

*State of Virginia Critical Shortage Teaching Endorsement Areas*

*for*

*2005-2006 School Year*

**Alternate Method for Determining Critical Shortage Teaching Endorsement Areas  
in Virginia**

Overview:

The 2005 General Assembly enacted legislation, through **Appropriation Act Item 141B**, directing local school boards to annually survey their respective divisions to identify critical shortages of teachers and administrative personnel by subject matter, and to report such critical shortages to the Superintendent of Public Instruction and the Virginia Retirement System. The Department of Education is required to report to the General Assembly on the critical teaching shortage areas in Virginia by October 1, 2005. In response to this requirement, data were obtained from the Instructional Personnel Report sent by the Department of Education to each of Virginia's school division superintendents in December 2004, to determine qualifications for teachers and administrators. Information requested on the survey was based on school data reports as of October 1, 2004. The Department contracted with Research Dimensions, Inc. (RDI), a Richmond-based organization, to analyze the results of the survey data. Designation of critical shortage areas is based on those analyses.

In Virginia, "critical shortage" may be defined in two ways: (1) shortages by subject matter as designated from the top 10 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. Endorsement areas were ranked according to the most severe academic teaching shortage areas. The ranking is based on an aggregation of the endorsement areas in special education, foreign languages, and middle education grades six through eight. The teaching endorsement areas in career and technical education were not aggregated. A total of 38 administrative and teaching areas were taken into account to determine the top 10 critical teaching shortage area assignments.

Methodology:

Data analyses include calculated rankings from both total Full Time Equivalent (FTEs) of unendorsed teachers and administrators and the percentage of these unendorsed FTEs. Rankings were totaled and the resulting sum ranked to determine subject area shortages. This approach reflects both the absolute shortage as well as the relative shortage of each endorsement area. By using this approach, the priority is reduced for those endorsement areas with a very high percentage of unendorsed teachers, but also with very few FTEs (e.g., American Sign Language PreK-12 with 65% unendorsed, but only 38.8 FTEs). Each of the 10 "most critical" shortage teaching areas, 2005-2006, has more than 500 FTEs.

## **2005-2006 Top 10 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 10 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 2005-2006 top 10 critical shortage teaching endorsement areas identified statewide were determined based on method number one as noted above and will be reported to the Virginia Retirement System as well as used to determine eligibility for the Virginia Teaching Scholarship Loan Program. Data were obtained from the Instructional Personnel Report sent by the Department of Education to each of Virginia’s school division superintendents in December 2004, to determine qualifications for teachers and administrators. Information requested on the survey was based on school data reports as of October 1, 2004. Based on an analysis of teaching endorsement areas ranked according to the most severe academic teaching shortage areas, a total of 38 administrative and teaching areas were taken into account.

The following represent the top 10 critical shortage teaching endorsement area assignments for 2005-2006:

1. Earth Science
2. Mathematics, 6-12 and Algebra I add-on endorsement
3. Special Education (learning disabilities; mental retardation; emotional disturbances; early childhood special education; speech and language disorders; hearing impairment; severe disabilities; visual impairment)
4. Career and Technical Education ( technology education, trade and industrial education)
5. History and Social Science, 6-12
6. Elementary Education, preK-6 ( Serious shortages in grade 5)
7. Health and Physical Education, preK-12
8. Reading Specialist (Graduate level)
9. English as a Second Language (ESL)
10. Computer Science, 6-12