



Review of Adequacy Studies

This brief addresses the following areas:

- Review of the four approaches to adequacy
- Examine the number and type of adequacy studies since 2003
- Examine the resources identified in the studies

Review of the Four Approaches to Adequacy

Four approaches to examine adequacy have been created over the past 25 years and at least one is used in every study:

1. **Professional Judgement (PJ)** approach requires educators identify the resources needed at the school and district level to meet state standards. It identifies the base cost and adjustments for district and student characteristic differences.
2. **Evidence-based (EB)** approach examines academic and school reform research to identify the resources needed at schools and districts to meet state standards.
3. **Successful Schools (SSD)** approach identifies schools or districts that are outperforming other districts in the state on student growth or absolute performance.
4. **Cost Function (CF)** approach utilizes statistical analysis to examine the relationship between outcomes and spending while controlling for the differences in student and district characteristics.

The SSD and CF approaches identify the base amount and/or adjustments for district and student needs, but do not identify specific resources. The PJ and EB approaches identify both the base amount and adjustments, as well as the specific resource levels driving the costs.

Examine the Number and Type of Adequacy Studies Since 2003

The study team identified each study that has occurred since 2003, the approach(es) used, and whether the state government or an advocacy group contracted for the study. Forty-nine studies were conducted across 31 states, including eight SREB state. Twenty-one studies used the PJ approach, 18 percent of studies used the EB approach, 17 used the SSD approach, and 8 studies used the CF. Forty-seven percent of the studies were contracted by state governments and 53 percent were contracted by advocacy groups. However, the recent studies have been more frequently contracted by state governments.

Examine the Resources Identified in the Studies

The study team identified the most recent adequacy study completed for each state that utilized the evidence-based or professional judgement approach and examined the resources for districts/schools closest to 500 students to best compare with Arkansas matrix. The study team used the evidence-based and professional judgment approaches because they generate

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specific resources rather than dollar amounts and weights. The study team looked at the national mode, most frequent study result, and the results for each of the SREB studies.

Instructional Personnel

The study team examined class size ratio, instructional facilitator ratio, and library and media specialist ratio. Arkansas matrix ratios are higher than the national mode and most SREB state studies in Kindergarten through second grade; however, in grades three through twelve the Arkansas matrix ratios are similar to the national mode and SREB state studies.

Instructional facilitator ratios vary, especially in the PJ approach. The Arkansas matrix ratio is in line with national mode for both elementary and secondary. Library and media specialists are more consistent across studies. Arkansas matrix ratios are 30 percent higher than the national mode and SREB state studies.

Student Support Personnel

Student support personnel is the total of counselors, psychologists, nurses, and social workers identified to serve all general education students. In Arkansas, the student support personnel consisted only of nurses and counselors. There is variation across the studies, including across SREB state studies. The Arkansas matrix ratio is 10 percent higher than the mode and SREB state studies in secondary and 33 percent higher in elementary.

Administration Services

The study team grouped administration services into two personnel types. Administrators consist of principals, assistant principals, and deans. Administrator supports consists of secretaries, office staff, and bookkeepers. The Arkansas Matrix ratio (1:500) is higher for administrators than the national mode (1:450) and all SREB state studies. The same is true for administrator support.

Other Costs

The study team examined the instructional materials, technology, activities, and assessment costs. Technology and instructional materials costs are explicitly identified in the matrix while activities and assessments are identified in other states state studies including SREB state studies, but not the matrix. Technology dollars per student in Arkansas are the same as the national mode (\$250) and similar to other SREB state studies. The Instructional materials per student are the same as the national mode (\$250) and the same or higher than SREB studies.

Special Education

The study team analyzed the total student supports and the total administration for special education students. Student supports includes teachers and support personnel other than administrators. The Arkansas matrix assigns special education resources by total student counts. The study team adjusted the matrix to align with the other adequacy studies by applying the Arkansas statewide average of 13 percent of students in special education for a total of 65 special education students in a 500 student school. The Arkansas ratio (1:22) is higher than the national mode (1:6) and all other SREB state studies.

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