Report on Supply and Demand of Instructional Personnel in Virginia: 2001-2002



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Prepared by
Division of Teacher Education and Licensure
Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120

Survey Highlights

The Report on the Supply and Demand of Instructional Personnel in Virginia 2001-2002 is based on data gathered from Virginia school superintendents. The data reported is in response to an annual survey required to identify critical shortages of teachers and administrative personnel by subject area, geographic region, or school division. The following are some highlights of the 2001-2002 report:

- 94,236 full-time teachers and administrative personnel were employed;
- 88,609 full-time classroom teachers received contracts;
- → 4,136 contractual teaching positions (4.4%) were filled with unendorsed personnel or the positions were unfilled;
- 1,176 special education teaching positions were filled with unendorsed teachers or positions were unfilled;
- 2,018 positions were filled with unendorsed teachers or positions were unfilled in one school division;
- ➤ 29.5 percent of the teaching positions in one public school were filled with unendorsed teachers or positions were unfilled at the beginning of the 2001-2002 school year; and
- the most critical teacher shortage areas are special education, mathematics, reading specialist, foreign languages (Spanish), science (earth science, chemistry), middle grades (6-8), library media, music education, technology education, and English.

House Bill 252 and House Bill 1589, enacted by the 2001 session of the General Assembly, amended the *Code of Virginia* to require the Superintendent of Public Instruction to survey all school divisions annually to identify issues related to the supply and demand of administrative and instructional personnel in Virginia. Specifically, the survey is required to identify critical shortages of teachers and administrative personnel by endorsement (subject) area, geographic region, or school division. To accomplish this task, the survey was designed to collect information on the total number of full-time equivalent positions (FTEs) in administration and instruction, the number of positions filled by unendorsed individuals, the number of unfilled positions, the number of position vacancies with three or fewer qualified applicants, and the projected shortages over the next five years. The findings from the survey are required to be reported to the Virginia Retirement System.

In October 2001, the Department of Education sent the survey to all school superintendents in the commonwealth. Although some superintendents responded only to selected items, all superintendents (132) responded to the survey. The results were compiled and the data was analyzed by Research Dimensions Incorporated (RDI), a Richmond-based research firm.

Statewide supply and demand

The analysis of data from the survey showed that school superintendents reported employing a total of 88,609 full-time teachers and 5,627 administrative personnel during the 2001-2002 school year. School superintendents also reported employing 26,844 elementary teachers (preK-6), 5,891 middle school teachers (6-8),

4,137 mathematics teachers, 1,906 science teachers, 4,526 English teachers, 3,673 social science teachers, 2,303 foreign language teachers, 4,937 vocational teachers, and 13,183 special education teachers full-time.

For every full-time equivalent position (FTE) reported, school division superintendents reported teaching positions that were filled with personnel unendorsed for the area in which they were assigned or the instructional positions were vacant. Of the 88,609 teachers under contract during the 2001-2002 school year, 4,136 teaching positions (4.4%) were filled with unendorsed personnel or positions were unfilled. At the elementary and middle school level, 698 and 118 teaching positions, respectively, were filled with unendorsed personnel or were unfilled. Four content areas at the secondary level had positions filled with unendorsed personnel or were unfilled: English 140; mathematics 183; science 172; and social studies 94. In foreign languages, 135 positions were filled with unendorsed personnel or were not filled, while in vocational education 235 positions were filled with unendorsed teachers or went unfilled. Technology education accounted for most of the unendorsed and unfilled positions in vocational education. For the second consecutive year special education had the most vacancies with 1,176 positions filled with unendorsed teachers or unfilled.

Supply and demand by school division

Many school divisions have positions filled with unendorsed personnel and positions that remain unfilled. Fairfax County public schools had the highest number of positions filled by unendorsed personnel and positions that were unfilled (2,018) during the 2001-2002 school year, yet the school division ranked tenth in percentage of positions filled by unendorsed personnel and positions that were unfilled (14.1%).

School divisions like Sussex, Nottoway, and Lunenburg counties have a small number of positions unfilled or filled by unendorsed personnel (42, 43, 29 respectively), but their percentages are the highest in the state (29.5%, 20.4%, 18.6% respectively). Most school division superintendents report, on average, about five percent of their FTE positions as either unfilled or filled by unendorsed individuals; 20 school division superintendents reported shortages of endorsed personnel in excess of 10 percent.

Supply and demand by superintendent's regional study groups

Virginia's public school divisions are grouped into eight regional study groups (see appendix). Analysis of data from the annual survey showed that Regional Study Group 4 (Northern Virginia) experienced the vast majority of all unfilled positions and positions filled by unendorsed individuals during the 2001-2002 school year (2,535 positions or 61.3%). In addition, Regional Study Group 4 shortages equate to 9.14 percent of their total FTEs, which is the highest rate of the eight regions and a rate that is more than twice the average of all the regions. Although Regional Study Group 8 (southside Virginia) reported only 198 shortages, less than five percent of the total statewide, the region reported the second highest percentage of the regional study groups. Regional Study Group 3 (Central/Tidewater area) reported three percent, following Regional Study Group 8 in the percentage of positions filled by unendorsed personnel and positions that were unfilled.

Supply and demand by endorsement area

Annual survey results clearly indicate that the greatest number of positions filled by unendorsed individuals is in the area of special education (1,094 positions, or slightly more than 8% of FTEs) with the highest concentration in the areas of learning

disabilities (507 positions) and emotional disturbance (164 positions). Although the six endorsement areas that comprise elementary education (pre-K through Grade 6) have the second highest number of positions filled by unendorsed individuals (666), those numbers represents less than three percent of the total number of elementary education teaching positions. Special education also continues to lead in the number of vacancies with three or fewer qualified applicants.

In Virginia, a "critical shortage" is identified as an endorsement area in which a school division regularly receives three or fewer applications for a position. Using this definition when evaluating statewide data, findings from the 2001-2001 annual survey indicate that the shortages in special education are followed by mathematics, reading specialists, foreign languages (Spanish), science (earth science, chemistry), middle grades (6-8), library media, music education, technology education, and English. A total of 43 administrative and teaching areas were taken into account to determine the top 10 critical shortage assignments stated above.

Statewide projections

Estimates of the supply of teachers and administrators over the next five years provide little remedy for the current shortages. Although teacher preparation programs graduate many new teachers each year in Virginia, the rate of retirements and attrition are increasing. Research at the national level has projected significant and growing shortages throughout the country, particularly in the endorsement areas of science, mathematics, foreign languages, and special education. Data from the 2001-2002 survey concur with national projections. Survey data also indicate that the shortages will be especially significant in certain geographical regions of Virginia. Superintendent's

Regional Study Groups 1 (Richmond area) and 2 (Tidewater) have projected the largest number of teachers needed over the next five years, while Regional Study Groups 3 (Central/Tidewater area) and 7 (southwest) have projected the smallest number. However, not all teaching areas will be in short supply. According to the survey data, it appears that there will be an excess supply of teachers in the endorsement areas of elementary education, health and physical education, history and social studies, and computer science.

Conclusion

Total enrollment in public elementary and secondary schools will most likely rise in the latter part of this decade, exacerbating projected teacher shortages. However, education professionals have suggested that pessimistic forecasts could be altered by variables such as increased incentives to enter teaching in critical shortage areas, increases in college aid programs for prospective teachers, changes in retirement policies, and creative recruitment and retention efforts. In Virginia, continuance of the Virginia Teaching Scholarship Loan Program, Statewide Mentor Teacher Program, alternative routes to licensure programs (Career Switcher, Provisional, and Special Education Conditional), and legislation permitting retired teachers and administrative personnel to return to teach without interrupting their retirement benefits should continue to ameliorate the need for teachers in the commonwealth.

Appendix

Superintendent's Regions

		Region 1	Region 2	Region 3
Virginia Public School		Charles City County	Accomack	Caroline
 		Chesterfield	Chesapeake City	Colonial Beach
Division Members		Colonial Heights City	Franklin City	Essex
of the Field		Dinwiddie	Hampton City	Fredericksburg City
of the Eight		Goochland	Isle of Wight	Gloucester
Superintendent Regions		Hanover	Newport News City	King George
Superintendent Regions		Henrico	Norfolk City	King Queen
		Hopewell City New Kent	Northampton	King William Lancaster
		Petersburg City	Poquoson City Portsmouth City	Mathews
		Powhatan	Southampton	Middlesex
		Prince George	Suffolk City	Northumberland
		Richmond City	Virginia Beach City	Richmond
		Surry	Williamsburg City	Spotsylvania
		Sussex	York	Stafford
		Cusson	I JIK	West Point
				Westmoreland
Region 4	Region 5	Region 6	Region 7	Region 8
Alexandria City	Albermarle	Alleghany Highlands	Bland	Amelia
Arlington	Amherst	Botetourt	Bristol City	Brunswick
Clarke	Appomattox	Covington City	Buchanan	Buckingham
Culpeper	Augusta	Craig	Carroll	Charlotte
Fairfax	Bath	Danville City	Dickenson	Cumberland
Fairfax City	Bedford	Floyd	Galax City	Greensville
Falls Church City	Bedford City	Franklin	Giles	Halifax
Fauquier	Buena Vista City	Henry	Grayson	Lunenburg
Frederick	Campbell	Martinsville City	Lee	Mecklenburg
Loundon	Charlottesville City	Montgomery	Norton City	Nottoway
Madison	Fluvanna	Patrick	Pulaski	Prince Edward
Manassas City	Greene	Pittsylvania	Radford City	
Manassas Park City	Harrisonburg City	Roanoke	Russell	
Orange	Highland	Roanoke City	Scott	
Page	Lexington City	Salem City	Smyth	
Prince William	Louisa		Tazewell	
Rappahannock Shenandoah	Lynchburg City Nelson		Washington Wise	
Warren	Rockbridge		Wythe	
Winchester City	Rockingham		vvytile	
willichiester City	Staunton City			
	Waynesboro City			
	waynesbold City			