique Root Causes*

- Many school divisions face challenges planning for unexpected increases in ELL enrollment.
- Because the ESL endorsement is often sought after a teaching license is obtained, many teachers cannot absorb the additional expense of the 24 credit hours associated with the ESL endorsement.
- Insufficient numbers of teachers are dually endorsed in ESL and special education.
- Teacher candidates face challenges passing the Praxis exams for foreign language endorsements.

### *Current/Ongoing Strategies*

- The VDOE has partnered with certain IHEs to offer no-cost ESL endorsement programs for teachers in school divisions with critical ESL endorsement shortages.
- EducateVA is an alternate route certified career switcher program that provides ESL endorsement opportunities to candidates through community colleges.

***Potential Strategies Recommended by Stakeholders***

- School divisions should create a cohort of teachers already employed by school divisions to complete ESL endorsement programs. Consideration should be given toward the development of regional cohorts as well.
- The VDOE should continue to develop and offer opportunities for teachers in high-needs divisions to enroll in ESL endorsement programs at a reduced rate or no cost.
- IHEs should create cohorts of pre-service teachers to work with cohorts of practicing teachers seeking ESL endorsements.

***Action Steps***

The VDOE committed to dedicating a full-time position at the VDOE for professional development for teachers of ELLs. The VDOE, IHEs, and school divisions committed to planning and coordinating programs to assist high-needs school divisions to increase the number of ESL teachers on staff. The VDOE and school divisions committed to planning and coordinating professional development offerings targeted to the needs of teachers of ELLs.

Regarding teachers of foreign languages, stakeholders agreed that the greater priorities at the current time existed in the area of ESL-endorsed teachers working with ELLs, as well as mathematics and special education; however, the state will continue to monitor the data and make adjustments as warranted in future updates.

**Performance Objectives**

Virginia's Teacher Equity Plan established performance objectives in three specific areas of greatest perceived need:

- Mathematics teachers in high-minority schools;
- Special education teachers in high-poverty and high-minority schools; and
- ESL-endorsed teachers in high-poverty schools.

The following performance objectives have been established to measure overall effectiveness of targeted strategies for the three prioritized equity gaps.

- By December 2017, the gaps in the percentage of out-of-field special education teachers between high- and low-minority and high- and low-poverty schools will be reduced.
- By December 2017, all high-poverty school divisions in the state will have a properly endorsed ESL teacher to provide services to ELLs.
- By December 2017, the gap in the percentage of out-of-field mathematics teachers between high- and low-minority schools will be reduced.

## Recommendations on Strategies to Address the Shortage of Qualified Teachers in the Commonwealth of Virginia

In responding to the 2015 General Assembly's request for a legislative study on the shortage of qualified teachers and recommendations for strategies to address these shortages, research has shown that there are many initiatives and strategies currently under way in Virginia. In spring 2015, as part of its Teacher Equity Plan developed for the U.S. Department of Education, the Virginia Department of Education completed a thorough analysis of "equity gaps" that exist in Virginia's teaching work force in high-poverty versus low-poverty schools and high-minority versus low-minority schools, and evidence indicates that addressing the teacher shortages in these schools would result in great progress in addressing the critical shortage of teachers statewide.

Based on research conducted for this study and feedback from stakeholders, the following recommendations are offered:

### Teacher Preparation Programs

- As SCHEV continues to review data and develop strategies to implement its 2014 Strategic Plan (available at <http://www.schev.edu/schev/StrategicPlan.asp>), particular attention should be devoted to encouraging Virginia's colleges and universities to remain aware of the changing environments in Virginia's K-12 schools and seek options in their teacher preparation programs to meet these needs, especially in areas such as:
  - Diverse needs of at-risk students;
  - High-minority and/or high-poverty student populations; and
  - Experience in different grade spans for teacher candidates in PreK-12 endorsements such as fine arts, foreign languages, health and physical education, etc.
- The teacher preparation programs in Virginia's IHEs should:
  - Be challenged to pursue innovative practices to attract teacher candidates into teacher preparation programs in Virginia;
  - Work with local school divisions to offer tuition discounts to ease the financial burden of extra coursework required for credentialing in teaching shortage areas;
  - Identify and apply for grants to provide teachers targeted trainings that address content-specific knowledge;
  - Strengthen teacher preparation coursework so the clinical and practical experiences help all educators develop an understanding of the needs of 1) schools in diverse settings and 2) different subgroups of students, such as students in poverty, ELLs, and students with disabilities; and
  - Collaborate with the career placement offices at their institutions to promote teaching as a profession and provide information and assistance as needed.

## Funding and Resources

- The Virginia General Assembly should continue to provide incentive funding for programs to attract teaching candidates to areas that are hard to staff. Consideration may be given to providing additional funding to expand programs that have drawn particular interest from potential teaching candidates or that have demonstrated particular success, such as:
  - Mentoring programs for beginning teachers;
  - MonarchTeach at Old Dominion University, an innovative teacher preparation program that allows students majoring in mathematics, science, or technology to receive teacher licensure while earning a baccalaureate degree in their content area rather than having to continue in a master's degree program;
  - Teacher Residency Programs that include a residency year devoted to combined roles of co-teacher in a classroom under the guidance of mentor teachers and university faculty and full-time graduate student, earning a master's degree, followed by a commitment to teach in a hard-to-staff school;
  - The STEM Teacher Recruitment and Retention Incentive Awards;
  - The Virginia Middle School Teacher Corps;
  - The Virginia Teaching Scholarship Loan Program;
  - Leadership development programs for challenged schools and school divisions; and
  - Programs to enhance the teaching profession (such as the development of a public service campaign to highlight the positive aspects of the teaching profession and school successes in Virginia).
- Virginia should consider ways to support teacher candidates, such as:
  - Providing student loan forgiveness;  
[Allow teachers to cancel a percentage of their student loans for each year they teach in a critical shortage area or challenged school.]
  - Developing higher education programs (perhaps online) to meet professional studies requirements for alternate route teachers;
  - Funding the Department of Education to contract for professional studies requirements for alternate route teachers aligned with training specific to school needs, such as challenged schools;
  - Providing academic support for teacher candidates in rigorous academic majors;
  - Paying fees for teacher candidates to take assessments required for a teaching license in Virginia, such as Praxis tests and the Virginia Communication and Literacy Assessment; and
  - Paying for or subsidizing child care so that teacher candidates may complete classroom observations, practicums, and/or student teaching.
- Virginia should consider ways to attract and retain licensed teachers, such as:
  - Increasing total teacher compensation, including both direct and indirect compensation, such as contributions toward health insurance and retirement;

A 2015 report by the Rutgers Graduate School of Education<sup>2</sup> noted that in 2012, the average 25-year-old teacher in Virginia made only 69 percent of the salary of a non-teacher in the same labor market who is of similar education, hours worked, and age – the lowest in the nation. The same report noted that the average 45-year-old teacher made 60 percent of the salary of a non-teacher under the same conditions – tied for lowest with Arizona.

- Offering additional retirement credit to attract individuals to teach in critical shortage areas or in challenged schools;
  - Offering retirement benefits to part-time teachers;
  - Expanding programs that focus not only on *recruiting* teachers to the profession but on *retaining* them in the classroom, such as funding support for induction, coaching/mentoring, and increased professional development;
  - Rewarding teachers for mentoring/coaching and providing professional development to veteran teachers on how to serve as effective mentors/coaches;
  - Providing additional funding to support signing bonuses or differential compensation for teachers in critical shortage areas or challenged schools;
  - Providing relocation bonuses to help teachers relocate to a Virginia school division;
  - Providing assistance with housing, such as funding for a down payment on a first home, providing grants to purchase and refurbish an urban house, or identifying housing options in rural areas, perhaps with subsidized rent for beginning teachers;
  - Providing career paths for teachers to become instructional leaders without leaving the classroom, (i.e., lead teacher positions rather than having to become school administrators to increase their compensation);
  - Reviewing licensure options, such as an adjunct license for career and technical education; and
  - Providing classroom materials and resources to teachers so they do not feel compelled to purchase instructional items with their personal funds.
- Virginia should consider ways to provide a program for paraprofessionals to become licensed teachers.

### School Divisions

School divisions should consider:

- Implementing strategies noted above that could be effective in their localities;
- Increasing the number of “Grow Your Own” programs that promote teaching as a career to middle and high school students;
- Establishing “Teachers for Tomorrow” programs that identify, train, and nurture high school students interested in a teaching career and provide students the opportunity to earn dual enrollment credit at an institution of higher education;

<sup>2</sup> Rutgers Graduate School of Education. (spring 2015). *Is School Funding Fair? A National Report Card*, <http://schoolfundingfairness.org/>. Retrieved September 3, 2015.

- Providing differential compensation and bonuses; and
- Seeking innovative ways to provide flexibility in the teaching schedule, such as position sharing.

### Collaborative Initiatives

- The VDOE, SCHEV, Virginia's school divisions, and other partners should continue implementation of Virginia's Teacher Equity Plan. Virginia's complete plan, including research background and action steps, is available online at <http://www2.ed.gov/programs/titleiparta/equitable/vaequityplan060115.pdf>. Areas of particular interest include:
  - Reducing the equity gaps among high-poverty versus low-poverty schools and high-minority versus low-minority schools, especially in the areas of out-of-field teachers in:
    - Mathematics;
    - Special education; and
    - English as a Second Language; and
  - Continued use of TeachVirginia, Virginia's online statewide recruitment tool.
- The VDOE and SCHEV should continue to collaborate in determining priority areas for the use of federal State Agency for Higher Education (SAHE) Teacher Quality Funds, including the possible addition of adding an equity component as a priority to be included within the request for proposals from IHEs.
- The four-year colleges and universities and the community colleges should work together to strengthen preparation for teaching majors at the community college with joint advising and agreements to ensure that students transferring from the community colleges have completed sufficient higher-level content courses to be able to enter the teacher preparation programs at the four-year institutions.

### Policies

- The VDOE should highlight for school divisions and IHEs provisions within the *Licensure Regulations for School Personnel* that offer pathways for already licensed teachers to become licensed in additional areas of need. A special focus might include:
  - Establishing teacher preparation programs that allow students to complete a college major and earn a teaching license within four years rather than having to pursue a master's degree to obtain a teaching license;
  - Taking a test to add an endorsement area;
  - Seeking an add-on endorsement in Algebra I;
  - Qualifying for multiple endorsements, such as Elementary Education PreK-6 and special education, or Middle Education 6-8 and Algebra I;
  - Exercising provisions within the revised *Licensure Regulations for School Personnel* (Effective September 9, 2015) such as:

- A provisional license for career and technical education teachers who have not attained an industry certification credential in the area in which the teacher seeks endorsement; and
- Recognizing that teachers with an undergraduate degree may pursue license renewal options other than college credit-bearing coursework to renew their teaching licenses.
- Pursuing the add-on endorsement in Special Education - General Curriculum proposed in revisions to Virginia's *Licensure Regulations for School Personnel*.
- Additional policy actions might include:
  - Reducing from five to three the number of years of full-time work experience required to enter Virginia's Career Switcher Program; and
  - Adding additional tests that would allow teachers to take a test to add an endorsement area, such as English as a Second Language.

## References

- Brown, E. (2015, April 30). *Study: Far fewer new teachers are leaving the profession than previously thought*. Retrieved July 9, 2015, from <http://www.washingtonpost.com/news/local/wp/2015/04/30/study-new-teacher-attrition-is-lower-than-previously-thought/>
- Education Commission of the States. (n.d.). *50-State Analysis From the ECS State Policy Database-Teacher Recruitment and Retention*. Retrieved July 3, 2015, from <http://b5.caspio.com/dp.asp?AppKey=b7f93000695b3d0d5abb4b68bd14&id=a0y70000000Cbu0AAC>
- Hanna, R. & Pennington, K. (2015, January 8). *Despite Reports to the Contrary, New Teachers Are Staying in Their Jobs Longer*. Retrieved July 1, 2015, from <https://www.americanprogress.org/issues/education/news/2015/01/08/103421/despite-reports-to-the-contrary-new-teachers-are-staying-in-their-jobs-longer/>
- Ingersoll, R., Merrill, L., & Stuckey, D. (Updated 2014, April). *Seven Trends: The Transformation of the Teaching Force*. Retrieved July 2, 2015, from <https://www.documentcloud.org/documents/1115249-cpre-seven-trends-the-transformation-of-the.html>
- Perda, D. (2013). *Transitions Into and Out of Teaching: A Longitudinal Analysis of Early Career Teacher Turnover*. Philadelphia: Dissertation, University of Pennsylvania.
- University of Virginia, Weldon Cooper Center for Public Services. (2015). *Enrollment Projections for Virginia Public Schools, 2009-10 to 2014-15*. Retrieved July 30, 2015, from [http://www.coopercenter.org/sites/default/files/node/13/SchoolProjections\\_EnrollmentADMreport\\_April2011.pdf](http://www.coopercenter.org/sites/default/files/node/13/SchoolProjections_EnrollmentADMreport_April2011.pdf)
- Virginia Department of Education. (2015, June). *Virginia's Plan to Ensure Excellent Educators for All Students*. Retrieved July 15, 2015, from <http://www2.ed.gov/programs/titleiparta/equitable/vaequityplan060115.pdf>



## Appendix A

**House Joint Resolution No. 558**

*Requesting the Virginia Department of Education and the State Council of Higher Education for Virginia to examine shortages of qualified teachers generally and in certain teaching endorsement areas and to recommend strategies for addressing these shortages.*

Agreed to by the House of Delegates, February 9, 2015. Agreed to by the Senate, February 24, 2015

WHEREAS, the Commonwealth is experiencing a shortage of qualified teachers generally and a critical shortage of qualified teachers in certain teaching endorsement areas; and

WHEREAS, paragraph G 1 a of Item 138 of Chapter 806 of the Acts of Assembly of 2013 (the Appropriation Act), as amended, requires the Department of Education (the Department) to report on the critical shortage teaching endorsement areas in the public elementary and secondary schools of the Commonwealth for the 2014-2015 school year; and

WHEREAS, in fulfillment of its reporting requirement, the Department has determined that the 2014-2015 school year's most critical teaching endorsement areas are, in order: special education, elementary education preK-6, middle education grades 6-8, career and technical education, mathematics grades 6-12, school counselor preK-12, foreign languages preK-12, health and physical education preK-12, English, and history and social sciences; and

WHEREAS, the State Council of Higher Education for Virginia (the Council), in fulfillment of its statutory duty in § [23-9.6:1](#) of the Code of Virginia, has developed a new statewide strategic plan for higher education in the Commonwealth and, over the course of developing such plan in 2014, the Council has also identified shortages and gaps in the supply of qualified teachers in the public elementary and secondary schools of the Commonwealth and its regions; and

WHEREAS, the Council is developing performance measures, indicators, and targets to monitor and assess progress toward achievement of the statewide strategic plan's goals, which include advancing the economic and cultural prosperity of the Commonwealth and its regions; and

WHEREAS, it is imperative to the future of the Commonwealth's children, public system of education, and economic and cultural well-being for the higher education community and the elementary and secondary education community to examine and address the general shortage of qualified teachers and any specific statewide and regional deficiencies identified in teaching endorsement areas; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, that the Virginia Department of Education and the State Council of Higher Education for Virginia be requested to examine shortages of qualified teachers generally and in certain teaching endorsement areas and to recommend strategies for addressing these shortages.

The Virginia Department of Education and the State Council of Higher Education for Virginia shall submit to the Division of Legislative Automated Systems an executive summary and report of their progress in meeting the requests of this resolution no later than the first day of the 2016 Regular Session of the General Assembly. The executive summary and report shall be submitted for publication as a report document as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.

Appendix B

**Top Ten Critical Shortage Teaching Endorsement Areas in Virginia  
2010-2011 through 2015-2016**

Rank	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1	Special Education	Special Education	Special Education	Special Education	Special Education	Special Education
2	Elementary Education PreK-6	Elementary Education PreK-6	Elementary Education PreK-6	Elementary Education PreK-6	Elementary Education PreK-6	Elementary Education PreK-6
3	Middle Education Grades 6-8	Middle Education Grades 6-8	Middle Education Grades 6-8	Middle Education Grades 6-8	Middle Education Grades 6-8	Middle Education Grades 6-8
4	Career and Technical Education	Career and Technical Education	Career and Technical Education	Career and Technical Education	Career and Technical Education	Career and Technical Education
5	Mathematics Grades 6-12 (including Algebra I)	Mathematics Grades 6-12 (including Algebra I)	Mathematics Grades 6-12 (including Algebra I)	Mathematics Grades 6-12 (including Algebra I)	Mathematics Grades 6-12 (including Algebra I)	Mathematics Grades 6-12 (including Algebra I)
6	Science Grades 6-12	Science Grades 6-12	School Counselor PreK-12	School Counselor PreK-12	School Counselor PreK-12	School Counselor PreK-12
7	Foreign Languages PreK-12	Foreign Languages PreK-12	Foreign Languages PreK-12	Science Grades 6-12	Foreign Languages PreK-12	Foreign Languages PreK-12
8	School Counselor PreK-12	School Counselor PreK-12	Science Grades 6-12	Foreign Languages PreK-12	English Grades 6-12	English Grades 6-12
9	Health and Physical Education PreK-12	Health and Physical Education PreK-12	English as a Second Language PreK-12	English Grades 6-12	Health and Physical Education PreK-12	Health and Physical Education PreK-12
10	English Grades 6-12	English Grades 6-12	Health and Physical Education	Health and Physical Education	History and Social Sciences (Secondary)	History and Social Sciences (Secondary)

Virginia Department of Education, Retrieved July 15, 2015, from [http://www.doe.virginia.gov/teaching/workforce\\_data/index.shtml](http://www.doe.virginia.gov/teaching/workforce_data/index.shtml)

Appendix C

**Legislation Enacted in Other States to Address Teacher Shortages  
2006 - 2015**

The Education Commission for the States (ECS) maintains a Teacher Quality – Recruitment and Retention Database, available at <http://b5.caspio.com/dp.asp?AppKey=b7f93000695b3d0d5abb4b68bd14&id=a0y70000000Cbu0AAC>, which reports educational policies and practices from all 50 states. The following list, retrieved on July 3, 2015, provides examples of strategies and requirements related to teacher critical shortages in practice in various states. The list is representative only and may not include all policies and practices that are in place in all states. Additionally, some strategies may no longer be active, and funding for some programs may no longer be available.

<b>Strategy/Requirement</b>	<b>State(s) and Date of Legislative Action</b>
<b>Licensure Requirements</b>	
Alternative certification programs, including for early childhood education (CT)	CT (2006), NC (2013), OH (2006)
Modified teacher certification requirements	CT (2015)
<ul style="list-style-type: none"> <li>• Requires reciprocity agreements with other states</li> </ul>	
<ul style="list-style-type: none"> <li>• Decreases from three to two years the amount of teaching experience an out-of-state teacher needs to qualify for a teaching license</li> </ul>	
<ul style="list-style-type: none"> <li>• State Board permitted to issue a temporary 90-day certificate in endorsement areas where critical shortage exists</li> </ul>	
Licensing authority must approve or deny within 30 days of receipt applications from educators certified in another state to teach high-need subjects	TX (2009)
<b>Funding</b>	
Teacher loan assistance and forgiveness programs	CO (2008), HI (2007), KY (2009, 2008), MO (2007), MT (2007), NE (2015, 2009), OR (2011), SC (2011), UT (2007), WV (2015, 2013), WY (2007)
Scholarships/fellowships to future teachers who meet certain eligibility requirements	AL (2010), IL (2006), KS (2007, 2006), KY (2009), MD (2014), MO (2008, 2006), SD (2012)
Provides a one-year grace period for repayment for certain recipients of a teacher loan	SC (2010)

<b>Strategy/Requirement</b>	<b>State(s) and Date of Legislative Action</b>
Tuition waivers/scholarships for teacher aides/paraeducators to become teachers in critical shortage areas, including early childhood education (IL)	IL (2007), KS (2006), NC (2007), TX (2011), UT (2008)
Mathematics and science teacher tuition reimbursement for teachers on a transitional certificate to complete teaching requirements	NY (2007)
Scholarships for teachers to pursue master's degrees	KS (2006)
Financial aid offered to prospective teachers of diverse backgrounds to become teachers in high-minority schools	MN (2008)
Local school board may offer higher compensation to fill teaching positions where only 45 days remain to the start of the school year or when a hard-to-fill position becomes vacant during the school year	ND (2007)
School districts guaranteed to receive funds for the following school year equivalent to 98 percent of the estimated student count to enable districts to make offers of employment to new teachers in late spring and early summer	DE (2011)
Community College Transfer Grant Program to provide financial assistance to eligible students for the costs of attending an institution that awards baccalaureate degrees	IL (2010)
<b>Teacher Mentoring and Support</b>	
Mentoring and coaching for teachers required	OH (2009)
Funding provided to support beginning teacher mentoring and induction programs	IA (2006)
<b>Teacher Preparation</b>	
Appropriation to develop a secondary-level agricultural science teacher training continuum and to provide incentive funding grants to agriculture science teacher education programs at selected public universities	IL (2007)
Scholarships offered to teachers returning to college to receive an additional certification	AR (2009), KY (2008)
Summer institutes to help teachers earn college credits to become certified in critical shortage areas	KY (2008)
Funds appropriated for public school teachers and candidates to take preparatory courses, tutorials, or programs for the Praxis examinations	HI (2008)
Incentive awards offered to undergraduate and graduate students leading to a teaching career in secondary mathematics or science	NY (2006)
<b>Hiring of Specific Populations</b>	

Strategy/Requirement	State(s) and Date of Legislative Action
Reemployment of retired teachers	CA (2013, 2011), GA (2008), HI (2008, 2006), IL (2012, 2008, 2006), KY (2008), LA (2006), MD (2007), ME (2014), MT (2015), NC (2007), OK (2008), OR (2007), SC (2014), WA (2007)
Reemployment of retired police officers as teachers	NY (2007)
Reemployment of retired state employees as teachers	LA (2007)
Troops to Teachers and other policies/programs to encourage veterans to become teachers	AR (2013), IN (2014), MS (2008), NJ (2012)
Identifies as a minority any person whose first language is not English and requires school districts and public teacher education programs to increase by 10 percent the number of minority students enrolled by July 1, 2015	OR (2013)
<b>Salaries</b>	
Permits school districts to offer teachers financial incentives such as signing bonuses, moving expenses, or tuition reimbursement	SD (2015)
Permits a district superintendent to increase the salary for certain teachers on its adopted employee salary schedule	CA (2009)
Leadership premium payments to teachers serving in a leadership role	ID (2014)
Incentives/bonuses for national board certified teachers	AR (2009), IA (2006), WY (2007)
Develop guidelines for a paid teacher residency/internship program that may be offered at each IHE for prospective teachers. Beginning in 2015-2016, each school district is required to participate.	OK (2014)
Funding provided for salary supplements to newly hired mathematics and science teachers	NC (2006)
Special educators receive stipends for additional days of work for added duties and responsibilities in complying with federal special education requirements	UT (2008)
Performance Pay/Merit Pay/Strategic Compensation Plans/Pilots	IA (2006), NV (2007), NC (2007)
<b>Special Programs (Teacher for America, Teacher Corps, Grow Your Own)</b>	

Strategy/Requirement	State(s) and Date of Legislative Action
Teach for America (TFA) and related programs, such as Teach Back Home (recruiting TFA candidates who are North Carolina residents) and Teach Beyond Two and Make It Home (encouraging teaching commitments beyond TFA’s required two years)	DE (2012, 2009, 2007), MS (2008), NC (2013), OK (2008), SD (2012)
Grow Your Own programs to recruit and train high school students to pursue future careers in education	IL (2009, 2008, 2007, 2006), NM (2011), OH (2009)
Visiting International Faculty, bringing international teachers to teach in critical shortage areas	CT (2007)
<b>Employment Policies</b>	
Employment retention priority may not be based only on tenure or seniority	AZ (2009)
Online state job posting system for teaching positions in the state	IA (2013)
<b>Other Incentives</b>	
High-priority school districts receive additional incentives for teacher recruitment and retention in the form of funding for teacher signing bonuses and supplements to match surrounding school district salaries.	AZ (2009) ), UT (2008)
Educational staff associates may receive service credit for non-school employment (occupational therapists, physical therapists, speech-language pathologists, audiologists, nurses, social workers, counselors, and psychologists).	WA (2007)
Financial incentives for teachers to relocate and teach in low-performing schools in disadvantaged and under-served areas of the state	FL (2006), LA (2006)

Appendix D

Approved Teacher Educator Programs in Virginia – November 2015

November 20, 2015	Grade Level				Administration and Supervision and Personnel Support					
APPROVED EDUCATOR PREPARATION PROGRAMS	<i>Early/Primary Education PreK-3</i>	<i>Elementary Education PreK-6</i>	<i>Middle Education 6-8</i>	<i>Adult Education</i>	<i>Administration and Supervision PreK-12</i>	<i>Math Specialist for Elementary/Middle Education</i>	<i>Reading Specialist</i>	<i>School Counselor PreK-12</i>	<i>School Psychology</i>	<i>School Social Worker</i>
LEGEND: U = Undergraduate Program G = Graduate Program										
Averett University		U,G			G		G			
Bluefield College		U								
Bridgewater College		U								
Christopher Newport University		G								
College of William and Mary		U,G			G	G	G	G	G	
Eastern Mennonite University	U	U					G			
Emory and Henry College	U,G	U,G	U				G			
Ferrum College		U								
George Mason University	G	G			G	G	G	G	G	
Hampton University	U	U,G			G			G		
Hollins University		U,G								
James Madison University	U,G	G	G		G	G	G	G	G	
Liberty University		U,G	U,G		G	G	G	G		
Longwood University		U,G	U		G	G	G	G		
Lynchburg College		U			G		G	G		
Mary Baldwin College		U,G	U,G				G			
Marymount University		U,G			G			G		
Norfolk State University	U	U,G			G	G		G		G
Old Dominion University	G	G	G		G	G	G	G		
Radford University	G	U,G	U		G		G	G	G	G
Randolph College		U								
Randolph Macon College		U								
Regent University		U,G			G	G	G	G		
Roanoke College		U								
Shenandoah University		U,G	U,G		G					
Sweet Briar College		G								
University of Mary Washington		G	G		G		G			
University of Richmond		U			G					
University of Virginia		G			G	G	G	G	G	
Univ. of Virginia's College at Wise		U								
Virginia Commonwealth University		G			G	G	G	G		G
Virginia State University		U,G			G	G		G		
Virginia Tech		G			G	G	G	G		
Virginia Union University		U								
Virginia Wesleyan College		U	U							
Washington and Lee University		U	U							



**VIRGINIA DEPARTMENT OF EDUCATION**

November 20, 2015	Foreign Languages PreK-12										Career and Technical Education				
APPROVED EDUCATOR PREPARATION PROGRAMS	Arabic	Chinese	French	German	Italian	Japanese	Korean	Spanish	Russian	Latin	Agricultural Education	Business and Information Technology	Marketing Education	Technology Education	Family and Consumer Sciences
LEGEND: U = Undergraduate Program G = Graduate Program															
Averett University															
Bluefield College												U,G			
Bridgewater College			U					U							U
Christopher Newport University								G							
College of William and Mary		U,G	U,G	U,G				U,G		U,G					
Eastern Mennonite University								U							
Emory and Henry College			U,G					U,G				U,G			
Ferrum College								U	U		U				
George Mason University	G	G	G	G		G	G	G		G					
Hampton University															
Hollins University			U,G					U,G		U,G					
James Madison University			U,G	U,G	U			U,G						G	
Liberty University								U,G				U,G			U,G
Longwood University			U,G	U,G				U,G							
Lynchburg College			U					U							
Mary Baldwin College			U					U				U			
Marymount University															
Norfolk State University			U					U				U			
Old Dominion University			U	U				U					U	U,G	
Radford University								U,G							
Randolph College			U					U		U					
Randolph Macon College			U	U				U		U					
Regent University															
Roanoke College			U	U				U							
Shenandoah University								U,G				U,G			
Sweet Briar College			G	G				G		G					
University of Mary Washington			G	G				G		G					
University of Richmond			U	U				U		U					
University of Virginia		G	G	G				G		G					
Univ. of Virginia's College at Wise			U					U				U			
Virginia Commonwealth University															
Virginia State University											U				U
Virginia Tech			G	G				G		G	G	G	G		G
Virginia Union University												U			
Virginia Wesleyan College			U	U				U		U					
Washington and Lee University		U	U	U				U		U					

**VIRGINIA DEPARTMENT OF EDUCATION**

November 20, 2015	PreK-12 Endorsements							
APPROVED EDUCATOR PREPARATION PROGRAMS	<i>Dance Arts</i>	<i>English as a Second Language</i>	<i>Health and Physical Education</i>	<i>Library Media</i>	<i>Music Education – Instrumental</i>	<i>Music Education – Vocal/Choral</i>	<i>Theatre Arts</i>	<i>Visual Arts</i>
LEGEND: U = Undergraduate Program G = Graduate Program								
Averett University			U,G				U,G	U,G
Bluefield College			U		U,G	U,G	U,G	U,G
Bridgewater College		U	U		U	U	U	U
Christopher Newport University		G			G	G		G
College of William and Mary		U,G						
Eastern Mennonite University		U,G	U		U	U	U	U
Emory and Henry College		U	U,G		U,G	U		U
Ferrum College			U				U	U
George Mason University	U	G	U		U	U	U,G	G
Hampton University			U		G	G		
Hollins University						U,G		U,G
James Madison University	U	U,G	G		U,G	U,G	U	U
Liberty University		U,G	U,G		U,G	U,G	U,G	U,G
Longwood University		U,G	U	G	U	U	U	U
Lynchburg College			U		U	U	U	U
Mary Baldwin College		U,G				U	U,G	U
Marymount University		G						U
Norfolk State University			U		U	U		U,G
Old Dominion University	U	G	U,G	G	U	U	U	U
Radford University	U		U		U	U		U
Randolph College	U	G	U		U	U	U	U
Randolph Macon College					U	U		
Regent University		G						
Roanoke College		U	U			U	U	U
Shenandoah University			U,G		U	U		
Sweet Briar College	G				G	G	G	G
University of Mary Washington		G			G	G		G
University of Richmond	U	U,G					U	U
University of Virginia		G	G					
Univ. of Virginia's College at Wise			U	U	U	U	U	
Virginia Commonwealth University		G	U,G		U,G	U,G		U,G
Virginia State University			U		U	U		
Virginia Tech		G			G	G		
Virginia Union University								
Virginia Wesleyan College						U	U	U
Washington and Lee University					U	U	U	U

November 20, 2015	Secondary Grades 6-12							
APPROVED EDUCATOR PREPARATION PROGRAMS	<i>Computer Science</i>	<i>English</i>	<i>History and Social Science</i>	<i>Mathematics</i>	<i>Science - Biology</i>	<i>Science - Chemistry</i>	<i>Science - Earth Science</i>	<i>Science - Physics</i>
LEGEND: U = Undergraduate Program G = Graduate Program								
Averett University	U,G	U,G	U,G	U,G	U,G			
Bluefield College		U	U,G	U	U,G	U		
Bridgewater College		U	U	U	U	U		U
Christopher Newport University		G	G	G	G	G		G
College of William and Mary		U,G	U,G	U,G	U,G	U,G	U,G	U,G
Eastern Mennonite University	U	U	U	U	U	U		
Emory and Henry College		U,G	U,G	U,G	U	U	U	U
Ferrum College	U	U	U	U	U	U		
George Mason University		G	G	G	G	G	G	G
Hampton University		G		G	G			
Hollins University		U,G	U,G	U,G	U,G	U,G		U,G
James Madison University		G	G	G	G	G	G	G
Liberty University	U,G	U,G	U,G	U,G	U,G	U,G		
Longwood University		U,G	U	U	U	U		U
Lynchburg College		U	U	U	U	U	U	U
Mary Baldwin College		U,G	U,G	U,G	U	U	U	U
Marymount University		U,G	U,G	U,G	U,G	G	G	G
Norfolk State University		U,G	U,G	U,G	U,G	U,G		U,G
Old Dominion University		U,G	U,G	U,G	U,G	U,G	U,G	U,G
Radford University		U,G	U,G	U,G	U,G	U,G	U,G	U,G
Randolph College		U	U	U	U	U	U	U
Randolph Macon College		U	U	U	U	U		U
Regent University		U	U	U				
Roanoke College	U	U	U	U	U	U		U
Shenandoah University		U,G	U,G	U,G	U,G	U,G		
Sweet Briar College		G	G	G	G	G		G
University of Mary Washington	G	G	G	G	G	G	G	G
University of Richmond		U	U	U	U	U		U
University of Virginia		G	G	G	G	G	G	G
Univ. of Virginia's College at Wise		U	U	U	U	U	U	
Virginia Commonwealth University		G	G	G	G	G	U,G	G
Virginia State University		U	U	U	U	U		U
Virginia Tech		G	G	G	G	G	G	G
Virginia Union University		U	U	U	U	U		
Virginia Wesleyan College		U	U	U	U	U	U	
Washington and Lee University	U	U	U	U	U	U	U	U

**VIRGINIA DEPARTMENT OF EDUCATION**

November 20, 2015	Special Education				
APPROVED EDUCATOR PREPARATION PROGRAMS	<i>Early Childhood Special Education (Birth through Age 5)</i>	<i>Adapted Curriculum K-12 (*Indicates that the institution is part of a consortium that offers an endorsement in Adapted Curriculum)</i>	<i>General Curriculum K-12</i>	<i>Hearing Impairments PreK-12</i>	<i>Visual Impairments PreK-12 (**There are no VI approved programs, but these institutions are part of a consortium offering a VI endorsement.)</i>
Averett University			U,G		
Bluefield College			U		
Bridgewater College					
Christopher Newport University					
College of William and Mary			G		
Eastern Mennonite University			U		
Emory and Henry College			G		
Ferrum College					
George Mason University	G	*	G		**
Hampton University			G		
Hollins University					
James Madison University	G	G	G		**
Liberty University			U,G		
Longwood University			U,G		
Lynchburg College	G	G	U,G		
Mary Baldwin College			U,G		
Marymount University			U,G		
Norfolk State University	G	*	U,G		**
Old Dominion University	U,G	U,G	U,G		**
Radford University	G	G	G	U,G	**
Randolph College			G		
Randolph Macon College			U		
Regent University			G		
Roanoke College					
Shenandoah University			G		
Sweet Briar College			G		
University of Mary Washington		G	G		
University of Richmond			U,G		
University of Virginia	G	*	G		
Univ. of Virginia's College at Wise			U		
Virginia Commonwealth University	G	*	G		
Virginia State University			U,G		
Virginia Tech					
Virginia Union University			U		
Virginia Wesleyan College			U		
Washington and Lee University					

**VIRGINIA DEPARTMENT OF EDUCATION**

November 20, 2015	Add-on Endorsements								
APPROVED EDUCATOR PREPARATION PROGRAMS	<i>Adult English as a Second Language</i>	<i>Dance Arts</i>	<i>Driver Education</i>	<i>Early Childhood 3- and 4-Year Olds</i>	<i>Gifted Education</i>	<i>Journalism</i>	<i>Keyboarding</i>	<i>Mathematics - Algebra I</i>	<i>Speech Communication</i>
LEGEND: U = Undergraduate Program G = Graduate Program									
Averett University			U		G	U			U,G
Bluefield College						U		U	U
Bridgewater College			U					U	
Christopher Newport University									
College of William and Mary					G			U,G	
Eastern Mennonite University						U			
Emory and Henry College			U					U	
Ferrum College						U		U	
George Mason University			U		G			G	
Hampton University									
Hollins University									
James Madison University					G	U		U	
Liberty University				G	G	U		U	U
Longwood University			U					U,G	
Lynchburg College								U	
Mary Baldwin College					G			U	
Marymount University									
Norfolk State University			U	G					
Old Dominion University			U			U		U	
Radford University			U		G			U	
Randolph College								U	
Randolph Macon College									
Regent University					G				
Roanoke College						U		U	U
Shenandoah University					G			U	
Sweet Briar College					G				
University of Mary Washington					G	U		U	U
University of Richmond					G	U		U	U
University of Virginia				G	G			G	
Univ. of Virginia's College at Wise			U					U	
Virginia Commonwealth University									
Virginia State University			U					G	
Virginia Tech						G			
Virginia Union University									
Virginia Wesleyan College									
Washington and Lee University						U		U	

## Appendix E

**Teacher Recruitment and Retention Initiatives at  
Virginia Institutions of Higher Education****Averett University****Shining Stars**

*Staff Contact Name:* Alexis Ehrhardt

*Funding* – Local grant

*Description of the Initiative* – Summer STEM Academy for 9-12 grade students

*Targeted Audience* – Students in grades 9-12

*Dates/Years Implemented* – 2010-2015

*Effectiveness/Outcomes* – Nineteen of the 20 original participants completed the program.

**Extended Satellite Campuses for On-Ground and Online Student Access**

*Staff Contact Name:* Stacy Gato

*Funding* – Enrollment/Marketing Account

*Description of the Initiative* – Extend access to higher education across the state

*Targeted Audience* – New students

*Dates/Years Implemented* – Ongoing

*Effectiveness/Outcomes* – The 2015 freshman class is the largest since 2000.

**Aggressive Marketing Strategy**

*Staff Contact Name:* Stacy Gato

*Funding* – Marketing Account

*Description of the Initiative* – Strategic growth plan implementation relative to diversifying enrollment growth

*Targeted Audience* – New students

*Dates/Years Implemented* – 2013

*Effectiveness/Outcomes* – The 2015 freshman class is the largest since 2000.

### **Averett Open House Events**

*Staff Contact Name:* Joel Nester

*Funding* – General Fund

*Description of the Initiative* – Preview days for students and parents to visit campus and talk with department representatives

*Targeted Audience* – Prospective students and parents

*Dates/Years Implemented* – Ongoing

*Effectiveness/Outcomes* – The 2015 freshman class is the largest since 2000.

### **Targeted Advising**

*Staff Contact Name:* Stacy Gato

*Description of the Initiative* – Concerted effort to explain and discuss critical shortages of teachers with STEM licenses related to availability of jobs and signing bonuses

*Targeted Audience* – Prospective STEM pre-service teachers

*Dates/Years Implemented* – Ongoing

## **Bluefield College**

### **Master of Arts in Education with Teacher Licensure**

*Staff Contact Name:* Dr. Donna Hardy Watson

*Description of the Initiative* – In response to baccalaureate-degreed individuals interested in pursuing a master's degree, the School of Education at Bluefield College launched an online Master of Arts in Education in the fall 2013, with the first four graduating on May 9, 2015. The first graduates were licensed teachers, and to ensure quality, they presented action research projects to a panel of division superintendents.

In order to address the critical teaching shortages, the College is working to add additional endorsements to the online Master of Arts program. Faculty at the College believe that by recruiting the College's own graduates who graduate in a high-need field and expanding opportunities for other candidates who have majors in critical shortage areas, the pool of qualified candidates for licensure will increase.

*Targeted Audience* – Baccalaureate degreed individuals desiring to earn a teaching license through an approved program.

*Dates/Years Implemented* – Fall 2014 to the present. The schedule to apply for endorsements in additional areas is as follows: Biology in 2015; Special Education and Mathematics in 2016; and Chemistry in 2017.

*Effectiveness/Outcomes* – The first graduates in the Master of Education program leading to licensure are expected in spring 2016.

## **Bridgewater College**

### **Steps to Improve Existing Programs**

*Staff Contact Name:* Dr. Jean Roth Hawk

*Description of the Initiative* – Bridgewater College offers an Elementary PreK-6 program, resulting in 18 licensure applications in 2015, and an average of 25 each during the past three years. The revised and revitalized Career and Technical Education: Family and Consumer Science program has been of renewed interest, with two licenses issued in 2015, and an expectation that this number will increase. The College has hired a secondary coordinator with a teaching license in mathematics and physics, and his presence should help with recruitment in mathematics and the sciences. Additionally, in recent years, the Bridgewater program has had successful licensure candidates in additional licensure programs, including foreign languages, health and physical education, English, and history and social science.



## **Teaching Fellows in Education**

*Staff Contact Name:* Dr. Jean Roth Hawk

*Funding* – \$150,000 for the three-year project

*Description of the Initiative* – The teaching fellowship program was created for the targeted purpose of bringing diverse faculty members into Bridgewater College classrooms. The College proposes to create a teaching fellowship program to attract ethnically diverse Ph.D. candidates who have completed “all but dissertation” or are recent graduates (post-doctoral). The goal is to attract talented teacher-scholars from diverse backgrounds to Bridgewater College by offering teaching experience in a small liberal arts institution, mentoring, research support, and a supportive network of professionals at a competitive salary.

*Partners* – Jesse Ball DuPont Foundation and anticipated partnering with historically Black colleges and universities

*Targeted Audience* – Teaching fellows who are persons of color

*Dates/Years Implemented* – Recruiting 2015 for hire 2015-2016, continuing 2016-2017 and 2017-2018

## **Christopher Newport University**

### **Meetings to Recruit Students to the STEM and ESL Teacher Preparation Programs**

*Staff Contact Name:* Dr. Marsha Sprague

*Description of the Initiative* – Faculty at Christopher Newport University are working to recruit more students into the English as a Second Language and STEM areas by meeting with students and holding informal information sessions for students in STEM fields.

## **The College of William and Mary**

### **Noyce Scholars**

*Staff Contact Name:* Dr. Paul Heideman

*Funding* – Students are provided scholarships of \$10,000, paid summer internship experiences for eight weeks (up to \$3,600).

*Description of the Initiative* – With funds from the National Science Foundation, the Noyce Scholars and TCT (Teachers for a Competitive Tomorrow) programs aim to increase the number of K-12 teachers with strong mathematics and science content knowledge and excellent pedagogical preparation who will teach in high-needs middle and secondary schools in the region.

*Partners* – Noyce Scholars complete field experiences in high-needs school divisions (including Hopewell City) and must commit to serving two years as a mathematics or science teacher in a high-needs local education agency within four years of graduation. (Dr. Marguerite Mason and Dr. Juanita Matkins, Principal Investigators)

*Targeted Audience* – Undergraduate and Master's Secondary Mathematics and Science teacher candidates

*Dates/Years Implemented* – 2010 to the present

*Effectiveness/Outcomes* – In total from 2010 to 2014, the Noyce program included 39 new teachers, of which 32 were teaching in high-needs school divisions, and 17 (nearly half) went into schools that were defined as high need.

### **Preparing Inclusive Educators**

*Staff Contact Name:* Dr. Sharon deFur

*Funding* – Funding is used in part to recruit students into the special education teacher education program through a variety of events, outreach activities, advertisements, and advising sessions.

*Description of the Initiative* – Funded by the federal Office of Special Education Programs through a personnel preparation grant, this project seeks to improve the recruitment, preparation, and retention of special education and general education teachers, with specific focus on employing evidence-based instructional practices and effectively reaching students from culturally and linguistically diverse backgrounds.

*Partners* – Local school divisions in the geographic service area of The College of William and Mary (including Williamsburg-James City, York, New Kent, Gloucester, Newport News, and Hampton). (Dr. Sharon deFur and Dr. Christopher Gareis, Co-Principal Investigators)

*Targeted Audience* – Master’s degree special education teacher candidates

*Dates/Years Implemented* – 2010-2015

*Effectiveness/Outcomes* – From 2010 to 2014, 29 students have obtained licensure in Special Education: General Curriculum K-12, and 12 students have obtained licenses with endorsements in both special education and general education (elementary or secondary).

### **English as a Second Language Partnership for Preparation**

*Staff Contact Name:* Dr. Gail McEachron

*Funding* – Funding provided by the Preparing Inclusive Educators grant

*Description of the Initiative* – This collaboration between faculty at The College of William and Mary and selected school divisions exists to facilitate the process of arranging and supervising field experiences for teacher candidates seeking dual-endorsement in teaching English as a Second Language while completing their initial preparation in elementary, secondary, or special education teaching.

*Partners* – The College of William and Mary School of Education and Department of Modern Languages and Literatures, Williamsburg-James City County Public Schools, Henrico County Public Schools, and Newport News Public Schools

*Targeted Audience* – Undergraduate and graduate teacher candidates in elementary, secondary and special education

*Dates/Years Implemented* – 2010 to the present

*Effectiveness/Outcomes* – From 2011 to 2015, 48 students have completed the ESL program and earned their endorsement. An additional 40 students are currently in the program.

## **Eastern Mennonite University**

### **Programs to Encourage and Support Students to Pursue Teaching**

*Staff Contact Name:* Dr. Cathy Smeltzer Erb

*Description of the Initiative* – For prospective students, the university has:

- Enhanced the visibility of licensure in critical shortage areas;
- Provided a class presentation at Blue Ridge Community College to promote and encourage transfer into the special education program at Eastern Mennonite University; and
- Hosted an annual recruitment event for all Teach for Tomorrow and Future Educator Association clubs in the Shenandoah Valley high schools.

For current students:

- In the first-year education course, students are informed of critical shortage areas within Virginia and are encouraged to consider licensure in one of these areas.
- One-on-one advising with a faculty advisor promotes and supports students pursuing licensure in a critical shortage area throughout their program and encourages:
  - Dual endorsement in Elementary Education PreK-6 and special education; and
  - Heritage Spanish speakers to consider licensure in foreign languages PreK-12.
- Faculty discuss recruitment in critical shortage areas with the institution's representatives on the teacher education advisory council, the Committee on Teacher Education.

*Partners* – Eastern Mennonite University faculty, Blue Ridge Community College, local high schools

*Targeted Audience* – Prospective students and currently enrolled university students

*Dates/Years Implemented* – Ongoing

## **Emory and Henry College**

### **Initiatives to Address Critical Shortage Areas**

*Staff Contact Name:* Dr. Janet Crickmer

*Description of the Initiative* – Emory and Henry College (E&H) has a number of initiatives designed to attract teacher candidates into its approved programs, especially in the critical shortage areas.

- Annually, the Education Division requires all first-year students to an informational/recruiting fair at the College. The approved teacher education program options are reviewed, and critical shortage areas in teaching are emphasized.
- The College created a five-year route to licensure that provides students with the option of completing licensure requirements in both general education and special education.
- The director of teacher education at the College meets with students enrolled in the first course of the education program, Education 115, to discuss the advantages of completing the special education endorsement. During this meeting, critical shortage areas are reviewed.
- Every November, three members of the Emory and Henry College Natural Science Division lead workshops at the Southwest Virginia Higher Education Center’s STEM Conference. Over 700 sixth-grade girls from four local school divisions attend hands-on workshops led by female scientists, engineers and mathematicians.  
(<http://www.swcenter.edu/stem-6th-grade-girl-program/>)
- Emory and Henry students work with the local Baden Powell Association scout group, leading nature hikes and providing outdoor education. Ten to fifteen children, ages 5-12, participate once or twice/ year.
- The College runs an annual Summer Scholars program for rising middle and high school students inclined toward academic adventure. (<http://www.ehc.edu/academics/summer-programs-and-camps/summer-scholars/>)
- The local American Chemistry Society chapter engages participants in scientific inquiry activities at the annual Family Fun Day on campus.
- Science division members partner with Eastman Chemical Company and run an annual two-day workshop for 400 fourth-graders who live within a 100-mile radius of the College.
- The Emory and Henry Departments of Education and Mathematics are partnering with Glade Springs Elementary School’s gifted and talented (GATE) program faculty to provide STEM education activities to gifted students during afterschool enrichment programs. The motivation in the development of this program is multifaceted. Involved faculty will introduce students to science, technology, engineering, and mathematics concepts in an effort to enhance understanding of concepts within STEM topic areas. In addition, discussion on potential career pathways in the STEM and teaching fields will be conducted as a recruitment exercise for local students. Four STEM activity days have been scheduled for the fall semester, and plans are under way to develop E&H honor student involvement for an ongoing program. Community outreach and service is a well-established part of the E&H mission and aligns with the developing “Ampersand” program of student project-based learning.

- The Science Division is seeking a S-STEM grant and has the following plans for recruitment:
  - Spend time with recruitment officers and departments (Core STEM Four) to educate the recruitment officers about the work ongoing in the department. Prepare specific materials about new STEM Bridge and sophomore seminar research project for recruitment officers. Work with local and regional guidance counselors to build visibility into the programs and benefits.
  - The Mathematics Department has plans to use 3-D printing for mathematics outreach in local schools.
  - The College facilitates TEACH grant applications for its teacher preparation students who are pursuing licensure in areas of critical shortage.
  - The Education division and Emory and Henry College Admissions Department staff work closely with area community colleges and their students, including aligning programs to ensure smooth transition to teacher preparation at Emory and Henry College. Education faculty members actively recruit community college students and travel to those colleges for recruiting fairs.
  - The Education Department and School of Health Sciences are partnering with the superintendent and principals of Smyth County schools to talk about collaboration, including working with their at-risk students and developing a more robust pre-health program at their technical high school with hopes of preparing students to enter and pursue studies at E&H.
  - The Education and Science departments are partnering to develop STEM education outreach programs for area K-12 students and teachers at the College's Bartlett-Crowe Field Station, a 70-acre diverse environmental area with river, stream, woods, wetlands, and transitional growth areas.

## **Ferrum College**

### **Plan to Seek Approval to Offer a Middle Grades Teaching Endorsement**

*Staff Contact Name:* Dr. Nancy Bradley

*Funding* – None needed at this time, but potential need for additional faculty in the future.

*Description of the Initiative* – Ferrum College is planning to seek approval from the Virginia Board of Education to offer a Middle Grades teaching endorsement, which is listed as one of the critical shortage areas. The college will continue to recruit and prepare teachers in its current endorsement areas of elementary education, mathematics, health and physical education, English, and history/social science.

*Partners* – Franklin County Public Schools; College Faculty in Content Areas of English, mathematics, history, and science

*Dates/Years Implemented* – Plan to submit complete set of matrices for middle school mathematics, science, history and English to the VDOE.

*Effectiveness/Outcomes*

- Multiple requests to establish middle grades endorsements in the last five years.
- Work with Franklin County and other school divisions to prepare teachers for shortages in middle grades, especially in mathematics and science.

## **George Mason University**

*Staff Contact Name:* Dr. Ellen Rodgers

### **Tuition Discount for Virginia Educators**

*Description of the Initiative* – This discount is available to Virginia residents who work in PreK-12 Virginia schools as a teacher, counselor, administrator, librarian, coach, or staff member. The discount is 15 percent off the university’s approved rate for in-state graduate students (<http://studentaccounts.gmu.edu> for current rate information). The discount was initiated to facilitate the further professional development of school division personnel and as an incentive for pursuit of academic preparation in teacher preparation fields, including those noted by the Commonwealth as critical shortage areas. This discount was initiated in 2014.

### **Cohort Outreach Programs**

*Description of the Initiative* – Cohort outreach programs have long been offered by George Mason University, initiated in response to school division requests to assist in the preparation of qualified personnel. The model is based on the concept that Mason can provide complete licensure and master’s degree programs to teachers where they work, rather than requiring them to come to campus. Students are provided with all of the benefits of the on-campus program, including individual advising, face-to-face instruction from full-time Mason faculty interspersed with collaboration, and instruction from highly qualified adjunct faculty working in the same schools. These programs provide convenience to the students as well as form a better link between academia and school realities. Such Cohort Outreach programs are offered in: Special Education, Education Leadership, Literacy, Mathematics Specialist, and English as a Second

Language. For information on special education cohorts, please refer to the following: <http://gse.gmu.edu/special-education-cohort/cohort-home/>.

### **Bachelor's/Accelerated Master's Programs**

*Description of the Initiative* – These programs have been initiated to encourage quality undergraduates with an early identified interest in the teaching profession to pursue an accelerated, seamless, and articulated route to recommendation for licensure. The programs are available in the following areas: Early/Primary PK-3, Elementary Education PK-6, secondary education (Mathematics, Biology, Chemistry Earth Science, Physics, History and social science), and Special Education (General Curriculum K-12, Adapted Curriculum K-12, Early Childhood (birth-age 5)). For further information, please refer to the following: [http://cehd.gmu.edu/assets/files/cehd/GMU\\_CEHD\\_bachelors\\_acc\\_masters.pdf](http://cehd.gmu.edu/assets/files/cehd/GMU_CEHD_bachelors_acc_masters.pdf).

### **External Funding to Support Critical Shortage Areas**

*Description of the Initiative* – Faculty are actively engaged in the solicitation of extramural funding to support initiatives that creatively encourage and facilitate the entry of individuals to the teaching profession in critical shortage areas (e.g., mathematics education pathways from Northern Virginia Community College to Mason via Noyce Grant funding).

## **Hampton University**

### **Routine Recruitment Efforts**

*Staff Contact Name:* Dr. Martha Jallim-Hall

*Description of the Initiative* – The School of Education and Human Development partners with other on-campus academic departments and the Office of Admissions to recruit students into teacher preparation programs.

*Partners* – The Office of Admissions and on-campus academic departments (i.e., Biology, Mathematics, Music, English)

*Targeted Audience* – Prospective students, freshmen, and sophomores

*Dates/Years Implemented* – Ongoing



## **Hollins University**

### **Review of Recruitment Practices**

*Staff Contact Name:* Dr. Rebecca Cox

*Description of the Initiative* – Hollins University has strong relationships with several programs that serve primarily low-income, first-generation college students. Additionally, the university recruits internationally and offers a Cultural and Community Engagement Center to set up study abroad experiences. The Hollins education department also is examining its current recruitment practices and has determined that support measures such as additional assistance with the admission assessments seem to help with recruitment.

## **James Madison University**

### **James Madison University Online Educational Technology Graduate Programs**

*Staff Contact Name:* Dr. Michele Estes

*Funding* – Online student tuition rate estimated at \$285 per credit for fall and spring semesters

*Description of the Initiative* – Cohort Development and Custom Offerings – To better accommodate the schedules of the busy adult learner population, to speed time-to-completion, to make completion more predictable and attainable, and to ease the administrative tasks involved in managing individual student pathways, James Madison University (JMU) seeks partners who are able to provide a cohort of 15-20 students interested in one or more of the following alternative cohort delivery models for our Educational Technology programs:

1. Week-long compressed courses on-site,
2. Blended courses with online and occasional on-site instruction,
3. Online hybrid instruction with synchronous and asynchronous components,
4. Online 16-week courses (the current tradition), and/or
5. Asynchronous coursework.

Although faculty have not taught MOOCs (Massive Open Online Courses) in the past, JMU will soon have the capacity to entertain such ideas should a particular course or program relate to many people in Virginia (e.g., a course about online teaching and learning).

Notes: These models would require a commitment from the partner for learner participation and pacing.

*Partners* – Seeking interested K-12 school divisions, businesses, industry partners, government agencies, and non-profits where teaching and learning with technologies is valued.

*Targeted Audience* – Licensed teachers, technology coaches, technology coordinators/directors, instructional designers, and others working or hoping to work in an environment that values leadership in teaching and learning with technologies.

*Dates/Years Implemented* – The M.Ed. has existed for some time at JMU and was moved entirely online in fall 2010. The related Graduate Certificate Programs were implemented as online certificates in fall 2010.

*Effectiveness/Outcomes* – Students complete coursework, key assessments, internships, and research projects and engage in the applied experience of graduate school. Alumni have since entered doctoral programs and accepted leadership positions in their current workplaces and in other workplaces - in Virginia, elsewhere in the United States, and in other countries.

### **Post-Baccalaureate Program in K-12 Special Education and in K-12 Early Childhood Special Education**

*Staff Contact Names:* Dr. Sharon Blatz and Dr. Mira Williams

*Funding* – Student tuition

*Description of the Initiative* – These two-year programs are designed for individuals who already possess a bachelor's degree and are seeking licensure with endorsements in Special Education: General Curriculum K-12 or Special Education Early Childhood (birth-age 5). These courses are offered after business hours to make the program convenient to individuals with full-time employment.

*Targeted Audience* – Individuals seeking initial licensure with endorsements in Special Education: General Curriculum K-12 or Special Education Early Childhood (birth-age 5) who already possess a bachelor's degree (e.g., career switchers, in-service teachers).

*Dates/Years Implemented* – Data exist back to 2000

*Effectiveness/Outcomes* – Since 2000, JMU has graduated 232 students with MAT/M.Ed. degrees, initial licensure in K-12 special education and 59 students with MAT/M.Ed. degrees, initial licensure in early childhood special education.

### **Inclusive Early Childhood Education Program**

*Staff Contact Name:* Dr. Mira Williams

*Funding* – Student tuition

*Description of the Initiative* – This five-year program is designed for individuals seeking initial licensure in Special Education Early Childhood (Birth to Age 5) as well as Early/Primary Education PreK-3. This program is a dual licensure program.

*Targeted Audience* – Individuals seeking initial licensure in these areas to work in inclusive early childhood classrooms.

*Dates/Years Implemented* – The first cohort of graduates completed the program in 2013.

*Effectiveness/Outcomes* – Since 2013, JMU has graduated 108 students with MAT degrees.

### **K-8 Mathematics Specialist**

*Staff Contact Name:* Dr. Ann Wallace

*Funding* – Student tuition

*Description of the Initiative* – This two-year program is designed to help practicing teachers (kindergarten, grades 1-8) develop advanced mathematics pedagogical and content knowledge and leads to the Master of Education degree.

*Targeted Audience* – Elementary and middle school teachers.

*Dates/Years Implemented* – Summer 2012 – present.

*Effectiveness/Outcomes* – Since its inception, 12 teachers have completed the program.

### **Additional Information**

Of the top 10 critical shortage teaching endorsement areas in Virginia, JMU's Department of Middle, Secondary, and Mathematics Education (MSME) offers initial licensure leading to the Master of Arts in Teaching (MAT) degree in five of them: Middle Education Grades 6-8, Mathematics Grades 6-12 (including Algebra I), Foreign Languages PreK-12 (Students will continue in the MSME pipeline, five-year MAT program, for at least two more years), English, and History and Social Sciences.

JMU's recruiting initiatives for these programs are firmly grounded in the relationships and regular conversations that JMU College of Education faculty and administrators have with the content-area faculty in each of those areas. The MSME department head works closely with the

content area academic unit heads and/or their faculty representatives to review licensure guidelines and advising information that raises students' awareness of the programs.

Additionally, MSME methods faculty members meet regularly with their content colleagues in their respective academic units to discuss recruitment (and students' performance once they have entered the program). One recent example of recruiting science students into teacher education involved a science education specialist in the College of Education working with an Earth Science specialist in the College of Science and Mathematics through a Noyce planning grant that creates new "on ramps" into our current teacher preparation program.

Another example involved a College of Education social studies educator working with history faculty in the College of Arts and Letters to create and teach a course for sophomore-level history majors that allows students to explore teaching as a profession. The primary purpose of the course is to help students begin developing their identities as teachers and not just as history majors.

Regarding middle grades education, the MSME department head meets monthly with leaders of the Interdisciplinary Liberal Studies (IDLS) as part of the Executive Committee to explore many different aspects of that program, including recruitment. On a number of occasions, the MSME department head has attended advising nights for IDLS majors and provided information about the Middle Education program specifically. The most comprehensive recruitment efforts for all MSME initial-licensure programs takes place during Academic Open Houses and through the programs operated during the summer First-Year Orientation program.

## **Liberty University**

### **Barlow Scholarship**

*Staff Contact Name:* Dr. Michelle B. Goodwin

*Funding – University*

*Description of the Initiative* – The Daniel L. Barlow Teacher Education Scholarship has been established to encourage academically talented individuals with superior potential for educational leadership to enter into careers in the field of teaching. Given in honor of the late Liberty education professor, Daniel L. Barlow, this scholarship will be awarded to students whose lives exemplify the spiritual commitment that characterized Dr. Barlow's life and work. The Barlow scholarship is directed toward candidates seeking teaching licensure in the critical shortage areas of mathematics, science, and English as a Second Language.

The Barlow Scholarship will be applied to the 2015-2016 academic year and will cover tuition costs up to \$3,000 for the year. Cost of fees, room and board, books, and classroom materials are not included.

Barlow Scholarships may be renewed in subsequent semesters if students meet the following conditions.

- continue in the teacher licensure program;
- maintain a cumulative GPA of 3.0 or above;
- maintain satisfactory conduct (verified by dean of students); and
- financial need – must submit FAFSA (Barlow Scholarship does not apply if tuition is already covered by another scholarship).

*Targeted Audience* – The Barlow Scholarship is directed toward candidates seeking teacher licensure in the critical shortage areas of mathematics, science, and English as a Second Language.

*Dates/Years Implemented* – Fall 2015

### **Teacher Education Access for Minorities (TEAM) Scholarship**

*Staff Contact Name:* Dr. Michelle B. Goodwin

*Funding* – University

*Description of the Initiative* – The TEAM Scholarship has been established to encourage and make it possible for well-qualified, talented, and strongly motivated individuals who are members of recognized minority groups to enter the field of teaching. The TEAM Scholarship will be applied to the 2015-2016 academic year and will cover tuition costs up to \$3,000 for the year. Cost of fees, room and board, books, and classroom materials are not included.

TEAM Scholarships may be renewed in subsequent semesters if students meet the following conditions:

- admission to Teacher Licensure Program;
- cumulative GPA of 2.75 or above (all A's and B's in EDUC courses);
- satisfactory conduct (verified by dean of students); and
- financial need – must submit FAFSA (The TEAM Scholarship does not apply if tuition is already covered by another scholarship).

*Targeted Audience* – This scholarship has been established to encourage and make it possible for well-qualified, talented, and strongly motivated individuals who are members of recognized minority groups to enter the field of teaching.

*Dates/Years Implemented* – Starts fall 2015

## **Longwood University**

### **Institutional and Program-Level Recruiting**

Longwood’s historical origins as a state Teacher’s College rooted in the rural geographic context of Southside Virginia can be contrasted with its current status as a comprehensive master’s-level university recruiting and preparing students from across the Commonwealth and beyond. Along with continuing focus on providing comprehensive undergraduate options to students, recent initiatives in admissions and other offices on campus have renewed the focus on working with regional partners to recruit and prepare teachers for partnering school divisions in southern Virginia. While graduates are recruited from and placed into contracted positions within many school divisions, the 13 rural counties of Region VIII rely heavily on Longwood as a recruitment partner and professional development resource. In addition to these school divisions, Southside Virginia Community College (SVCC), other Virginia community colleges, and the Southern Virginia Higher Education Center are valuable partners in these efforts.

### **Call Me Mister!**

*Staff Contact Name:* Maurice Carter

*Description of the Initiative* – The Call Me Mister! (CMM) program epitomizes Longwood’s ongoing efforts to increase diversity within the teacher education programs through the recruitment of young men from ethnic minorities into the teaching fields, with specific focus on elementary education. CMM functions as a community outreach, minority recruitment, student support, leadership development, and placement initiative providing dozens of “Misters” opportunities to gain valuable experience while preparing for their own classrooms. Misters are often recruited while still in high school through the organization’s outreach and tutoring efforts, and the director also has established partnerships with community colleges and historically black colleges and universities within Virginia to expand the reach of CMM.

## **Professional Education Council (PEC) of Longwood University**

*Staff Contact Name:* Dr. David Locascio

*Description of the Initiative* – The PEC is made up of program coordinators of all the programs leading to licensure within the university and is chaired by the Associate Dean. In addition, *ex officio* membership is granted to representatives of partnering school divisions from Region VIII and other area systems (e.g., a Chesterfield County representative is currently serving). Regular agenda items that directly involve the PEC *ex officios* include student teaching placement and professional development as well as scheduling Longwood faculty to participate in career days, support Teacher Cadet programs, or otherwise engage in student recruitment.

### **Southside Recruiting Initiatives**

*Staff Contact:* Longwood University Director of Admissions, TBA

*Description of the Initiative* – Longwood President Taylor Reveley III, has expressed the desire for the university's service to the southside region to be a more explicit focus of both recruiting and service/outreach. A new director of admissions is being hired with expanded resources to be focused toward this renewed regional emphasis. Part of this effort has included the establishment of satellite programs in Emporia and Martinsville. Longwood, the New College Institute (NCI), Patrick Henry Community College (in Martinsville), and Southside Virginia Community College (in Emporia) have partnered to offer residents of these areas the opportunity to earn a bachelor's degree in programs of study including Elementary Education. In order to accommodate the schedules of working individuals more fully, coursework in these programs is scheduled during weekday evenings.

### **Expansion of Single/Multiple Endorsements through Internal Recruiting**

The largest program within teacher education at Longwood is Liberal Studies - Elementary Education. Hundreds of talented candidates preparing for PK-6 teaching positions represent a rich pool of potential recruits for additional endorsements to complement the elementary licensure. While this recruiting often has proceeded through informal conversations with undergraduates, the potential for more purposeful recruiting for these additional endorsements has been recognized by several program coordinators on campus. For example, faculty from the middle school program have scheduled opportunities to speak to the elementary education sections of the freshman seminar to invite students to consider dual endorsement by adding a middle grades content endorsement to their elementary program. While adding both content and pedagogical coursework to students' undergraduate load, having multiple critical need endorsements has been appealing to these undergraduates and has contributed to a steady growth of the number of dual endorsement candidates. In addition, some graduate programs have

reworked the sequence of their Master's level programs to allow students completing the undergraduate degree to commit to a "4+1" design and complete an additional endorsement in this manner.

### **Elementary/Middle (LSTB) Recruiting**

*Staff Contact Name:* Dr. David Locascio

*Description of the Initiative* – The effort to invite Liberal Studies Elementary (LSTE) students to add additional Middle Grades endorsements to their programs has led to increases in the number of Liberal Studies Elementary/Middle (LSTB) program completers over the past several years. Between 2010 and 2015, the number of students graduating LSTB doubled (from approximately 11 to over 20 per year), with particularly high increases in the number pursuing Middle School Mathematics. In the fall of 2014, two-thirds of students enrolled in the primary pedagogy course for Middle Grades (12 of 18) were seeking mathematics among their endorsements.

### **Special Education Graduate Program Recruiting among LSTE, Art PreK-12, and Secondary Programs**

*Staff Contact Name:* Dr. Chris Jones

*Description of the Initiative* – The Special Education program at Longwood has for some time had multiple pathways toward completion. The "traditional" program is a five-year program leading to a master's degree and special education (SPED) licensure (K-12), while an additional pathway has involved the completion of graduate coursework in SPED by completers of other areas of educational preparation at the undergraduate level. It is primarily this second master's pathway that is contributing to the expansion of the number of SPED teachers being prepared. Through the redesign of graduate coursework to be framed within a summer-year-summer design, students completing their undergraduate degrees can add the SPED endorsement and licensure in time to take a contracted teaching position by the following fall. This change, along with concerted efforts at recruiting among undergraduate students has led to a near doubling of the SPED graduate course enrollment. In addition to elementary completers, the program faculty in art is in the process of reworking various course requirements in their program to better allow their graduates to consider a one-year option toward SPED licensure and a master's degree in the hopes of making employment prospects better than with solely the Art PreK-12 endorsement. Two 2015 completers of the secondary history program and one from secondary English have similarly stayed the year for this additional SPED endorsement.



## **SOLSTICE**

*Staff Contact Name:* Dr. Gena Southall

*Description of the Initiative* – SOLSTICE is a program designed both to internally recruit and better prepare future teachers in STEM areas from among elementary, middle, and secondary Education program enrollees. Courses in the SOLSTICE program are offered during the summer terms and, while mostly online, each course includes one week in residence at Longwood's Hull Springs Farm (HSF) in Westmoreland County just off the Chesapeake Bay. The week in residence at HSF – room, board, field trips and other activities – is supported by STEM grants and is offered at no cost to the student beyond the tuition for corresponding coursework.

### **Support of Area School Divisions and Teachers**

The bulk of initiatives undertaken by the Longwood College of Education and Human Services relate to supporting the professional development of teachers and other education professionals within our region and throughout the Commonwealth. As such, these initiatives do not normally qualify as “recruiting” efforts but work toward the same ultimate goal: to more adequately meet the instructional needs of K-12 students.

### **Region VIII Professional Development Council and Superintendents’ Network**

*Staff Contact Name:* Dr. David Locascio

*Description of the Initiative* – Service on these two Region VIII councils reflects Longwood’s efforts to support area schools in their own initiatives. Southside Virginia Community College representatives also serve on these councils, and together these two institutions work to provide recruiting, professional development, and leadership support to these systems. Efforts have included providing information and data to support systems’ expansion of dual enrollment associate’s degrees and expanding the capacities of these students to complete baccalaureate degrees.

### **Comprehensive Early Childhood Center**

*Staff Contact Name:* Dr. Paul Chapman

*Description of the Initiative* – This initiative represents an opportunity for collaboration across different programs within the College of Education and Human Services (Elementary Education, Special Education, Communications Sciences and Disorders, etc.) along with the representatives from Farmville and Prince Edward County to develop and staff a comprehensive Early Childhood Center in Farmville. Center development is currently under way.

## **Laboratory Schools**

*Staff Contact Name:* Dr. Paul Chapman

*Description of the Initiative* – Longwood Laboratory Partnership Schools (LLPSM) have been established in Amelia, Charlotte, Cumberland, and Prince Edward Counties since 2012. These partnerships pair Longwood faculty with staff and administrators from area school divisions to develop program and research initiatives based upon needs identified within the counties. These initiatives have included extended (multi-semester) clinical placements of individual candidates within systems, performance pay initiatives for teachers, tutoring programs, and professional development initiatives.

### **PEx3**

*Staff Contact Name:* Dr. Vonnie Colvin

*Description of the Initiative* – PEx3 represents a partnership with nearby Prince Edward County Middle School (PECMS) to support the development of standards-based Health and Physical Education units at PECMS while providing a classroom context through which Longwood Physical and Health Education candidates can gain valuable and well-supported practical experience.

### **Institute for Teaching Through Technology (ITTIP)**

*Staff Contact Name:* Dr. Paula Leach

*Description of the Initiative* – ITTIP programs focus on professional development for teachers from a wide array of STEM-oriented subjects. With college funding and independently secured grants, ITTIP programs held throughout the summer and academic year impact the instructional and assessment practices of teachers in dozens of Virginia school divisions.

## **Lynchburg College**

### **Collaborative Work with School Divisions, Other University Programs, and Central Virginia Community College**

*Staff Contact Name:* Dr. Roger Jones

*Description of the Initiative* – Faculty from the School of Education work cross campus with the Academic Dean of the College, Associate Dean, School of Sciences Dean, Education Faculty,

and Admissions staff on a STEM Teacher Scholar initiative. They also meet with area superintendents. The School of Education is considering a Scholarship Program Competition for entering freshmen who would like to become STEM teachers in middle or high schools. Through the competition, students would be given opportunities to connect with outstanding STEM teachers in central Virginia as they do their field experience. In addition, they would have research opportunities with either education or academic discipline faculty.

Also, faculty from the School of Education will meet with the president of Central Virginia Community College (CVCC) to discuss the possibility of CVCC and Lynchburg College (LC) partnering with local school divisions in a “grow your own initiative” with a focus on lower income and minority students. These students would be identified by the school divisions, attend CVCC for two years (but would take some education courses at LC at CVCC tuition rates), and then transfer to LC for their final two years.

## **Mary Baldwin College**

### **Encouragement to Seek Multiple or Dual Teaching Endorsements**

*Staff Contact Name:* Dr. Rachel Potter

*Description of the Initiative* – Mary Baldwin College encourages students to seek multiple or dual endorsement areas to provide flexibility in meeting needs in critical shortage areas.

## **Marymount University**

### **English as a Second Language (ESL) in PDS (Professional Development School)**

*Staff Contact Name:* Dr. Lisa Turissini

*Funding* – Through Fairfax County Public Schools

*Description of the Initiative* – Marymount University expanded its one-year intensive, cohort-based PDS master’s program leading to licensure, to include English as a Second Language for the 2015-2016 academic year. Fairfax County provides a small amount of tuition assistance to individuals in the program and offers program completers priority for hiring. (Note: The PDS program also ensures a fast-track to licensure at the post-baccalaureate level in elementary education and special education.)

*Partners* – Fairfax County Public Schools

*Targeted Audience* – Marymount University students about to graduate who want to pursue licensure and recent graduates from other institutions with the same desire to complete their M.Ed. and licensure requirements in an academic year.

*Dates/Years Implemented* – Starts fall 2015

### **Four-Year Undergraduate Degree Leading to Teacher Licensure**

*Staff Contact Name:* Dr. Lisa Turissini

*Description of the Initiative* – Marymount University has worked diligently to provide pathways to licensure for students who are “early deciders.” Students who come to Marymount University knowing they want to teach and who are interested in pursuing licensure in elementary education, special education, and various secondary teaching fields are able to complete their undergraduate degrees and be eligible for their license upon graduation. These pathways help ensure that future teachers have an affordable way to pursue their passion for service in a timely manner.

### **Evening/Weekend M.Ed. for Career Switchers**

*Staff Contact Name:* Dr. Lisa Turissini

*Description of the Initiative* – Marymount University provides pathways to licensure for individuals who are “late deciders” or career switchers with a Friday/Saturday weekend program. This particular pathway helps ensure that future teachers have an affordable way to pursue their passion for service in a timely manner without having to give up their employment before stepping into their full-time internship semester.

*Dates/Years Implemented* – From 2007 to the present

### **Undergraduate Student Information Sessions**

*Description of the Initiative* – Marymount University is collaborating with undergraduate departments across the university to focus on opportunities for their juniors and seniors to consider a career in teaching and transition into the M.Ed. with licensure program. Student information sessions for in-house students were held.

*Dates/Years Implemented:* Spring 2015

## **Articulation Agreements**

### *Description of the Initiative*

Articulation agreements developed with liberal arts universities and community colleges help students transition into either the Marymount undergraduate or graduate licensure programs. Course sequencing and course equivalencies are determined between universities to support students' pathways into all offered licensure programs.

*Dates/Years Implemented:* Fall 2015 to the present

### **Norfolk State University**

#### **Partnership for Military Cognizant Child and Youth Programs**

*Staff Contact Name:* Dr. Denise Littleton/Dr. Rinkya Allison

*Description of the Initiative* – A collaboration/partnership between the Navy Region Fleet Readiness Program and Norfolk State University (NSU) to recruit and provide training opportunities for the Child and Youth Programs' personnel as well as provide NSU students additional experiences in working with military children and their families.

*Partners* – Navy Region Mid-Atlantic Fleet Readiness Program, Child and Youth Program (CYP), and the School of Education at Norfolk State University

*Targeted Audience* – CYP personnel and NSU students in preservice elementary and special education programs.

*Dates/Years Implemented* – Spring/Summer 2015

### **Old Dominion University**

#### **MonarchTeach**

*Staff Contact Name:* Dr. Deborah Duffy

*Funding* – Grant funding from the VDOE

*Description of the Initiative* – The purpose of MonarchTeach is to increase the number of teaching candidates in secondary mathematics and all science programs. The goal is to add technology education to the Monarch TEACH curriculum in order to increase enrollments in the technology program. The program increased the number of field experiences, starting with the elementary level.

*Partners* – Currently partnering with Norfolk Public Schools; beginning to add other school divisions.

*Targeted Audience* – Entering freshman; starting fall 2015 will target transfer students.

*Dates/Years Implemented* – Started fall 2013.

*Effectiveness/Outcomes* – Currently, 120 teacher candidates are in the program.

**Bachelor of Science Undergraduate Interdisciplinary Studies with Initial Licensure in  
Special Education Early Childhood, Special Education: Adapted Curriculum K-12, and  
Special Education: General Curriculum K-12**

*Staff Contact Name:* Dr. Leigh L. Butler

*Description of the Initiative*

The intent of these distance learning programs is to increase the number of candidates in Special Education Early Childhood (birth to age five), Special Education: Adapted Curriculum K-12, and in Special Education: General Curriculum K-12. The early childhood and adapted curriculum programs were approved in November 2014. Recruitment began in fall 2015.

*Partners* – Special Education Early Childhood and Special Education: Adapted Curriculum K-12 Programs: Virginia Beach, Norfolk, and Suffolk Public Schools; Special Education: General Curriculum K-12: All Region 2 school divisions and participants who join through the distance learning program.

*Targeted Audience* – Special Education: Early Childhood and Special Education: Adapted Curriculum K-12 Programs: Entering freshmen, juniors, and transfer students;

Special Education: General Curriculum K-12: Undergraduate programs starting as freshmen or transfer students

*Dates/Years Implemented* – Special Education: Early Childhood and Adapted Curriculum K-12 Programs: Started fall 2015; Special Education: General Curriculum K-12: Started fall 2009

*Effectiveness/Outcomes* – Since the Special Education: General Curriculum K-12 program started in 2009, 82 individuals have completed the undergraduate program. The program continues to increase in number.

### **Teachers-In-Residence (TIR) – Norfolk Program**

*Staff Contact Name:* Dr. Jane Bray

*Description of the Initiative* – Old Dominion University was issued a state grant for the Teachers-In-Residence (TIR) – Norfolk Program. The purpose of TIR-Norfolk is to train 15 teachers-in-residence who will be prepared as highly qualified and highly effective teachers.

*Partners* – Norfolk City Schools and Old Dominion University.

*Targeted Audience* – The first priority will be to prepare individuals as licensed teachers in the high-need area of mathematics. The second priority will be to prepare teachers of science.

*Dates/Years Implemented* – New grant (Fiscal Year 2016)

### **Radford University**

#### **Teacher Preparation and Professional Development, and Scholarships for Teachers in Hearing Impairments PreK–12**

*Staff Contact Name:* Ms. Karen Stinson

*Description of Initiative* – VDOE grant funds provide tuition support and stipends to individuals pursuing licensure in Hearing Impairments PreK-12. Seventy-five percent of the tuition is provided at the reduced educator rate.

VDOE grant funds also provide scholarships for student teachers in the IDHH (Interdisciplinary Deaf and Hard of Hearing) program. Scholarships are provided during the student teaching semester.

*Target Audience* – Educators presently serving deaf and hard of hearing students without an endorsement; educators wishing to add the Hearing Impairments endorsement. The scholarships target undergraduate or graduate students who will be completing the IDHH program.

*Dates/Years Implemented* – 2002 to the present

*Effectiveness/Outcomes* – Over the past five years, 21 students obtained licenses with endorsements in Hearing Impairments PreK-12. The number of current students pursuing degrees and licensure in Hearing Impairments is as follows: B.S. (20); M.S. (7); Licensure only- (3).

Four scholarships were awarded during both the 2013-2014 and 2014-2015 academic years.

**Virginia Consortium for Teacher Preparation in Special Education Adapted Curriculum:  
Supporting Students with Severe Disabilities and Autism (ACSD Consortium)  
[renamed May 2015]**

*Staff Contact Name:* Dr. Liz Altieri

*Description of the Initiative* – VDOE grant funds provide tuition support to individuals pursuing an endorsement in Special Education-Adapted Curriculum PreK-12. Radford University (RU) students receive tuition support from the grants – 50 percent of the Educator Reduced Tuition Rate for Graduate Students.

*Partners* – Radford University, George Mason University, James Madison University, Norfolk State University, and Old Dominion University

*Targeted Audience* – Provisionally licensed teachers or candidates pursuing an endorsement to teach children with severe disabilities or autism

*Dates/Years Implemented* – 2001 to the present. Radford University joined the ACSD Consortium in 2002.

*Effectiveness/Outcomes*

Since 2003, a total of 90 students have received tuition support through the grant and have taken two or more classes at Radford University. Forty-nine students have received master's degrees; 32 students completed add-on licensure in adapted curriculum; and nine students were non-completers.

**Virginia Consortium for Teacher Preparation in Visual Impairments**

*Staff Contact Name:* Dr. Liz Altieri

*Description of the Initiative* – VDOE grant funds provide tuition support to individuals pursuing an endorsement in Special Education: Visual Impairments PreK-12. Radford University students receive tuition support from the grants – 50 percent of the Educator Reduced Tuition Rate for Graduate Students.



*Targeted Audience* – Provisionally licensed teachers or candidates pursuing the endorsement in Special Education: Visual Impairments.

*Dates/Years Implemented* – 2007 to the present

*Effectiveness/Outcomes* – Since the program began, 26 students have received tuition support towards licensure. Two completed master’s degrees, 14 completed coursework needed to receive add-on licensure (available just the first two years) or to complete full licensure coursework program, and three were non-completers.

In the 2013-2014 academic year, six students participated in the program. Two students completed the coursework for a provisional license with an endorsement in Special Education: Visual Impairments. Students have taken 20 courses toward full endorsement in Special Education: Visual Impairments during the 2013-2014 academic year.

### **Virginia Consortium for Teacher Training in Early Childhood Special Education**

*Staff Contact Name:* Dr. Kathy Hoover

*Description of the Initiative* – This partnership supports the need (via online learning) to prepare teachers in the early childhood special education (ECSE) area. A VDOE grant provides partial tuition for coursework required for the ECSE endorsement.

*Partners* – Radford University and Lynchburg College

*Targeted Audience* – Provisionally licensed teachers in the area of ECSE and others seeking the ECSE endorsement

*Dates/Years Implemented* – 2006 to the present

*Effectiveness/Outcomes* – One hundred and twenty-nine students have completed ECSE endorsement requirements through consortium coursework. Students have received support for a total of 393 courses.

### **Sped End Pro 15 877 Radford University Special Education: General Curriculum K-12 Traineeship Grant**

*Staff Contact Name:* Dr. Brooke Blanks

*Description of the Initiative* – The primary goal of this project was to increase the number of educators in Virginia who are endorsed in Special Education: General Curriculum, K-12. The secondary goal was to assist school divisions in increasing their supply of special educators who

have knowledge and skills in special education. VDOE grant funds provided tuition support to educators in Superintendents' Regions 6 and 7.

*Targeted Audience* – Provisionally licensed teachers with an endorsement in Special Education-General Curriculum K-12

*Dates/Years Implemented* – July 1, 2013-June 30, 2014 and July 1, 2014-May 9, 2015

*Effectiveness/Outcomes* – During the 2013-2014 academic year, 12 students received tuition support for 51 individual graduate level courses required to complete their provisional licensure. During the 2014-2015 academic year, partial tuition support was provided for 13 students to take 52 courses toward professional licensure.

### **Project MERGE**

*Staff Contact Name:* Dr. Liz Altieri

*Description of the Initiative* – One of the major goals of the MERGE grant project was to increase the number of students in the special education program. The target goal was 20 special education students per year (80 total).

*Dates/Years Implemented* – 2008-2012

*Effectiveness/Outcomes* – Across four years, Radford University produced 79 special education graduates at the master's level (five-year program and the traditional Master's program).

### **Radford University Special Education Teacher Pipeline (for Elementary Education and Deaf and Hard of Hearing)**

*Staff Contact Name:* Dr. Leslie Daniel

*Description of the Initiative* – Undergraduates who complete an elementary education program or the deaf and hard of hearing program can return to graduate school and in one year complete the M.S. in Special Education program and receive the Special Education: General Curriculum K-12 endorsement.

*Partners* – Radford University Elementary Education and Special Education programs; Radford University Deaf and Hard of Hearing and Special Education programs

*Targeted Audience* – Undergraduate students in the elementary education program who have a 12-hour concentration in special education; undergraduate students in the deaf and hard of hearing program

*Dates/Years Implemented* –Elementary Education: 2008-present; Deaf and Hard of Hearing: 2011-present

*Effectiveness/Outcomes* – Since 2008, 12 students (with licensure in Elementary Education) have returned to graduate school to complete the M.S. in special education program with the Special Education: General Curriculum K-12 endorsement. Seven students have enrolled in the program for the 2015-2016 academic year. So far, only one student (with an endorsement in Special Education: Hearing Impairments) has returned to graduate school to complete the M.S. in special education program (Special Education: General Curriculum K-12 endorsement).

### **Endorsements in Gifted Education and English as a Second Language (ESL)**

*Staff Contact (Gifted Education):* Dr. Holly Robbins

*Staff Contact (ESL):* Dr. Don Langrehr

*Description of the Initiative* – These endorsement programs were established in response to a growing need in the Radford University region for professional development opportunities in the area of gifted learners and for teachers who know how to effectively work with children who speak English as a Second Language.

*Dates/Years Implemented* – Gifted Education – spring 2015 to the present; English as a Second Language – fall 2016

### **Virginia Secondary Mathematics Professional Development Center at Radford University**

*Staff Contact Name:* Dr. Rayya Younes

*Description of the Initiative* – This professional development for mathematics teachers enhances mathematical and pedagogical knowledge for teaching Algebra I and II; Algebra, Functions, and Data Analysis (AFDA); and geometry. The Mathematics-Science Partnership (MSP) grant from the VDOE covers the tuition of the mathematics courses.

*Targeted Audience* – Secondary mathematics teachers

*Dates/Years Implemented* – 2010 to the present

*Effectiveness/Outcomes* – The students below either completed the program or are on track to complete it:

Cohort 1: 14 students

Cohort 5: 14 students

Cohort 2: 16 students

Cohort 6: 25 students

Cohort 3: 20 students

Cohort 7: 19 students (through June 2015)

Cohort 4: 16 students

## **Randolph College**

### **Science and Math Summer Institute**

*Staff Contact Name:* Dr. Peggy Schimmoeller

*Funding* – State Council of Higher Education for Virginia

*Description of the Initiative* – The College invites 65 local teachers to the institute to improve instruction in mathematics and science. During this weeklong institute, faculty talk to teachers about obtaining endorsements in science or mathematics and the process to complete the licensure requirements.

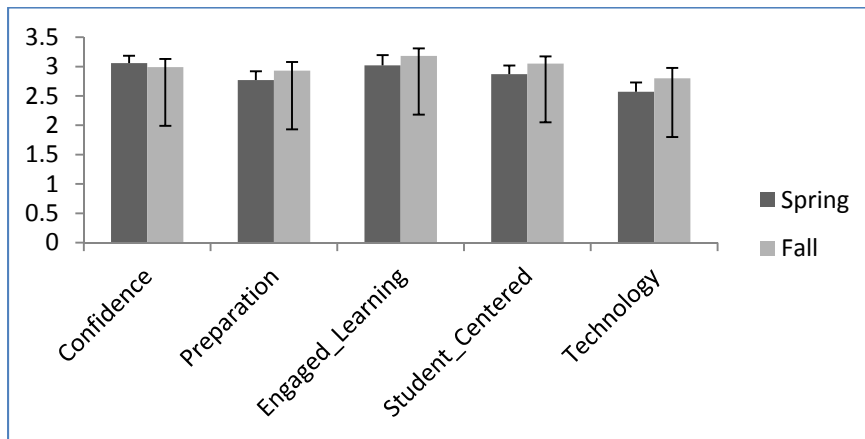
*Targeted Audience* – Practicing teachers and recent graduates who are entering the teaching profession grades K-9. In addition to the institute, the college faculty members visit each participant's classroom and conduct an observation using the RTOP (Reformed Teacher Observation Protocol). A Web site is open to all to access lesson plans and videos, and participants are invited to join a Listserv supported by college science and education faculty.

*Dates/Years Implemented* – The program began in 2010.

*Effectiveness/Outcomes* – Analysis of Teacher Attitude Data

Fifty-three teachers completed online attitude questionnaires before (spring) and after (fall) attending the 2014 summer institute. The items from that attitude questionnaire are presented in Table 1 and included in the first analysis. Prior to analysis, items were grouped into five categories based on face validity. The categories included teacher confidence (3 items), preparation (3 items), engaged learning (5 items), student-centered teaching (7 items), and use of technology in teaching (8 items). Averages responses for individual items in each category were calculated. A within-groups MANOVA tested for changes in these five attitudes from spring (before the summer institute) to fall (after the summer institute).

The means and upper 95 percent confidence intervals for each category in the spring and fall are presented in the following figure. The multivariate statistic failed to reach the .05 level of significance,  $\lambda = .824$ ,  $F(5,48) = 2.051$ ,  $p = .088$ . However, univariate analyses of the main effects indicated interesting and significant changes in teachers' ratings from spring to fall for Engaged Learning,  $F(1,52) = 5.76$ ,  $p = .02$ ,  $\eta^2 = .10$ ; Student-Centered Learning,  $F(1,52) = 5.91$ ,  $p = .019$ ,  $\eta^2 = .10$ ; and Use of Technology,  $F(1,52) = 7.40$ ,  $p = .009$ ,  $\eta^2 = .12$ , with higher ratings following the summer institute.

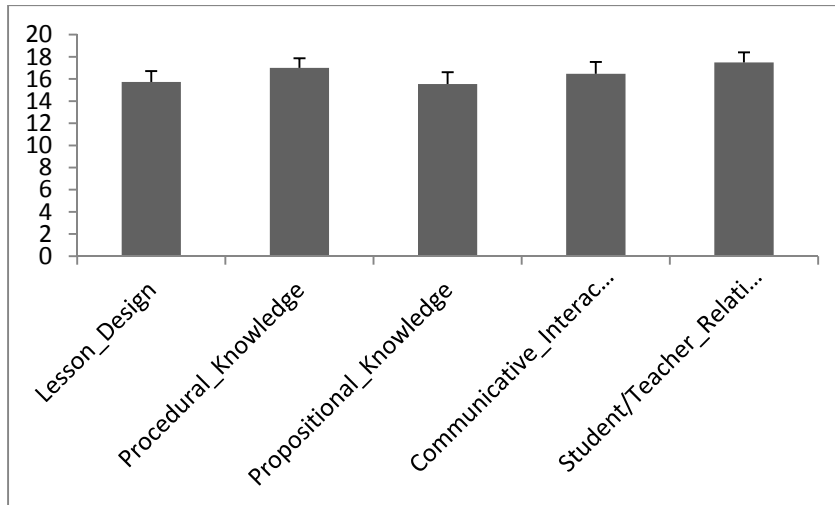


Teacher attitude analysis completed July 9, 2014.

#### Analysis of RTOP Data

The analysis indicates 52 useful RTOP observations. The scores were calculated for each of the five subscales and for the total. The total score ( $M = 82.2$ ,  $SD = 5.2$ ) was larger than the published norm of 48.5 for middle school teachers (the lowest academic level available). This difference was statistically significant,  $t(51) = 15.99$ ,  $p < .001$ ,  $d = 2.22$ .

The following graph presents the mean scores with 95-percent confidence intervals for each of the subscales. A one-way within groups ANOVA revealed a significant difference among the subscales,  $F(4,204) = 8.76$ ,  $p < .001$ ,  $\eta^2 = .15$ . *Post hoc* analyses showed that the Procedural Knowledge, Communicative Interactions, and Student/Teacher Relationship subscales were both significantly higher than the other three subscales.



### **Kids in College Mentoring Program**

*Staff Contact Name:* Consuella Woods

*Funding* – Lynchburg City Schools and Randolph College

*Description of the Initiative* – Middle school students in this program are having problems passing the Standards of Learning tests. Initially, college students volunteered for the program, but there was inconstancy in the number of volunteers available for each session. A class was developed that taught leadership and tutoring in mathematics. The idea was if students could develop strong leadership skills they could have the confidence to do well in all subjects.

*Partners* – Lynchburg City Schools/Paul Laurence Dunbar Middle School of Innovation

*Targeted Audience* – Undergraduates interested in teaching at the secondary level are recruited from the mathematics and science departments.

*Dates/Years Implemented* – Fall 2007

*Effectiveness/Outcomes* – Data are available showing the progress of the students in the program.

### **Science Saturdays**

*Staff Contact Name:* Dr. Peter Sheldon, Dr. Cheryl Lindeman, Dr. Peggy Schimmoeller

*Funding* – Internal Funding

*Description of the Initiative* – The College hosts Saturday science sessions to expose high school students to the sciences at the college level. The faculty in the education department host two Saturday sessions. During these sessions, faculty members talk to students about teaching middle school and high school science and mathematics and how to prepare for teacher licensure at the undergraduate level.

*Targeted Audience* – High school juniors and seniors

*Dates/Years Implemented* – Fall and spring semester each year (program began in 2014)

*Effectiveness/Outcomes* – Two sessions focused on encouraging high school juniors and seniors to consider entering a science or mathematics area with the intent to teach.

Session 1: What Happened When the Train Went Off the Track?

Session 2: Title: Teach the Science You Love!

### **One-Year Master of Arts in Teaching (MAT) for Initial Licensure**

*Staff Contact Name:* Dr. Peggy Schimmoeller

*Funding* – Tuition based and internal grant

*Description of the Initiative* – To help schools fill shortage areas in mathematics and science, Randolph College designed a Master of Arts in Teaching program that can be completed over 12 months, if taken on a full-time basis. Mathematics and science department students who may have thought about or are thinking about a career in teaching are recruited. They enter the MAT program with a major in mathematics or one of the natural sciences, and faculty members work with them to prepare to meet the Virginia licensure requirements. Candidates begin working in a school during the fall semester under the guidance of a full-time faculty member.

*Targeted Audience* – College seniors and career switchers

*Dates/Years Implemented* – 2008 to the present

*Effectiveness/Outcomes* – One of the most successful components of the program is the action research project all candidates conduct during the student teaching experience. This project allows candidates to become familiar with collecting data on student progress and using these data to inform their teaching. This program is very successful because the classes are small and students work closely with area school divisions in need. Many of the candidates are

offered teaching jobs during the student teaching experience. The program is intense and prepares candidates very well to enter the classroom. The job placement rate is 99 percent.

### **Meeting the Needs of Diverse Learners/Summer Camp Initiative**

*Staff Contact Name:* Dr. Peggy Schimmoeller

*Funding –* Randolph College

*Description of the Initiative –* To encourage candidates enrolled in the MAT program to consider an endorsement in special education, the College has partnered with a local elementary school to host a summer camp housed at the school site. Students who are “at risk” or have been identified as having a learning difference are invited to attend this enrichment camp. The focus is not on remediation, but research-based teaching methods are used to work with children in reading, writing, mathematics and science. The candidates have this experience early in the program (during the first summer session) and are able to experience and learn firsthand how to work with children with varying learning needs and how to differentiate instruction. This course has encouraged many candidates to add the special education endorsement. The hope is to expand this program and work with a local middle school using the same model.

*Partners:* Lynchburg City Schools/Paul Munro Elementary School

*Targeted Audience –* Graduate students

*Dates/Years Implemented –* Summer 2014

### **Randolph College Education Department Ideas in the Developmental/Exploratory Stage**

*Staff Contact Name:* Dr. Peggy Schimmoeller

The Education Department at Randolph College is exploring the following possible initiatives:

1. Grants/scholarships for students interested in teaching mathematics, chemistry, biology, or physics. Require adequate progress in the teacher education program at the undergraduate or graduate level.
2. Grants/scholarships for career switchers who want to teach mathematics or science or special education. A local school division would hire the candidate on a provisional license, and the candidate would receive a scholarship to enroll in the MAT program with support from faculty in the content area and in pedagogy as they begin teaching



- full time in the school. Courses would be given in a blended format to accommodate the teaching schedule.
3. Expand the “Teach What You Love” campaign on a larger scale to recruit more students to teach STEM curricula in middle and high schools. Extend the promotional materials and information to churches and synagogues and community centers.
  4. Expand the Randolph College SUPER program, which is a summer program that gives entering mathematics and science majors a scholarship and college credit to jump start their academic studies.

## **Randolph-Macon College**

### **Proposed Program: Randolph-Macon College Noyce Teacher/Scholar Program**

*Staff Contact Name:* Dr. Diana Yesbeck and Dr. April Marchetti

*Funding* – Seeking \$1.2 million from the National Science Foundation for 18 science candidates’ full tuition to prepare future classroom teachers

*Description of the Initiative* – The proposed program will be designed to accomplish several goals within the four years of the College experience:

Students will be shown the *relevance* of a career in education and the societal impact of STEM education. Special emphasis will be placed upon science as relevant to the lives of the K-12 students whom future educators will teach. Internships and classroom experiences at the College and in schools will relate to the relevance of science in research, medicine, and the environment, with concrete examples to exemplify scientific principles and content.

Students will be exposed to *research* in the field of education and in their STEM disciplines through a Noyce Summer Program, where they will be able to complete an internship, perform original STEM research with a faculty member or interact with students from high-needs school divisions during a Noyce student-designed summer camp. This experience will expose students to the most recent advancements in the field, developing a cohort of instructors with the skills to develop innovative instructional techniques and complete original STEM research in the secondary school setting.

A major focus of the program will be *retention* of students while in the program and once they begin their careers as STEM educators. This goal will be accomplished by endeavoring to create a cohesive cohort via multiple methods while students are at the College, and establishing a comprehensive support program during the induction year for new teachers.

*Partners* – National Science Foundation

*Targeted Audience* – Prospective students in physics, biology, chemistry, and teacher education

*Dates/Years Implemented* – Awaiting approval: Implementation dependent upon approval

## **Regent University**

### **Traineeships for Education of Special Education Personnel**

*Staff Contact Name:* Dr. Hope Jordan

*Funding* – State Funds

*Description of the Initiative* – Online Special Education: General Curriculum K-12 endorsement courses for individuals who hold a provisional license in special education.

*Dates/Years Implemented* – October 28, 2014-May 8, 2015

*Effectiveness/Outcomes* – Twenty-one participants took 168 credit hours.

## **Roanoke College**

### **Teaching in the Diverse Classroom**

*Staff Contact Name:* Dr. Maria Stallions

*Funding* – Institutional Support

*Description of the Initiative* – This initiative consisted of a series of “Open House” events focusing on English as a Second Language teaching career opportunities and exploring the importance and significant professional contributions as well as personal rewards of educating culturally and linguistically diverse Prek-12 students. The goal was not only to recruit Roanoke College students into the English as a Second Language teacher licensure credential program, but to initiate a campus-wide awareness campaign about teaching as a profession.

*Partners* – Roanoke College Admissions Office, Career Services, and the Department of Modern Languages

*Targeted Audience* – Roanoke College undeclared major and first generation students

*Dates/Years Implemented* – 2011-2012 and 2014

*Effectiveness/Outcomes* – Preliminary data indicate that interest in teaching English as a Second Language (ESL) has increased. While Roanoke College’s ESL teacher licensure program is relatively small, all of the December 2014 and May 2015 ESL program completers are teaching in Virginia. The Education Department at Roanoke College is in the early implementation stages of a three-year strategic plan with specific recruitment goals and measurable outcomes.

### **Teaching Mathematics and Science Marketing Campaign**

*Staff Contact Name:* Dr. Maria Stallions

*Funding* – Institutional Support

*Description of the Initiative* – This initiative is a marketing collaborative campaign project between Roanoke College’s Education Department and the Admissions Office targeting mathematics and science majors. Brochures and other marketing materials were developed and distributed to students with specific information about licensure requirements for teaching mathematics and science in middle and high school settings.

*Partners* – Roanoke College Admissions Office

*Targeted Audience* – Roanoke College undeclared major and first generation students

*Dates/Years Implemented* – Started in 2012; ongoing

## **Shenandoah University**

### **Meetings with School Division Superintendents**

Shenandoah University is collaborating to better meet the needs identified by area superintendents in the areas of special education, English as a Second Language (ESL), and the opportunity for teachers to gain certification as teacher leader/coaches. In fall 2015, the

University is working with the Virginia Association for Supervision and Curriculum Development (VASCD) to offer an Instructional Coaching Conference.

## **Sweet Briar College**

### **Tri-College Consortium for Clinical Faculty and Mentoring: Collaborative Practices (Serving Region 5)**

*Staff Contact Name:* Gail Brown

*Funding – Grant Award*

*Description of the Initiative –* Three colleges (Lynchburg, Randolph, and Sweet Briar) work together to provide a range of programs for PreK-12 students, parents, and the community on topics and issues related to local needs. For example, Lynchburg College hosts the Schewel Lecture on issues related to education and diversity.

*Partners -* Lynchburg College, Randolph College, and Sweet Briar College and the school divisions of Amherst, Appomattox, Bedford, Campbell, Lynchburg City, and Nelson

*Targeted Audience –* Clinical faculty and prospective teachers

*Dates/Years Implemented –* Most recently, December 16, 2014

*Effectiveness/Outcomes –* Grant research outcomes show that the Santa Cruz model, especially the Analysis of Student Work, gives teachers a new understanding of formative and summative assessment. The Tri-College Colloquium Consortium brings all student teachers from the three colleges together for workshops, lectures, and demonstrations. The special education lecture is one of many grant activities that are geared to clinical faculty and to prospective teachers.

### **Pathways to Science, Institute for Broadening Participation, Building Partnerships to Support Diversity in STEM, Explore Engineering**

*Staff Contact Name:* Paulette Porter-Stransky

*Funding –* AREVA, Inc.; National Science Foundation; Babcock and Wilcox; and Chrysler Group, LLC

*Description of the Initiative –* Broadening Participation in STEM education for women

*Partners* – St. Ambrose University

*Targeted Audience* – High school girls

*Dates/Years Implemented* – October 2008 to the present

*Effectiveness/Outcomes* – Since inception, over 350 high school girls (of which approximately one-quarter to one-third are minorities) have attended one or more of the events. Students have continued to become STEM teachers; engineering college professors; and biomedical, environmental, mechanical, electrical, and aerospace engineers. Many have succeeded in entering prestigious graduate schools. One member of the class of 2015 is currently an engineer at the Johns Hopkins Applied Physics Laboratory working in the Air and Missile Defense sector. A 2009 graduate has just returned with a Ph.D. and is teaching engineering beginning this semester at Sweet Briar College.

## **University of Mary Washington**

### **Professional Development Weekend Courses**

*Staff Contact Name:* Dr. Jane L. Huffman

*Funding* – The tuition for the courses is paid by the students at the rate for a one-credit course.

*Description of the Initiative* – The College of Education offers courses for teachers in the region on a wide range of topics across pedagogical areas and academic levels appropriate for P-12 professionals. The courses are offered on Friday evenings and Saturdays with some offered in a hybrid format. The courses are designed to address critical needs areas including special education and English as a Second Language.

*Partners* – The College of Education and school division partners in the region disseminate information about the courses to all teachers.

*Targeted Audience* – The program targets in-service teachers and other school professionals seeking professional development and license renewal credit.

*Dates/Years Implemented* – Courses are offered during the fall, spring, and summer terms. The program has been in place over 10 years.

*Effectiveness/Outcomes* – According to data over the past three years, 41 course sections were offered (29 different courses) with 514 teachers completing the courses. The course evaluation data confirm satisfaction with the quality of the courses. Satisfaction is also evidenced by the number of teachers who return to take additional weekend courses.

## **Teachers for Tomorrow**

*Staff Contact Name:* Dr. Shalyn Lapke

*Funding* – The program is funded by Prince William County Schools.

*Description of the Initiative* – The College of Education supports the efforts of the Prince William County Schools (PWCS) to recruit, mentor, and prepare middle and high school students interested in the field of education through their *Growing Our Own in PWCS* program initiative.

The College of Education has supported the Today's Students, Tomorrow's Teachers (TSTT) program through scholarships in the past, and scholarship students are still at the College. Dr. Shalyn Lapke serves on the program Advisory Board. The College of Education hosts students participating in the program on campus during the spring semester. Dr. Lapke directed the on-campus event for students to learn more about the teacher education program.

*Partners* – The University of Mary Washington College of Education partners with the Prince William County Schools *Growing Our Own in PWCS* program to support the Teacher Cadet and Future Educators of America programs in the county.

*Targeted Audience* – The targeted audience is high school students in Prince William County interested in the field of education.

*Dates/Years Implemented* – Ongoing partnership.

*Effectiveness/Outcomes* – In spring 2015, approximately 50 high school students visited the campus as part of the program. Future tracking of data will reveal success in the recruitment of students for teacher education programs.

## **Superintendents' Forums**

*Staff Contact Name:* Dr. Nina Mikhalevsky

*Funding* – The Forums are sponsored and funded by the College of Education.

*Description of the Initiative* – The College of Education partners with superintendents to examine opportunities for collaboration, including strategies for addressing teacher critical needs areas and professional development to support continuing teachers.

*Partners* – Spotsylvania County Schools, Stafford County Schools, Fredericksburg City Schools, Prince William County Schools, Fauquier County Schools, King George County

Schools, Culpeper County Schools, Westmoreland County Schools, Manassas City Schools, and Manassas Park City Schools.

*Targeted Audience* – Superintendents and Central Office Administrators in the school divisions surrounding the university.

*Dates/Years Implemented* – Ongoing partnership.

*Effectiveness/Outcomes* – Professional development partnerships have been created with school districts to offer courses in critical needs areas to support in-service teachers.

### **Facilitated Transfer Program**

*Staff Contact Name:* Dr. Nina Mikhalevsky

*Funding* – All costs associated with this program are covered by the university.

*Description of the Initiative* – The program goal is to increase the number of transfer students entering education programs at the University of Mary Washington by creating structures to ease the transition. This initiative has included the development of new literature targeting transfer students interested in education programs, including the critical needs areas of special education, elementary, secondary mathematics, and secondary science, and a Web page dedicated to transfers. Working with admissions and transfer advisors, faculty members have developed a protocol for regular engagement with students and advisors on the community college campus. Additionally, the university will be expanding its outreach to other community colleges in the region over the next year.

*Partners* – Germanna Community College

*Targeted Audience* – Community college students interested in teaching as a career.

*Dates/Years Implemented* – This is a new initiative beginning in 2015.

### **Makerspaces – STEM Education**

*Staff Contact Name:* Dr. George Meadows

*Funding* – The funding to support the partnership combines resources from the university, grants and the partnership schools.

*Description of the Initiative* – The College of Education partners with local schools in the area to create Makerspaces at school sites. The College provides its partners and the Makerspace

community with information about new technologies, links to tutorials, curriculum ideas, and special projects through professional development. The Makerspace labs provide students hands-on experience using new technology tools and through that experience excites them about careers in STEM fields including education.

*Partners* – Brock Road Elementary School, Cedar Forest Elementary School, Hartwood Elementary School, Robert E. Lee Elementary School, Battlefield Middle School, and England Run Branch Library

*Targeted Audience* – Teachers and students.

*Dates/Years Implemented* – This is a growing partnership project with new schools added each year. The program was first initiated in 2012.

*Effectiveness/Outcomes* – Makerspaces have been placed in partnership schools. For example, Hartwood Elementary School created the Engineering and Design Studio, which is now available for teachers and students to use for classes and special projects. Student interns placed in the Makerspace schools have the added value of teaching in the labs.

At England Run Library, a MakerLab space was designated for use each week and is staffed by Education students during the academic year. It offers library visitors interactive science activities to introduce them to the STEM field and demonstrates how teaching and learning have changed to encourage visitors to consider teaching as a profession with emphasis on STEM endorsement areas.

### **Environmental Education Makerspaces**

*Staff Contact Name:* Dr. George Meadows

*Funding* – Dominion Power

*Description of the Initiative* – This grant, awarded in 2015, will fund an effort by the College of Education and the College of Arts and Sciences faculty and students and educators from Friends of the Rappahannock and the England Run Public Library in a project investigating the development of environmental education makerspaces. The environmental education makerspace will be the first of its kind, and outcomes will include a number of makerspace-related projects, displays, and activities.

*Partners* – England Run Library and Friends of the Rappahannock.

*Targeted Audience* – Once the project is complete, the Makerspaces will support environmental education in schools and the library.



*Dates/Years Implemented* – The grant was awarded in 2015.

*Effectiveness/Outcomes* – Data will not be available until the project is complete.

### **Chesapeake Bay Trust Partnership**

*Staff Contact Name:* Dr. George Meadows

*Funding* – Chesapeake Bay Trust Fund Grants

*Description of the Initiative* – A partnership with teachers and principals at three elementary schools and the Friends of the Rappahannock was designed to educate more than 300 students about water pollution caused by oil spills. The students were engaged in designing motorized machines that would clean oil spills from the surface of the Rappahannock River. The project will be presented at the Virginia Association of Science Teachers Conference.

*Partners* – Anne E. Moncure, Hartwood Elementary School, Ferry Farm Elementary School, and Friends of the Rappahannock

*Targeted Audience* – Elementary school students.

*Dates/Years Implemented* – 2015

*Effectiveness/Outcomes* – The final report is in progress.

### **Special Education Teachers Support Grant**

*Staff Contact Name:* Dr. Roberta Gentry

*Funding* – State Funds

*Description of the Initiative* – The University of Mary Washington will deliver graduate-level special education courses to provisionally licensed (General Curriculum K-12) special educators working in public schools teaching students accessing the General Curriculum. The University of Mary Washington will provide courses in face-to-face, hybrid, and online formats.

*Partners* – Counties of: Arlington, Caroline, Clarke, Culpeper, Essex, Fairfax, Fauquier, Frederick, Gloucester, King George, King William, King and Queen, Lancaster, Loudoun, Mathews, Madison, Middlesex, Northumberland, Orange, Page, Prince William, Rappahannock, Richmond, Spotsylvania, Stafford, Warren, and Westmoreland; and cities of:

Alexandria, Colonial Beach, Falls Church, Fredericksburg, Manassas, Manassas Park, West Point, and Winchester.

*Targeted Audience* – Provisionally licensed teachers in Special Education attending the University of Mary Washington

*Dates/Years Implemented* – New grant for 2015-2016: the College of Education has been an annual recipient of the grant

*Effectiveness/Outcomes*

New Grant: Data not available until May 2016.

In 2014-2015, the grant served six provisionally licensed teachers in the region. Feedback from the UMW students and mentors was positive regarding support received and resources available online.

### **Clinical Faculty Grant, “Pathways to Excellence”**

*Staff Contact Name:* Dr. Courtney Clayton

*Funding* – VDOE grant

*Description of the Initiative* – The project is designed to create a cohort of clinically trained faculty in area schools to effectively mentor pre-service and beginning teachers. Teachers will be nominated to participate in this initiative. A focus of the professional development will be on learning analytics for teachers.

*Partners* – Spotsylvania County Schools, Stafford County Schools, and Fredericksburg City Schools.

*Targeted Audience* – Teachers in partnership school divisions.

*Dates/Years Implemented* –2015-2016.

*Effectiveness/Outcomes* – Data not available until September 2016.

### **Mathematics Science Program Grant**

*Staff Contact Name:* Dr. George Meadows

*Funding* – VDOE grant proposal

*Description of the Initiative* – This mathematics focus grant will engage faculty from the College of Education and the College of Arts and Sciences in a project designed to provide both content and pedagogical knowledge to mathematics teachers in Spotsylvania County elementary and middle schools. The project will address areas in mathematics identified as “areas of weakness” in the participating schools.

*Partners* – Spotsylvania County Schools

*Targeted Audience* – Elementary and middle school teachers.

*Dates/Years Implemented* –2015-2016.

*Effectiveness/Outcomes* – New grant

## **University of Richmond**

### **MSI: Richmond (Math/Science Investigators at Richmond)**

*Staff Contact Name:* Dr. Patricia Stohr-Hunt

*Funding* – Private Grant

*Description of the Initiative* – While initially targeted to Richmond City Public Schools middle school students, the program was extended to include Richmond City middle school teachers who were provisionally licensed or teaching out of field in the areas of mathematics and science. Teachers were recommended by the mathematics and science specialists and received three graduate-level courses in their discipline. These courses were designed to improve teacher content knowledge and pedagogy.

*Partners* – Richmond City Public Schools

*Targeted Audience* – Middle school mathematics and science teachers provisionally licensed or teaching out of field

*Dates/Years Implemented* – 2007-2014

*Effectiveness/Outcomes* – More than 60 teachers received training in mathematics or science during the years of implementation. Data are not available on how many went on to become fully licensed. Results of pre- and post-tests of participating science teachers using Diagnostic Science Assessments for Middle School Teachers indicated significant gains in content

knowledge. Pre- and post-testing for mathematics was done with a locally developed assessment and showed modest gains.

### **Dual Endorsement Programs**

*Staff Contact Name:* Dr. Patricia Stohr-Hunt

*Description of the Initiative* – The University of Richmond has developed a series of dual endorsement programs that allow program graduates and classroom teachers to add gifted education, English as a Second Language, and Special Education, General Curriculum to their endorsements. Additionally, the University partners with school divisions with high need to offer courses for cohorts of teachers.

### **University of Virginia**

#### **Curry Teaching Fellows**

*Staff Contact Name:* Dr. Adria Hoffman

*Funding* – Pilot funded by Apple Federal Credit Union Education Foundation. Currently, the project is working to secure additional community-based funding for more localities.

Funding will:

1. Offset teacher candidates' tuition and/ or licensure requirement (testing, processing, CPR/First Aid training) costs;
2. Compensate university supervisors (experienced educators/ administrators) familiar with and located in the placement community; and, ideally,
3. Support initiatives at the University of Virginia (UVA) Curry School of Education to prepare effective, culturally responsive teachers.

Ideal Funding Level per Fellow (Based on 2014-2015 tuition): \$9,700 per Fellow

\$500 (University Supervisor Compensation)

\$8,200 Full Semester Tuition + Fees

\$1,000 Culturally Responsive Teacher Preparation beyond coursework (for Fellows)

*Description of the Initiative* – This is a partnership program between individual school divisions and the UVA Curry School of Education. Curry teacher candidates named as Fellows will receive funding via a third-party and/or costs offset by the school division and, in return, commit to teach in that school division for a minimum number of years should they successfully complete their student teaching and receive an offer of employment. The school division will include Fellows in the teacher induction activities, collaboratively work to match them with strong mentors who will both model effective pedagogy and help these new professionals navigate the school division context, and prioritize Fellows in the hiring process.

Key features of the Fellowship include:

- Shared application decision making between school division and UVA personnel;
- Shared supervision between UVA faculty and school division personnel;
- Prioritized funding for school division-specific hard-to-staff endorsement areas and historically under-represented teacher demographics; and
- Funding to support candidates during the student teaching semester.

*Partners* – Falls Church City Public Schools and Apple Federal Credit Union Education Foundation

The institution is in the planning stages to develop this program for four additional school divisions in rural and urban areas in Virginia.

*Targeted Audience* –

Option I

- Recruit Curry teacher candidates who aim to teach in that school division (potentially alumni) and meet critical need areas in that school division
- Fellowship commitment to candidates stated prior to enrolling in MT program at Curry
  - Recruit graduates to return.
  - Offset expenses for promising teacher candidates facing financial challenges
- Annual Program Evaluation
- Aggregate, multi-year program evaluation to include impact on student academic progress

Option II

- Unlike the one-semester model, these Fellows would receive My Teaching Partner coaching for the entire year. They will complete the Curry School of Education student teaching requirements in the fall and then remain in their placements as part-time

instructional support staff while completing their field project and contemporary issues courses. In return for the additional supports, candidates agree to accept an offer of employment (should the school division make one) and remain employees in the school division (should their contracts be renewed) for at least 3 years. Third-party funding may supplement the part-time salary and provide funds needed for year-long My Teaching Partner coaching/supervision, locally based seminar facilitation, and program evaluation.

*Dates/Years Implemented* – Pilot Falls Church City Program Implemented fall 2014. Renewal of grant funding for a second year/Fellow in fall 2015.

*Effectiveness/Outcomes* – This partnership model will enable school divisions to recruit and retain promising teacher candidates. As they hire Fellows, the school division will build capacity in critical need areas. The potential to use this funding to “grow their own” teachers may reduce teacher attrition. Fellows may serve as mentors for future student teachers and potentially reduce school divisions’ need to hire at the current rates.

### **University of Virginia Robert Noyce Teacher Scholarship and Stipend Program**

*Staff Contact Name:* Dr. Frackson Mumba

*Funding* – \$1.3 million, National Science Foundation grant

*Description of the Initiative* – The University of Virginia has implemented the National Science Foundation-funded Robert Noyce Scholarship and Stipend Program aimed at training 40 academically talented science and engineering undergraduates and STEM professionals who will become licensed high school science teachers in high-need schools in Virginia. This is a five-year project. The educational experience for Noyce scholarship and stipend recipients includes coursework in the UVA secondary science teacher education program. Overall, this project will significantly increase the number of licensed secondary science teachers in high-need schools in Virginia, and subsequently stands to increase student achievement in science.

*Partners* – Hampton City Public Schools, Alexandria City Public Schools, and Culpeper Public Schools

*Targeted Audience* – Undergraduate students in science and engineering and STEM professionals (graduate students and industry professionals with degrees in science and engineering).

*Dates/Years Implemented* – 2014-2019

*Anticipated Outcomes* – Overall, this project will significantly increase the number of licensed secondary science teachers in high-need schools in Virginia, and subsequently stands to improve student achievement in science.

## **University of Virginia’s College at Wise**

### **Robert Noyce Teaching Scholarship Program (Wise-Scholars)**

*Staff Contact Name:* Dr. Paul Andrew “Andy” Cox

*Funding* – National Science Foundation (NSF) Robert Noyce Teaching Scholarship Fund (\$783,000)

*Description of the Initiative* – The University of Virginia’s College at Wise Robert Noyce Scholars proposal (Wise-Scholars) is uniquely designed to encourage talented undergraduate students to become highly qualified mathematics and science teachers in high-need secondary schools. The Wise-Scholars program addresses the critical need for STEM teachers by offering students an assortment of camps, academic support, teaching opportunities, internships, stipends, scholarships, and a STEM support community after graduation.

The Wise-Scholars program, through a series of modules, seeks to recruit, educate, train, support, and produce highly qualified STEM teachers. Specifically, the proposal will: (1) create a partnership with two local high-need K-12 school divisions, (2) encourage more students to seek teaching careers in the STEM areas, (3) increase the number of highly qualified STEM educators, (4) improve the quality of the UVA-Wise Teacher Education Program, (5) offer new academic support to STEM and all students, (6) secure additional teaching training opportunities for STEM students, (7) provide financial support to students, and (8) create a STEM career mentor support system.

*Partners* – Norton City Public Schools and Wise County Public Schools

*Targeted Audience* – High school and college students who show potential in becoming STEM educators

*Dates/Years Implemented* – January 2016

*Effectiveness/Outcomes* – Pending NSF funding

## **Virginia Commonwealth University**

### **Richmond Teacher Residency Program**

*Staff Contact Name:* Dr. Terry Dozier

*Funding* – \$5.8 million in 2010; Re-funded in 2014 for \$7.5 million through a five-year Teacher Quality Partnership grant from the U.S. Department of Education

*Description of the Initiative* – The Richmond Teacher Residency Program recruits outstanding individuals with an undergraduate major in a high-need content area to Richmond City Public Schools. Virginia Commonwealth University provides them with an intensive, school-based teacher preparation program that integrates research and theory behind effective urban teaching with a year-long medical-style residency under the mentorship of an exemplary classroom teacher. This program is part of a national network of urban teacher residency programs.

*Partners* – Richmond City Public Schools, Jim Ukrop, Main Street Realty, Greater Richmond Chamber of Commerce, Venture Richmond

*Targeted Audience* – Undergraduate majors in a high-need content area

*Dates/Years Implemented* – 2010 to the present

*Effectiveness/Outcomes* – Sixty candidates have been fully licensed and employed since the program's inception. The current program has 16 candidates (eight in special education and eight secondary education majors, including science education and middle school mathematics education majors).

### **VCU Noyce Initiative and VCU Noyce II**

*Staff Contact Name:* Dr. Jacqueline McDonnough

*Funding* – Funded by the National Science Foundation initially in 2009 and a continuation award funded in 2013.

*Description of the Initiative* – The VCU Noyce Initiative is an integrated collaborative project between the School of Education and the College of Humanities and Sciences, in partnership with area school divisions including Richmond City, Henrico County, Chesterfield County, and Hopewell City (2010 only). This program recruits, supports, and prepares undergraduate and graduate students to be effective secondary science and mathematics teachers in high-needs schools.



*Partners* – Identified high-needs schools in Henrico County, Chesterfield County, and Richmond City.

*Targeted Audience* – Undergraduate and graduate science and mathematics majors

*Dates/Years Implemented* – 2009 to the present

*Effectiveness/Outcomes* – The Noyce program has recruited and placed over 40 secondary science and mathematics teachers since its inception in 2009. The majority (90 percent of Noyce graduates) are currently working in high-needs schools.

## **Virginia State University**

### **G.R.O.W.S. (Gaining Real Opportunities With Students)**

*Staff Contact Name:* Shandra Claiborne-Payton

*Funding* – Title III of the Higher Education Act

*Description of the Initiative* – In an attempt to recruit students to consider the teaching profession as a career, the College of Education has organized an annual one-week summer program called G.R.O.W.S. for upcoming high school seniors in the state of Virginia. The program is focused on collegiate awareness, teacher preparation, and leadership training. The program instills skills such as initiative, creativity, accountability, collaboration, and communication. During the week, the following components are incorporated in the workshops and culminating experiences: (1) Implementing instructional technology in the classroom; (2) Professional Dispositions; (3) Politics in Education with a culminating trip to Washington, D.C., to visit the U.S. Department of Education, two Congressmen, and the National Education Association; (4) SAT preparation; (5) Conceptual Framework of the Virginia State University College of Education; (6) Stephen Covey's Leadership training; and (7) team-building activities. This recruitment effort has allowed the university to connect with students and build relationships and show what The College of Education at Virginia State University has to offer.

*Partners* – Surrounding school divisions and the U.S. Department of Education

*Targeted Audience* – High school seniors

*Dates/Years Implemented* – 2010 to the present

*Effectiveness/Outcomes* – The G.R.O.W.S. Program has been successful in recruiting (64 percent of the participants to enroll at Virginia State University) and encouraging students to

pursue a degree with a teacher education endorsement. The students accepted to the university all have over a 3.0 GPA and 1000 on the SAT (Mathematics/Verbal). The G.R.O.W.S. program continues to be effective at attracting the type of candidates needed to produce quality teachers and will help the College of Education meet the revised standards and benchmarks set by the Council for the Accreditation of Educator Preparation (CAEP).

## **Virginia Tech**

### **Virginia Tech, Robert Noyce Scholarships**

*Staff Contact Name:* Dr. Jay Wilkins

*Funding* – Full scholarship

*Description of the Initiative* – In collaboration with the university, two local divisions, and three local community colleges, this program encourages mathematics majors to commit to teaching in a high-needs school for two years after graduation.

*Partners* – Montgomery County Public Schools, Roanoke City Public Schools, New River Community College, Southwest Virginia Community College, and Virginia Western Community College

*Targeted Audience* – Mathematics majors

*Dates/Years Implemented* – 2010

### **Distance Learning for Provisionally Licensed Science Teachers**

*Staff Contact Name:* Dr. Takumi Sato

*Funding* – Self-funded by students – tuition reduction for teachers in Virginia

*Description of the Initiative* – The program provides graduate-level courses for science teachers who are provisionally licensed or practicing teachers. Students earn a master's degree in education through distance learning courses that enhance their current teaching practices.

*Targeted Audience* – Current practicing science teachers, especially those who have not completed a full education program

*Dates/Years Implemented* – 2008

## **Physics Teacher Education Coalition (PhysTEC)**

*Staff Contact Name:* Dr. George Glasson

*Funding* – Self-funded by students

*Description of the Initiative* – Virginia Tech is one of nine fully-funded, comprehensive PhysTEC institutions in the country. The program is a focused effort for pre-service teachers to make a seamless transition between their undergraduate physics degrees and their Master of Education degrees in Science Education through specialized curriculum scheduling and cross-departmental communication. Courses in undergraduate physics have been revised to represent teaching pedagogy and introduce education as a career option.

*Partners* – Virginia Tech Physics Department and Science Education Department

*Targeted Audience* – Physics majors

*Dates/Years Implemented* – August 2011

*Effectiveness/Outcomes* – Awarded the 5+ club status in 2012-2013 for graduating five or more physics teachers in one year. Overall, graduates from PhysTEC programs stay in the profession longer than other graduates.

## **Virginia Union University**

### **STEM EnRichmond**

*Staff Contact Name:* Dr. Gerard McShepard/Ms. Linda Jackson/Dr. Matthew Lynch

*Funding* – Altria, MeadWestvaco, and Wells Fargo

*Description of the Initiative* – This initiative is meant to facilitate a pipeline of highly qualified STEM teachers to serve the metro Richmond Area.

*Partners* – Altria, MeadWestvaco, and Wells Fargo

*Targeted Audience* – Entering freshmen

*Dates/Years Implemented* – 2014-2015

## **Master of Arts in Curriculum and Instruction (New Program)**

*Staff Contact Name:* Dr. Matthew Lynch

*Funding* – Tuition based

*Description of the Initiative* – This new program provides a curriculum and instruction graduate program with three unique strands: Elementary Education, Urban Education, and Special Education. The aim of the program is to prepare teacher leaders for challenges and potential job placement in area schools.

*Targeted Audience* – Area educators interested in earning graduate degrees and focusing on specific strands of Elementary Education, Urban Education, and Special Education.

*Dates/Years Implemented* – January 2015

## **Virginia Wesleyan College**

### **School Service/Community Outreach**

*Staff Contact Name:* Dr. Hilve Firek/Dr. Malcom Lively

*Funding* – Virginia Wesleyan College Education and Biology Departments

*Description of the Initiative* – As part of initiating a partnership with Suffolk Public Schools and Chesapeake Public Schools in 2013, Virginia Wesleyan College (VWC) invited International Baccalaureate students to receive instruction and experiment with VWC's Scanning Electron Microscope with members of the VWC Biology Department. Due to the success of this program, additional invitations have been extended for fall 2015 to biology teachers and students from Nansemond-Suffolk Academy and Henrico County Public Schools, and VWC anticipates hosting students from Bayside High School's Health Sciences Academy as part of a new partnership with Bayside. The impetus for this initiative was a similar program implemented with Teacher Cadets that was funded through a Verizon/Virginia Foundation of Independent Colleges Grant (\$20K) from 2011-2013.

*Partners* – VWC Biology Department and participating school divisions

*Targeted Audience* – High school science and International Baccalaureate students

*Dates/Years Implemented* – 2013 to the present

## **Washington and Lee University**

### **Establishing Connections to Promote Teaching**

*Staff Contact Name:* Dr. Lenna Ojure

*Description of the Initiative* – Washington and Lee University (W&L) has several strategies to promote interest in teaching in critical shortage areas. Students from all majors are invited to volunteer in the nearby public schools as possible, either during the day or in after school programs. This involvement has led to a number of students enrolling in the teacher licensure program. The majority of W&L's teaching candidates earn licensure in elementary education. In addition, a steady flow of students are earning licensure in the sciences. Because students complete fieldwork assignments with every course they take, they become familiar with the local schools and often know when there are going to be openings.

The Teacher Education Program also establishes connections with specific faculty in each of the disciplines at W&L, asking them to promote teaching. W&L has strong advocates in music, biology, chemistry, English, psychology (often a source for elementary education students), and in the poverty studies program.

*Partners* – The three school divisions in the area: Rockbridge County, Lexington, and Buena Vista.

*Effectiveness/Outcomes* – The W&L program is small, however, of note is that two men completed licensure in elementary education in the last two years because of volunteer work in the schools, and they are teaching in Virginia schools. In 2015-2016, three of W&L's recent graduates will be teaching in the surrounding school divisions. Given that W&L produces only about 12 teachers a year, 25 percent of these students will be serving our local schools.

**Teacher Recruitment and Retention Initiatives Provided by  
the Virginia Department of Education**

**Clinical Faculty Programs (Teacher Preparation Programs)**

*Staff Contact Name:* Dr. Joan B. Johnson

*Authority* – Virginia Appropriation Act

*Funding* – The Virginia General Assembly appropriated funds in the amount of \$318,750 for Clinical Faculty Programs.

*Description of the Initiative* – State funds are used to award competitive grants to support training provided by Virginia regionally accredited Approved Educator Preparation programs to enhance Clinical Faculty and Teacher Induction Programs. The Clinical Faculty Programs will serve to assist pre-service teachers and beginning teachers to make a successful transition into full-time teaching. Institutions of higher education must collaborate with school divisions in the continued development and implementation of Clinical Faculty Programs.

*Targeted Audience* – Virginia regionally accredited institutions of higher education that have Board of Education-approved educator preparation programs.

*Dates/Years Implemented* – Started 1998, ongoing

*Effectiveness/Outcomes* – Each program provides an evaluation plan that measures the progress towards meeting the project goals and objectives by evaluating the impact (or potential impact) of the clinical faculty training on student achievement. During the 2014-2015 year grant recipients include:

Amherst County Public Schools (Sweet Briar, Lynchburg College, Randolph College)  
The College of William and Mary  
Hampton City Public Schools (Hampton University)  
Hanover County Public Schools (Randolph-Macon College)  
James Madison University  
Norfolk State University  
University of Virginia's College at Wise  
Virginia Commonwealth University  
Virginia Tech Consortium (Virginia Tech, Radford University, Roanoke College,  
Hollins College, and Ferrum College).

For that grant period, a total of 1,457 clinical faculty members and mentor teachers participated in program training activities. The training also impacted more than 977 pre-service teachers, counselors, and first year teachers and counselors through the efforts of the clinical faculty's and mentor teachers' coaching and supervision.

Clinical faculty grants have been awarded for the 2015-2016 year to the following recipients:

Amherst County Public Schools (Lynchburg College, Randolph College, and Sweet Briar College)  
Christopher Newport University  
The College of William and Mary  
Hampton City Public Schools (Hampton University)  
James Madison University Partners: Bridgewater College, Mary Baldwin College  
University of Mary Washington  
University of Virginia's College at Wise  
University of Virginia  
Virginia Commonwealth University  
Virginia Tech Consortium (Virginia Tech, Radford University, Roanoke College, Hollins University, and Ferrum College).

### **Mentor Teacher Program**

*Staff Contact Name:* Dr. Joan B. Johnson

*Authority* – The Mentor Teacher Program is authorized by the *Code of Virginia*, Section [22.1-305.1](#).

*Funding* – The Virginia General Assembly appropriated \$1,000,000 for the Mentor Teacher Program for Fiscal Year 2016.

*Description of the Initiative* – This program provides grants to school divisions to support mentors for new teachers with zero years of teaching experience. Participation in this funding opportunity is voluntary. However, Section 22.1-303 of the *Code of Virginia* requires that, “School boards shall provide each probationary teacher except probationary teachers who have prior successful teaching experience, as determined by the local school board in a school division, a mentor teacher, as described by Board guidelines developed pursuant to § 22.1-305.1, during the first year of the probationary period, to assist such probationary teacher in achieving excellence in instruction.”

*Targeted Audience* – New teachers with zero years' experience

*Dates/Years Implemented* – Ongoing

*Effectiveness/Outcomes* – In the 2015-2016 school year, 4,760 new teachers with zero years of experience were reported. The school division grants provided \$210.08 per teacher to support mentoring of these new teachers.

## **National Board Certification Incentive Award**

*Staff Contact Name:* Ms. Eleanor Joyce

*Authority* – The National Board Certification Incentive Award Program and fund is authorized in the *Code of Virginia* § 22.1-299.2.

The 1999 General Assembly in House Bill 2910 codified the National Board Incentive Award Program and Fund by prescribing that teachers who obtain national certification shall receive for an initial award and subsequent awards. Procedures for determining amounts of awards if the moneys in the “fund” were not sufficient were established by the Virginia Board of Education.

*Funding* – Funding is authorized in Chapter 665 of the 2015 Acts of Assembly, Special Session, Item 135.

*Description of the Initiative* – On June 28, 2012, the Virginia Board of Education (BOE) adopted revised *Guidelines for Distributing National Board Certification Incentive Awards*. The *Guidelines* were revisited to clarify the eligibility criteria and to change the timeline for distributing incentive awards. The BOE established the following Eligibility Criteria for the National Board Certification Awards:

- An individual seeking a National Board Certification Incentive Award must:
  - hold an active National Board Certificate issued by the National Board for Professional Teaching Standards and be employed as a teacher in a public school in Virginia on September 30 of the current school year with at least 50 percent of the regular school day engaged in direct instruction with students; and
  - be a teacher holding an active five-year renewable license issued by the Virginia Board of Education.
- An individual who holds an active National Board Certificate issued by the National Board for Professional Teaching Standards and is assigned as a building administrator, a supervisor in a central office position, or a teacher who is teaching less than 50 percent of the regular school day shall be excluded from the incentive awards.
- The teacher’s employment shall be verified annually by the division superintendent or designee pursuant to the Appropriation Act.



## Procedures for Distributing the Incentive Awards

On June 28, 2012, the Virginia Board of Education established the following revised procedures for distributing the National Board Certification Incentive Awards:

- An initial award not to exceed \$5,000, contingent upon available funding, will be issued to teachers who meet the eligibility criteria described above and who achieved National Board Certification while teaching in a Virginia public school.
- Continuing awards not to exceed \$2,500, contingent upon available funding, will be issued annually for the life of the active certificate to teachers who meet the above eligibility criteria each year the award is granted. An individual will not receive an initial award and a continuing award in the same year.
- For those individuals who receive notification that they achieved National Board Certification while teaching in another state, no initial award will be granted. These individuals will be eligible for the continuing award, contingent upon available funding, for the life of the active certificate provided the individual continues to meet the eligibility criteria described above.
- Contingent upon available funding, awards shall be granted to all National Board Certified teachers who meet the eligibility criteria as of September 30 of each school year and whose names are reported to the Virginia Department of Education. Funds will be distributed to employing school divisions on or before December 31 of the same school year for distribution to their eligible teachers. The incentive payment is taxable to the recipient, and the school division assumes responsibility for ensuring all taxes are remitted.
- The procedure for disbursement of funds if the program is not fully funded shall be based on a 2:1 ratio. (The initial award would be twice that of the continuing award).
- The procedure for disbursement of funds following a year when no funds are appropriated or available shall be as follows:
  - An individual who meets the criteria for an initial award would be granted such an award once funds are available; and
  - An individual who meets the criteria for a continuing award would be granted such an award once funds are available. (Awards for previous years when funds were not available would not be granted).
- In school years when funding has been appropriated, school divisions must complete and submit to the Virginia Department of Education a signed National Board Certification Incentive Award verification report. It is the responsibility of each school division to determine the eligibility of each individual who meets the Board of Education eligibility criteria and to submit individuals' names on the National Board Certification Incentive Award verification report and signed affidavit every school year pursuant to the Appropriation Act.

*Partners* – The VDOE partners with each public school division in Virginia to determine the names of National Board Certified Teachers (NBCTs) who meet the eligibility requirements for the award. In August of each year, a superintendent’s memo is published directing school divisions to submit the names of eligible NBCTs through the Single Sign-on for Web Systems (SSWS) portal. The funds are distributed from the Virginia Department of Education to the school divisions that reported eligible NBCTs by December 31 each year. The school divisions are responsible for distributing the funds and making sure taxes are remitted.

*Targeted Audience* – The targeted audience is all teachers in Virginia who wish to pursue a rigorous professional development opportunity. National Board Certification is an extensive assessment of actual teaching practice based upon high and rigorous standards established by the National Board for Professional Teaching Standards (NBPTS). Founded in 1987, NBPTS is an independent, nonprofit, nonpartisan and nongovernmental organization governed by a board of directors, with the majority of its 29 members being classroom teachers.

Through the National Board Certification process, teachers document their subject knowledge, provide evidence that they know how to teach their subjects to students most effectively, and demonstrate their ability to manage and measure student learning.

*Dates/Years Implemented* – 1999 to the present

*Effectiveness/Outcomes* – In 2015, 2,016 National Board Certified Teachers (NBCTs) in Virginia received incentive awards. Continuing awards of \$2,500 were awarded to 1,865 NBCTs, and 151 received an initial award of \$5,000.

In November 2015, another 63 Virginia teachers achieved National Board Certification and may be eligible for the initial incentive award in 2016. This number is lower than usual because all new NBCTs are retaking portfolio entries. The NBC process has been revised, and the new process will become effective in 2017.

In 2014, Virginia ranked eighth nationally in the number of new National Board Certified Teachers and eleventh among the states in the total number of National Board Certified Teachers with a total of 3,091.

According to data received from the National Board for Professional Teaching Standards, 370 Virginia teachers who certified between 1995 and 2005 have renewed their certification.

Prior to 2014, all National Board assessments consisted of two major parts, the portfolio entries and the assessment center exercises. Candidates could complete the process in one, two, or three years. Beginning in the 2014-2015 school year, the process changed for the first time

since 2001. Candidates will continue to have up to three years to complete the process. The assessment process will change to consist of four major components:

- Content Knowledge,
- Differentiation in Instruction,
- Teaching Practice and Learning Environment, and
- Effective and Reflective Practitioner.

The certification process is being revised, but the standards and rigor of the process will not change. The revised certification process will:

- Continue to be based on the Five Core Propositions of the National Board for Professional Teaching Standards.
- Incorporate the latest research on effective teaching. Just as Board-certified teachers always have been asked to be reflective in their practice, the National Board also strives to ensure the certification process incorporates new research on best teaching practices.
- Decrease cost from \$2,500 (one-time fee) to \$1,900 (\$475 per component) to give candidates the option to pay as they go through the process thus spreading out the payments over three years.

During the transition to the new process, the only teachers who achieve certification in 2015 and 2016 will be those teachers who did not achieve certification in 2014 and are retaking a portfolio entry or assessment center exercises. This is the reason the number of National Board Certified Teachers is lower in 2015. The first class of National Board Certified Teachers who will achieve certification through the new process will be announced in the fall of 2017. The teachers who achieve certification in 2017 will be eligible for an initial award in 2018.

Teachers who are eligible for a continuing award of \$2,500 will continue to receive the award, pending approval of the National Board Certification Incentive Award by the General Assembly and verification of eligibility from the employing school division.

Offered on a voluntary basis, a National Board Certificate is valid for ten years and can be renewed in the eighth or ninth year of the certificate validity period. The renewal fee is \$1,250.

**Summary of Financial Reports 1999-2015**

School Year	Initial Award Recipients	\$5,000 Per Teacher	Continuing Award Recipients	\$2,500 Per Teacher	Total Award Payments
1999-2000	22	\$110,000	0	0	\$110,000

School Year	Initial Award Recipients	\$5,000 Per Teacher	Continuing Award Recipients	\$2,500 Per Teacher	Total Award Payments
2000-2001	39	\$195,000	22	\$55,000	\$250,000
2001-2002	70	\$350,000	53	\$132,500	\$482,500
2002-2003	116	\$580,000	115	\$287,500	\$867,500
2003-2004	137	\$685,000	227	\$567,500	\$1,252,500
2004-2005	127	\$635,000	346	\$865,000	\$1,500,000
2005-2006	171	\$855,000	458	\$1,145,000	\$2,000,000
2006-2007	161	\$805,000	605	\$1,512,500	\$2,317,500
2007-2008	220	\$1,100,000	735	\$1,837,500	\$2,937,500
2008-2009	272	\$1,360,000	921	\$2,302,500	\$3,662,500
2009-2010	312	\$1,560,000	1,151	\$2,877,500	\$4,437,500
2010-2011	227	\$1,135,000	1,402	\$3,505,000	\$4,640,000
2011-2012	175	\$875,000	1,575	\$3,937,500	\$4,812,500
2012-2013	191	\$955,000	1,643	\$4,107,500	\$5,062,500
2013-2014	192	\$960,000	1,727	\$4,317,500	\$5,277,500
2014-2015	242	\$1,210,000	1,797	\$4,492,500	\$5,702,500
2015-2016	151	\$755,000	1,865	\$4,662,500	\$5,417,500
<b>TOTAL</b>					<b>\$50,730,000</b>

**Special Education Teacher Recruitment and Retention Initiatives (Federally-Funded Programs)**

*Staff Contact Name:* Ms. Johnelle M. Torbert

*Authority* – The special education initiatives, including Speech and Language, are funded through the Individuals with Disabilities Education Act (IDEA), Part B Section 611, Flow-Through Sub-grant Awards (CFDA#84.027).

*Funding* – Listed below are the initiatives, agency, and amount funded for 2015-2016.

Program Initiatives	Institution/Agency	Amount Funded
Consortium of Institutions of Higher Education in Virginia in Severe Disabilities	George Mason University	\$451,577
Traineeship for Special Education Personnel: A Distance Model for Endorsement in Special Education: General Curriculum (DCOP)	George Mason University	\$84,994
Consortium of Institutions of Higher Education in Virginia in Visual Impairments	George Mason University	\$266,282.17
Traineeship for Special Education Personnel:	Old Dominion University	\$84,855

<b>Program Initiatives</b>	<b>Institution/Agency</b>	<b>Amount Funded</b>
The Commonwealth Special Education Endorsement Program (CSEEP) Endorsement Program		
Radford Teaching Preparation Project: Hearing Impairments PreK-12	Radford University	\$200,000
Comprehensive Web-based Educator Recruiting Management Service*	Teachers.Teachers.com	\$238,000

\***Note:** Additional funding is provided by the Office of Program Administration and Accountability in the amount of \$42,000 to cover total expenses.

*Description of the Initiative* – The Virginia Department of Education (VDOE) provides funding to Virginia regionally accredited institutions of higher education that offer a Virginia Board of Education-approved teaching endorsement programs in special education.

**Consortium of Institutions of Higher Education in Virginia in Severe Disabilities  
(George Mason University)**

The following institutions are part of a consortium that offers an endorsement in Adapted Curriculum K-12: George Mason University, James Madison University, Norfolk State University, Old Dominion University, Radford University, and Virginia Commonwealth University. These institutions offer the coursework needed for an individual seeking a license with an Adapted Curriculum K-12 endorsement and a license holder with an endorsement in Special Education - General Curriculum K-12 seeking to add an endorsement in Special Education-Adapted Curriculum K-12 to the license. The Virginia Consortium for Teacher Preparation in Severe Disabilities and Autism Web site may be accessed at the following link: <http://kihd.gmu.edu/sdc/>.

**Traineeship for Special Education Personnel: A Distance Model for Endorsement in Special Education: General Curriculum (DCOP) (George Mason University)**

The purpose of this project is to provide training for Special Education: General Curriculum K-12 to deliver undergraduate and/or graduate-level special education courses to individuals who hold a provisional (special education) license with a Special Education: General Curriculum K-12 endorsement and who are employed in Virginia public schools as special educators of children with disabilities (accessing the general curriculum). The primary emphasis is on providing funding to support this endorsement program. The Distance Cohort Outreach Program Web site may be accessed at the following link: <http://gse.gmu.edu/special-education-cohort/admission/>.

**Consortium of Institutions of Higher Education in Virginia in Visual Impairments  
(George Mason University)**

The Virginia Consortium of Institutions of Higher Education in Vision Impairments (VI) is comprised of five universities in Virginia (George Mason, Norfolk State, Old Dominion, Radford, and James Madison). The mission of the VI Consortium is to develop and implement a statewide program to meet the initial and continuing education needs for teachers of students with visual impairments in the Commonwealth of Virginia. Utilizing distance education and a shared program of study and coursework, participating universities will provide coursework toward licensure with an endorsement in Special Education: Visual Impairments, as well as continuing education courses for teachers to become designated as highly qualified teachers of students with visual impairments. Information for the Virginia Consortium for Teacher Preparation in Vision Impairments Web site may be accessed at the following link: <http://kihd.gmu.edu/training-grants/teacher-prep-program/>.

**Traineeship for Special Education Personnel: The Commonwealth Special Education Endorsement Program (CSEEP) Endorsement Program (Old Dominion University)**

The Commonwealth Special Education Endorsement Program (CSEEP) is a technology-rich, innovative approach to teacher preparation in special education. The purpose of this project is to provide training for Special Education: General Curriculum K-12 by delivering undergraduate and/or graduate-level special education courses to individuals who hold a provisional (special education) license with a Special Education: General Curriculum K-12 endorsement and who are employed in Virginia public schools as special educators of children with disabilities (accessing the general curriculum). The primary emphasis is on providing funding to support this endorsement program. The Commonwealth Special Education Endorsement Program Web site may be accessed at the following link: <http://www.odu.edu/education/programs/cseep>.

**Radford Teaching Preparation Project: Hearing Impairments PreK-12  
(Radford University)**

The purpose of this program is to provide preparation for full-time undergraduate and graduate students seeking an endorsement in Special Education: Hearing Impairments PreK-12. In addition, persons currently working under a provisional license serving students with hearing impairments and persons seeking an add-on endorsement in this area may participate through part-time studies. The Hearing Impairments PreK-12 Preparation and Professional Development Program Web site may be accessed at the following link: <http://www.radford.edu/content/cehd/home/rudhh.html> .

## **Virginia Early Childhood Special Education (ECSE) Consortium (Radford University)**

The Virginia Early Childhood Special Education (ECSE) Consortium is comprised of Radford University and Lynchburg College. The purpose of the consortium is to provide preparation to assist current teachers in early childhood special education (ECSE) with provisional licensure to complete six of the required courses for the Early Childhood Special Education endorsement. Teachers in this group are the priority recipients of tuition assistance. The Virginia Consortium for Teacher Preparation in Early Childhood Special Education Web site may be accessed at the following link: <http://www.lynchburg.edu/master-education-special-education/va-consortium-early-childhood-special-education>.

*Partners* – See description listed above.

*Targeted Audience* -Provisionally licensed teachers and individuals seeking endorsement in various areas of special education.

Consortium of Institutions of Higher Education in Virginia in Severe Disabilities: 2002-Present

Traineeship for Special Education Personnel: A Distance Model for Endorsement in Special Education: General Curriculum (DCOP) (George Mason University): Mid 1990s-Present

Consortium of Institutions of Higher Education in Virginia in Visual Impaired (George Mason University): The program was first awarded funds in October 2006 for planning with a start date for the program of fall 2007.

Traineeship for Special Education Personnel: The Commonwealth Special Education Endorsement Program (CSEEP) Endorsement Program (Old Dominion University): 1997-Present

Radford Teaching Preparation Project: Hearing Impairments PreK-12 (Radford University): 2002-Present

*Effectiveness/Outcomes* – All data listed below are based on the 2014-2015 academic year.

Consortium of Institutions of Higher Education in Virginia in Severe Disabilities (George Mason University):

During the 2014-2015 academic year, a total enrollment of 332 students completed coursework through the consortium with a delivery of nine courses

through video conferencing to the six consortium universities and additional remote sites. In addition, George Mason University is offering a series of cohort courses with Fairfax County Public Schools with an additional 20-25 students per course.

#### Traineeship for Special Education Personnel: A Distance Model for Endorsement in Special Education: General Curriculum (DCOP) (George Mason University):

DCOP supported students through three cohort designs, as follows:

Design A: Provided a face-to-face distance education model for a schedule of courses designed for an identified group of individuals (20 in each cohort) seeking a licensure program.

Design B: Provided an on-line and face-to-face distance education model for individual courses needed by individuals who may or may not need to join a specific cohort of classes.

Design C: Individuals applied to complete a course that is online/on-demand via distance technologies. The program expanded the *use* and *capacity* of technology to effectively and efficiently provide eCoaching and/or supervision of prospective teachers (who are seeking licensure) during their field-based experiences, specifically. This was done by piloting the virtual coaching model (e.g., bug-in-ear) in the fall 2014 and spring 2015. Third, technology to facilitate eCoaching was purchased, and funding to support the training of supervisors and familiarizing students as to how to use these technologies was provided.

The 2014-2015 DCOP project piloted (three university supervisors and ten interns) the eCoaching during the culminating eight-week teaching internships. During the pilot, project personnel developed a process of expectations for the eCoaching model during the internship, became familiar with the technology, developed coaching skills, identified prerequisites needed by the interns for coaching, and are currently analyzing the data to determine specific intern outcomes. Anecdotally, the interns were very receptive to the “bug-in-ear” technology and appreciated the real-time feedback during their teaching experiences. Research indicates that this type of immediate feedback and “in-the-ear” feedback model of eCoaching has significantly positive effects for improving the practice of pre-service and in-service teachers. In addition, the ability to provide direct supervision to more students, in a short amount of time, that requires minimal travel, is an appealing facet to involve more of our faculty (versus adjuncts) to participate in supervision.



Consortium of Institutions of Higher Education in Virginia in Visual Impaired (George Mason University):

In 2015, across all five VI Consortium universities the VI Consortium had a total enrollment of 121 candidates in VI courses. In 2014, VI course enrollment was 97. The VI Consortium experienced a 25 percent course enrollment increase between 2014 and 2015.

During the 2014-2015 academic year, four students were accepted to the program and one student was re-admitted to the program. One student completed the coursework to add an endorsement in VI and remains in a current job teaching special education. VI students have taken 13 courses toward full endorsement in Special Education: Visual Impairments during this period. VI students are currently enrolled in 10 classes for fall 2015.

Traineeship for Special Education Personnel: The Commonwealth Special Education Endorsement Program (CSEEP) Endorsement Program (Old Dominion University):

During the 2014-2015 academic year, 42 students completed the endorsement program. CSEEP participants achieved endorsements in a timely manner. Seventy (70) teachers finished a year or more before the expiration on their provisional licenses. A survey indicated that CSEEP finishers report being prepared to meet teaching challenges. The data suggest that the program has a positive impact, not only on the quality of the teacher, but also on the quality of the instruction that grant participants are able to provide to their students.

Radford Teaching Preparation Project: Hearing Impairments PreK-12 (Radford University):

During the 2014-2015 academic year, two students graduated with a Bachelor of Science degree in Interdisciplinary Studies with licensure in Special Education: Hearing Impairments PreK-12. One has been hired as a teacher of the deaf in the Commonwealth of Virginia. One student has gone onto graduate school in audiology. In May 2015, one student graduated with a Master of Science degree in Special Education with licensure in Hearing Impairments PreK-12. This student has been hired in Virginia schools.

Early Childhood Special Education Consortium:

At least 11 students (mostly provisionally licensed and pre-professional ECSE teachers) completed requirements for the endorsement by the end of summer 2015, with a

projected two to three additional individuals anticipated to complete the requirements by the end of fall 2015. Twenty-three new ECSE teachers with provisional licenses and students seeking endorsement in ECSE were added to the Consortium in spring and summer of 2015, and approximately five to 10 additional students are in the process of applying to the institutions to participate in the Consortium beginning in fall 2015.

### **Special Education Teacher Recruitment and Retention Initiatives (State-Funded Programs)**

*Staff Contact Name:* Ms. Johnelle M. Torbert

*Authority* – Traineeships for education of special education personnel are authorized by the Code of Virginia Section 23-38.10:1. Funding is authorized in the Appropriation Act: 2014 Special Session I, Chapter 2, Item 136.

*Description of Initiative* – The Virginia Department of Education (VDOE) grants funding to Virginia regionally accredited institutions of higher education that have a Virginia Board of Education-approved program in Special Education: General Curriculum K-12 to deliver undergraduate and/or graduate-level special education courses to individuals who hold a provisional (special education) license with a Special Education: General Curriculum K-12 endorsement and who are employed in Virginia public schools as special educators of children with disabilities (accessing the general curriculum). Courses taken must match the undergraduate and graduate courses which the institution of higher education has been approved to offer. The grant is to provide these teachers with high-quality programs to complete requirements they need to become eligible for a five-year, renewable license.

*Priority:* A priority shall be to have access to Special Education: General Curriculum K-12 programs in the eight superintendent's regions.

*Funding* – The Virginia General Assembly appropriated funds in the amount of \$600,000 to support the traineeship for the education of special education personnel program for the 2015 fiscal year.

Grants were awarded as shown below:

<b>Institution</b>	<b>Regions</b>	<b>Amount Funded</b>
George Mason University	3, 4, and 5	\$125,865
Lynchburg College	5, 6, and 8	\$6,513
Old Dominion University	1 through 8	\$313,325
Radford University	6 and 7	\$25,988
University of Mary Washington	3 and 4	\$22,522
Virginia Commonwealth University	1, 3, and 8	\$105,787

*Partners* – See chart above.

*Targeted Audience* – Provisionally licensed teachers with a Special Education: General Curriculum K-12 endorsement who are employed in Virginia public schools as special educators of children with disabilities (accessing the general curriculum).

*Dates/Years Implemented* – Early 1990s to the present

*Effectiveness/Outcomes* – During 2014-2015, approximately 511 traineeships were funded for coursework leading to an endorsement in Special Education: General Curriculum K-12. Fifty teachers completed all coursework towards full endorsement in Special Education: General Curriculum K-12.

### **Speech-Language Pathologist Retention and Recruitment Initiatives**

*Staff Contact Name:* Ms. Marie Ireland

*Authority* – Individuals with Disabilities Education Act (IDEA)

*Funding* – Individuals with Disabilities Education Act (IDEA)

*Description of the Initiative* – The Virginia Department of Education (VDOE) implemented a variety of recruitment and retention initiatives targeting the school based speech-language pathologist (SLP).

### **Continuing Education**

The current recruitment and retention initiative provides no-cost, high-quality continuing education to maintain state licensure and national certification through the American Speech-Language Hearing Association (ASHA). Registration for professional continuing education

events can range from \$100 to \$500. VDOE staff provide training, and group webinars are purchased from ASHA and offered in regional sessions at no cost to the SLP.

### **Distance Learning in Virginia Education for Speech-Language Pathology (DLVE-SLP)**

DLVE-SLP was a multi-institution, distance learning consortium involving four Virginia universities (Hampton, James Madison, Longwood, and the University of Virginia). DLVE-SLP provided a distance education opportunity for individuals to pursue a master's degree, which is required to work as an SLP in Virginia. The program began in 2005 and is still being offered by James Madison University. VDOE funding for the DLVE-SLP began in 2005 and ended in 2014.

### **Virginia Incentive Program for Speech-Language Pathology (VIP-SLP)**

VIP-SLP provided recruitment and retention incentives to SLPs. New graduates and SLPs from the medical setting and other states were eligible to apply for incentive funds for up to three years for a total of \$9,000. This program replaced the tuition scholarship program and required school service to qualify for incentive payment. VIP-SLP began in 2009 and ended in 2013.

*Partners* – Collaborating partners include institutions of higher education with master's degree training programs (James Madison, Hampton, Longwood, and the University of Virginia); local school divisions (e.g., Tazewell, Wise, Bristol, Stafford, Norfolk, Prince William); and ASHA (volume discounts were negotiated for some purchases).

*Targeted Audience* – School Speech-Language Pathologists

*Dates/Years Implemented* – Continuing Education: 2005 to present; DLVE-SLP: 2005 to 2014; VIP-SLP: 2009 to 2013.

*Effectiveness/Outcomes* –

Continuing Education:

Cost \$11,600 for 2013 - 2015

SLPs Trained: More than 800 SLPs were trained during 2014-2015. Statewide efforts provided training in all areas of Virginia using webinar replays and face-to-face full-day conference sessions.

DLVE-SLP:

Costs/Events \$2.5 million over 9 years

SLPs Trained: 60 SLPs completed the program

VIP-SLP:

Cost \$984,000 over three school years (2010-2013)

368 SLPs

### **Science, Technology, Engineering, and Mathematics (STEM) Teacher Recruitment and Retention Incentive Awards**

*Staff Contact Name:* Dr. Kendra Crump

*Authority* – Chapter 3, 2015 Acts of Assembly, Item M

*Description of Initiative* – The intent of this pilot initiative is to attract, recruit, and retain high-quality diverse individuals to teach science, technology, engineering, or mathematics (STEM) subjects in Virginia’s middle and high schools. This program provides incentive awards to teachers who meet specified criteria and are employed in a Virginia public school.

Funding is awarded on a first-come, first-served basis with preference to teachers assigned to teach in hard-to-staff schools or low-performing schools not fully accredited. Applicants for the pilot must meet the following requirements:

#### Teachers Reassigned from a Fully Accredited School to a Hard-to-Staff School or School Not Fully Accredited

- Be a teacher employed full time in a Virginia school division;
- Hold an active five-year Virginia teaching license (Collegiate Professional or Postgraduate Professional License) with an endorsement in Middle Education 6-8: Mathematics; Mathematics: Algebra I; Mathematics; Middle Education 6-8: Science; Biology; Chemistry; Earth and Space Science; Physics; or Technology Education and be assigned full time to a teaching position in a corresponding subject area; and
- Regardless of teaching experience, be a teacher who is reassigned from a fully accredited school in a Virginia school division to a hard-to-staff school or a school that is not fully accredited in the 2014-2015 school year.

Successful teachers, regardless of teaching experience, selected to participate in the pilot program under this criterion will be eligible to receive a \$5,000 initial incentive award after the completion of the year of teaching experience in the hard-to-staff school or a school that is not fully accredited, a satisfactory performance evaluation, and a signed contract in the same school division for the following year.

Teachers New to the Profession or Teachers With Up to Three Years' Teaching Experience  
[Applicants must have less than three years' teaching experience.]

- Be a teacher new to the profession (no teaching experience) or a teacher with up to three years of teaching experience (less than three years' teaching experience);
- Be employed as a teacher full time in a Virginia school division; and
- Hold an active five-year Virginia teaching license (Collegiate Professional or Postgraduate Professional License) with an endorsement in Middle Education 6-8: Mathematics; Mathematics: Algebra I; Mathematics; Middle Education 6-8: Science; Biology; Chemistry; Earth and Space Science; Physics; or Technology Education and be assigned to a teaching position full time in a corresponding subject area.

Successful teachers selected to participate in the pilot program under this criterion will be eligible to receive a \$5,000 initial incentive award after the completion of the first, second, or third year of teaching with a satisfactory performance evaluation and a signed contract in the same school division for the following school year.

Continuation Incentive Awards

An additional \$1,000 incentive award may be granted for each year the eligible teacher (meeting either criteria above) receives a satisfactory evaluation and teaches a qualifying STEM subject in which the teacher has an endorsement for up to three years in the same Virginia school division following the year in which the teacher receives the initial incentive award. The maximum incentive award (initial and continuation) for each eligible teacher is \$8,000. **Incentive awards are contingent upon available funding.** The incentive awards are taxable to the recipient, and the school division is responsible for ensuring all taxes are remitted.

*Funding* – The 2015 Virginia General Assembly appropriated \$808,000 in each year of the biennium to provide incentive funding to attract, recruit, and retain high-quality diverse individuals to teach STEM subjects in Virginia's middle and high schools.

*Partners* – School divisions

*Targeted Audience* – Teachers reassigned from a fully accredited school to a hard-to-staff school or a school not fully accredited and/or teachers new to the profession or teachers with up to three years’ teaching experience. [Applicants must have less than three years’ teaching experience.]

*Dates/Years Implemented* – 2013 to the present

*Effectiveness/Outcomes* – In 2014-2015, 320 teachers received grants totaling over \$800,000.

## **Teacher Residency Program**

*Staff Contact Name:* Mrs. Patty Pitts

*Funding* – General Assembly

*Description of the Initiative* – The 2015 Virginia General Assembly appropriated \$500,000 for the second year of the biennium from the general fund to provide grants for teacher residency partnerships between one or two university teacher preparation programs and the Petersburg and Norfolk school divisions to help improve new teacher training and retention for hard-to-staff schools. Old Dominion University received the award for Fiscal Year 2016. The program is a partnership between Norfolk Public Schools and Old Dominion University’s Darden College of Education. The purpose is to train 15 Teachers-In-Residence. Priority areas for participation are mathematics and science.

## **TeachVirginia Educator Recruitment Project**

*Staff Contact Name:* Ms. Johnelle M. Torbert

*Authority* – The special education initiatives, including Speech and Language, are funded through the Individuals with Disabilities Education Act (IDEA), Part B Section 611, Flow-Through Sub-grant Awards (CFDA#84.027).

*Description of Initiative* – The purpose of this project is to provide resources to recruit highly qualified school personnel, specifically in the critical shortage teaching areas, to Virginia PreK-12 schools and to encourage individuals to pursue a career in education. The project offers an online recruitment system that allows school divisions to post an unlimited number of positions to conduct searches for qualified candidates, and to hire teachers, administrators, and other school personnel.

Another available resource is the TeachVirginia Educator Career Center. This Web site may be accessed through [www.teachvirginia.org](http://www.teachvirginia.org). The Web site provides prospective educators information on job opportunities, critical teaching shortage areas, approved education

preparation programs, and Virginia licensure. This site also provides information on becoming a special educator in the Commonwealth.

*Funding:* Federal Funds

*Targeted Audience* – Prospective Educators and School Division Human Resources Offices

*Dates/Years Implemented* – 2004 to the present

*Effectiveness/Outcomes* – One hundred and thirty-two Virginia school divisions posted jobs or sent messages during the year. Virginia school division recruiters advertised 1,782 job postings and sent messages to 69,618 candidates. For 2014, 458 candidates secured a job with a Virginia public school division through TeachVirginia.

### **Teacher Recruitment Preparation Pilot Initiative (MonarchTeach)**

*Staff Contact Name:* Mr. James C. Firebaugh, Jr./Ms. Kim Powell

*Authority* – Chapter 3, 2015 Acts of Assembly, Item 135, P. (Approved March 26, 2015)

*P. Out of this appropriation, \$400,000 the first year and \$400,000 the second year from the general fund is provided to establish a comprehensive pilot initiative to recruit students to major in the fields of mathematics and science to help alleviate the shortage of qualified teachers in these fields.*

*Funding* – FY2013 - \$300,000, FY 2014, 2015, 2016 - \$400,000 each year

*Description of the Initiative* – The purpose of the initiative is to increase the number and quality of mathematics and science teachers being prepared in Virginia in order to meet the Commonwealth’s growing shortfall of highly-qualified middle and high school mathematics and science teachers. The initiative requires restructuring how university teacher education programs attract, motivate, prepare, reward, and retain mathematics and science teachers.

Through a competitive request-for-proposals process, Old Dominion University (ODU) was initially awarded two years of funding to implement the restructuring pilot that it titled, *MonarchTeach*. *MonarchTeach*’s overall design is modeled after the innovative and highly successful *UTeach* program, originated at the University of Texas, Austin, and now operating at 34 universities in 17 states.

- The first year of the award to ODU (beginning in February 2013) provided funds for planning, course development, recruitment, training for program staff,



instructional materials, and other program structures necessary for implementing the requirement of the initiative.

- The second, third, and fourth (final) years of funding have been used for full program implementation including restructuring all upper-level professional education coursework specifically designed for mathematics and science majors also planning to teach.

The *MonarchTeach* program is institutionalizing the following elements:

- A compact, four-year-degree program that fully integrates the mathematics and science content major requirements with teacher preparation requirements;
- Formal coordination of the program between the college of education and the college of sciences;
- A unique program identity replacing the approved teacher preparation program at the university in secondary mathematics and science;
- A restructured education curriculum (professional studies) specially designed for secondary mathematics and science only;
- Enhanced recruitment and incentives, including reimbursable introductory courses and provisions for tuition rebates and stipends;
- Highly-qualified and highly-effective mathematics, science, and education faculty members who are actively engaged in research in mathematics and science;
- Early and ongoing professional teaching experiences with actual classroom instruction in partnering classrooms during students' first semester and throughout the four program years; and
- An institutional priority, sustained through ongoing financial support from the university.

*Partners* – Norfolk, Virginia Beach, and Portsmouth City Public Schools

*Targeted Audience* – Secondary Mathematics and Science Teachers

*Dates/Years Implemented* – Freshman-level cohort mathematics and science education courses were implemented beginning in fall 2013. Successive upper-level courses have been implemented each year as ODU phased out its pre-existing mathematics and science teacher preparation programs.

The complete ODU program restructuring will be in place during the 2016-2017 school year, with the first graduating class of Bachelor of Science mathematics and science majors licensed to teach in May 2017.

*Effectiveness/Outcomes* – Student enrollments in the freshman- and sophomore-level courses (after two full years of implementation) have met or exceeded the projections for an in-process *UTeach* replication. The national *UTeach* office, which supports and closely monitors all new programs, has issued strong, positive progress reports for the ODU *MonarchTeach* implementation to date.

### **Virginia Career Switcher Program (and Mentoring)**

*Staff Contact Name:* Ms. Eleanor Joyce

*Authority* – Virginia’s Career Switcher Program is authorized in Chapter 2, 2014 Special Session 1, Virginia Acts of Assembly.

The Board of Education approved conducting a pilot program for the Career Switcher Program for military personnel during the summer of 2000. An amendment to the *Licensure Regulations for School Personnel* to establish an initial “Career Switcher” Alternative Route to Licensure Program for military personnel was approved by the Board during the fall of 2000. The Career Switcher Alternative Route to Licensure Pilot Program for Military Personnel for the 2000-2001 academic year concluded on June 30, 2001. On November 30, 2000, the Board approved expanding the program to other professions.

On November 27, 2001, the Board of Education approved *Licensure Regulations for School Personnel* establishing a Career Switcher Alternative Route to Licensure. The regulations became effective February 13, 2002. The program has been in place since that time.

*Funding* – The program costs are funded through tuition paid by participants. There are various sources for tuition assistance for those who qualify.

The Appropriation Act of the General Assembly, Chapter 2, 2014 Special Session 1, Virginia Acts of Assembly provided additional funding to support mentor teachers for new teachers entering the profession through an alternative route to licensure: “Appropriations in this Item include \$279,983 the first year and \$279,983, the second year from the general fund to provide grants to school divisions that employ mentor teachers for new teachers entering the profession through the alternative route to licensure as prescribed by the Board of Education.”

*Description of the Initiative* – The Virginia Career Switcher Alternative Route to Licensure Program was created in response to Senate Joint Resolution 384 and the 1999 Appropriation Act (Item 127D and 129Q). The Career Switcher Alternative Route to Licensure Program is designed to encourage individuals from various occupational and life experiences to become classroom teachers, thereby increasing the quantity and diversity of applicants to the profession. The Career Switcher Program recognizes the life experiences of qualified

individuals and provides participants with what they need to start teaching in the classroom with the integration of professional studies in a traditional program.

Virginia currently has four certified Career Switcher programs. These include three universities – Old Dominion University, Regent University, and Shenandoah University – and the Virginia Community College System. Certified Career Switcher program providers are responsible for recruiting, screening, and selecting applicants based on the following requirements: an application process, a bachelor’s degree from a regionally accredited institution, the completion of an endorsement in a teaching area in the *Licensure Regulations for School Personnel* or the equivalent through verifiable experience or academic study, meet Virginia qualifying scores on the professional teacher's assessments as prescribed by the Virginia Board of Education, and at least five years’ full-time work experience or its equivalent. Providers must document that individuals accepted in the Career Switcher Program meet all requirements.

Additionally, the General Assembly appropriates grants in the amount of \$1,000 for the mentor support of each Provisional Career Switcher license holder during Level II (the first year of employment as a teacher). All funding is contingent upon the availability of funds. Payments to school divisions may be issued in December and May of each fiscal year. Each school division may apply for the mentor grant to support the mentoring of the new Career Switcher teachers. Applying for the funds is voluntary on the part of the school divisions.

*Partners* – The certified Career Switcher programs partner with Virginia public and nonpublic schools to place participants in classrooms for the required practicum experience. The programs partner with local colleges and universities to recruit faculty to teach courses and utilize classroom space for satellite classes. Each program submits a Partnerships and Collaboration report each year.

*Targeted Audience* – The programs focus on critical shortage areas, such as mathematics, science, and English as a Second Language. Special Education is not an endorsement offered through the Career Switcher program. Old Dominion University offers endorsements in Early Primary Education PreK-3 and Elementary Education PreK-6.

*Dates/Years Implemented* – On November 27, 2001, the Board of Education approved *Licensure Regulations for School Personnel* establishing a Career Switcher Alternative Route to Licensure. The regulations became effective February 13, 2002. The program continues to recruit and prepare career professionals who wish to pursue a teaching career.

## *Effectiveness/Outcomes*

### Career Switcher Program

During the 2013-2014 school year, 367 individuals received an initial Provisional (Career Switcher) License, and 215 individuals completed Level II preparation and received a five-year, renewable license.

### Funding for Mentor Support

There has been an increase over the past few years in the amount of money requested for the mentor grant. The amount appropriated by the General Assembly each year was \$279,983. While the majority of the grant was paid to the more densely populated school divisions in Regions 1, 2, 3, and 4, grant money also was paid to school divisions in the more sparsely populated divisions in the other regions. In 2014, 582 candidates completed the Career Switcher program.

In 2015, all monies appropriated were disbursed:

- In 2012, \$145,500 was distributed to 42 public school divisions.
- In 2013, \$153,500 was distributed to 40 public school divisions.
- In 2014, \$210,000 was distributed to 52 public school divisions.
- In 2015, \$279,983 was distributed to 57 public school divisions.

### **Virginia Middle School Teacher Corps**

*Staff Contact Name:* Mr. James C. Firebaugh, Jr./Ms. Kim Powell

*Authority* – 2015 Appropriation Act (Chapter 3, 2015 Acts of Assembly, Approved March 26, 2015)

§ 22.1-199.1. Programs designed to promote educational opportunities.

G. The General Assembly finds that certain schools have particular difficulty hiring teachers for certain subject areas and that the need for such teachers in these schools is particularly strong. Accordingly, in an effort to attract and retain high quality teachers, local school boards may offer instructional personnel serving in such schools as a member of a middle school teacher corps administered by the Department of Education incentives such as increased compensation, improved retirement benefits in accordance with Chapter 6.2 (§ 51.1-617 et seq.) of Title 51.1, increased deferred compensation in accordance with § 51.1-603, relocation expenses, bonuses, and other incentives as may be determined by the board.

*Funding* – FY2016 - \$415,000

*Description of the Initiative* – The purpose of the Middle School Teacher Corps (MSTC) program is to help middle schools that are designated as “at risk” in mathematics to recruit and retain experienced mathematics teachers who have demonstrated success in helping students achieve academically. The program is intended to reinforce the quality of mathematics instruction in the targeted schools and to help recruit and retain highly-qualified and highly-effective middle mathematics teachers.

The Virginia Department of Education administers the program through a competitive application process through which funding is awarded to school divisions to recruit and retain teachers at eligible middle schools. Eligible schools are those that are: 1) “Warned in Mathematics” under the Commonwealth’s school accreditation process; and/or 2) identified as Priority Schools, where mathematics is an area identified for improvement.

From program inception to the present, schools have been able to use the funds to recruit teachers “new” to an eligible school or to retain highly-effective mathematics teachers currently on staff and meeting the program requirements. A teacher is eligible to receive the salary adjustment recruitment/retention incentive for three years. Qualified MSTC teachers must:

- have a major or minor in mathematics (or a minimum of 18 semester hours of mathematics coursework);
- have demonstrated success in improving students’ academic achievement in mathematics;
- have at least three years of experience in full-time teaching of middle or high school mathematics;
- hold an active, five-year Virginia teaching license; and
- hold an appropriate teaching endorsement to teach middle school mathematics.

Teacher Corps members must be evaluated annually by their school divisions. Participants must receive a proficient rating or higher on student academic progress and their summative evaluations in order to continue in the MSTC program for a second or third year.

Currently, for the 2015-2016 school year, the program has three MSTC cohorts (2013-2016, 2014-2017, and 2015-2018), which includes 79 middle school mathematics teachers in 56 different middle schools, representing 28 school divisions and all eight statewide Superintendents’ Regions.

*Partners* – Virginia school divisions

*Targeted Audience* – Highly-qualified, highly-effective mathematics teachers serving in middle-school grades (sixth, seventh, and/or eighth grade) at schools that have “Warned in Mathematics” status.

*Dates/Years Implemented* – The program began in 2004 as part of Governor Mark Warner’s “Education for a Lifetime” initiative.

*Effectiveness/Outcomes* – The MSTC program incentive funding has been used to recruit or retain approximately 75-80 teachers each year in three concurrent three-year-duration cohorts. Demand for funding has met or exceeded the appropriation in most years. Several school divisions have utilized their MSTC positions in building mathematics program leadership roles, thus the impact has been greater than the single effect of recruiting/retaining highly effective mathematics faculty members.

In a few instances, schools “Warned in Mathematics” that were awarded MSTC funding were not able to recruit middle mathematics teachers who met the MSTC qualifying criteria (listed above). The state fiscal year (awards made after July 1, and reimbursement requested by June 1 the following year) is not fully congruent with the timing of most teacher recruitment by school divisions. For example, recruitment for vacancies occurs well prior to July 1. School division and regional recruitment fairs generally occur in the spring months. Thus, many highly-qualified, highly-effective teachers who are looking for mathematics teaching positions are already recruited and “off the market” before schools that are awarded the MSTC incentive funding are able to use the incentive for that purpose.

## **Virginia Teachers for Tomorrow Program**

*Staff Contact Names:* Ms. Lolita B. Hall/Mr. George R. Willcox

*Authority* – §22.1-253.13 *Code of Virginia*, 8VAC20-131-90 (B), Instructional program in middle schools; 8VAC20-131-100 (A) (1), (B), Instructional program in secondary schools

*Funding* – State Standards of Quality and Federal Carl D. Perkins Career and Technical Act of 2006

*Description of the Initiative* – The Virginia Teachers for Tomorrow (VTfT) curriculum fosters student interest, understanding, and appreciation of the teaching profession and allows middle and high school students the opportunity to explore careers in education for PreK-12 in all disciplines and content areas. Students build a foundation for teaching; learn the history, structure and governance of teaching; apply professional teaching techniques in the VTfT

classroom and field experiences; and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Future Educators Association®.

*Partners* – School Divisions and Virginia Institutions of Higher Education

*Targeted Audience* – Middle and High School Students

*Dates/Years Implemented* – 2001 – CTE Adopted (North Carolina’s) Teacher Cadet Curriculum; 2006 – Office of Teacher Licensure Implemented the Teacher Cadet Program (The Governor’s Teacher Quality Grant); 2007 – Implementation of the Virginia Teachers for Tomorrow Program

*Effectiveness/Outcomes* – Currently, the Virginia Teachers for Tomorrow Program is offered statewide in all eight regions in 65 school divisions. Over the past several years, enrollments have continued to decline while the critical shortage of teachers across the state continues to increase.

#### **Virginia Teachers for Tomorrow Course Enrollments**

<b>School Year</b>	<b>Total Students</b>
2011-2012	1,791
2012-2013	1,580
2013-2014	1,382

#### Virginia Teaching Scholarship Loan Program

*Staff Contact Name:* Ms. Johnelle M. Torbert

*Authority* – The Virginia Teaching Scholarship Loan Program is authorized in the *Code of Virginia*, Section 22.1-290.01.

*Funding* – Since 1999, the General Assembly has appropriated \$558,000 from the general fund for the Virginia Teaching Scholarship Loan Program. The 2007 General Assembly approved a \$150,000 increase for the 2007-2008 program year. Since Fiscal Year 2008 the appropriation each year has totaled \$708,000.

In accordance with the Appropriation Act, scholarship amounts are based on \$10,000 per year for full-time students and are pro-rated for part-time students based on number of credit hours for which the students have enrolled.

*Description of the Initiative* – The primary purpose of the Virginia Teaching Scholarship Loan Program (VTSLP) is to provide financial support as an incentive to students who are pursuing a teaching career in one of Virginia’s critical shortage teaching endorsement areas. The critical teaching shortage areas may be accessed on the following Web site:

[http://www.doe.virginia.gov/teaching/workforce\\_data/](http://www.doe.virginia.gov/teaching/workforce_data/).

The VTSLP application process begins when the Virginia Department of Education distributes application materials to each of the Virginia colleges and universities with approved teacher preparation programs. Scholarship loans, subject to available funding, are awarded to selected individuals who meet the *Code of Virginia* and Appropriation Act requirements for eligibility.

Before any teaching scholarship loan is awarded, the scholarship loan recipient shall sign a promissory note. The recipient must (i) complete an approved teacher education program full-time or part-time at an accredited public or private four-year institution of higher education in Virginia and (ii) upon program completion, shall begin to teach in the public schools of the Commonwealth in the first full academic year after becoming eligible for a teaching license and teach full-time under contract in one of the critical teacher shortage disciplines as established by the Board of Education or in a career and technical education discipline or, regardless of teaching discipline, in a school with a high concentration of students eligible for free or reduced price lunch or in any discipline or at any grade level within a school division with a shortage of teachers, as defined in the Board of Education’s *Regulations Governing the Determination of Critical Teacher Shortage Areas* or in a rural or urban region of the state with a teacher shortage. If the recipient fails to teach full-time under contract in the public schools of Virginia in the first full academic year after becoming eligible for teaching license, the scholarship loan must be paid back to the Commonwealth of Virginia.

*Partners* – All Virginia colleges and universities with approved teacher preparation programs.

*Targeted Audience* – Undergraduate and graduate students who are pursuing a teaching career in one of Virginia’s critical shortage teaching endorsement areas

*Dates/Years Implemented* – 1999 to the present

*Effectiveness/Outcomes* – The following chart provides the number of recipients for each criterion. This chart does have duplicate counts. For example, some recipients completed approved programs (endorsements) in more than one area.



### Number of Recipients by Criterion

Criterion	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Career and Technical Education	5	4	0	6	1	2	4	0	1
Computer Science	0	n/a*	n/a*	n/a*	n/a*	n/a*	n/a*	n/a*	n/a*
Elementary Education	94	93	111	44	104	87	95	35	34
English	n/a*	20	14	36	12	24	n/a*	4	2
English as a Second Language	7	n/a*	n/a*	24	n/a*	n/a*	17	n/a*	n/a*
Foreign Language	n/a	9	8	12	8	7	13	0	3
Health and Physical Education	2	n/a*	n/a*	3	9	10	8	3	0
History and Social Science	20	18	2	3	n/a*	n/a*	n/a*	n/a*	4
Library Media	n/a*	n/a*	n/a*	4	n/a*	n/a*	n/a*	n/a*	n/a*
Mathematics	32	28	18	43	30	19	22	9	5
Middle Grades	n/a*	19	22	32	26	10	28	8	9
Reading Specialist	2	3	0	6	n/a*	n/a*	n/a*	n/a*	n/a*
Science	7	3	2	22	13	12	19	7	n/a*
Special Education	33	40	30	74	43	42	38	20	18
Technology Education	n/a*	n/a*	n/a*	n/a*	n/a*	n/a*	n/a*	n/a*	n/a*
Males in Elementary/Middle	23	22	24	39	31	26	26	9	18
Minority Students	54	30	34	85	37	30	49	19	31
School Counselor	n/a*	n/a*	n/a*	n/a*	7	11	5	7	6

\* The area was not listed for that year as a critical shortage area.