

AGATE & AAGEA Position on the Inclusion of GT in the 2018 Adequacy Report

Arkansans for Gifted and Talented Education (AGATE) and the Arkansas Association of Gifted Education Administrators (AAGEA), appreciate the opportunity to comment on the Adequacy Report of 2018. We have monitored this report each year since the first report in 2003. At that time we had AGATE members present during the initial discussions and even contributed essential information about gifted and talented education to that original report. Initially, Mr. Odden and Mr. Picus were not aware that GT Education was a mandate in Arkansas but after meeting with two AGATE representatives, Dr. Ann Robinson and Ms. Donna Whiting, added the following information to the matrix of the initial Adequacy Report of 2003:

Table 4 (Continued)
Recommendations for Adequate Resources for
Prototypical Arkansas Elementary, Middle and High Schools

School Element	Elementary Schools	Middle Schools	High Schools
School Characteristics			
Alternative Learning Environment	1 Teacher for every 20 ALE students	1 Teacher for every 20 ALE students	1 Teacher for every 20 ALE students
Teachers for students with moderate disabilities/speech/hearing	2.9	2.9	2.9
Severe Disabilities	Keep current Catastrophic Program but reduce expenditure threshold to the base allocation. Also deduct Federal Title VI (b) funds in calculating catastrophic aid.	Keep current Catastrophic Program but reduce expenditure threshold to the base allocation. Also deduct Federal Title VI (b) funds in calculating catastrophic aid.	Keep current Catastrophic Program but reduce expenditure threshold to the base allocation. Also deduct Federal Title VI (b) funds in calculating catastrophic aid.
Teachers for gifted students	Retain current standards, expenditure requirements and monitoring.	Retain current standards, expenditure requirements and monitoring.	Retain current standards, expenditure requirements and monitoring.
Aides for categorical students	0	0	0
Pupil support staff	1/each 20% poverty, or 1 for every 100 poverty students: 2.5	1 for every 100 poverty students plus 1.0 guidance 3.5 total	1 for every 100 poverty students plus 2.0 guidance 4.5 total
Librarians/media specialists	0; included with specialist teachers	1.0	1.5
Technology resource teachers	Included in Instructional Facilitators	Included in Instructional Facilitators	Included in Instructional Facilitators
Substitutes	10 days per teacher	10 days per teacher	10 days per teacher
Dollar per Pupil Resources			
Professional development	Included above: Instructional facilitators Planning & prep time 10 summer days Additional: \$50/pupil for other PD expenses – trainers, conferences, travel, etc.	Included above: Instructional facilitators Planning & prep time 10 summer days Additional: \$50/pupil for other PD expenses – trainers, conferences, travel, etc.	Included above: Instructional facilitators Planning & prep time 10 summer days Additional: \$50/pupil for other PD expenses – trainers, conferences, travel, etc.
Technology	\$250/pupil	\$250/pupil	\$250/pupil

There were also several paragraphs of research rationale provided by Dr. Ann Robinson in the 2003 report that was included in the Odden and Picus report. We have asked Dr. Robinson to update that rationale, so we are not including the original here. The new rationale includes some of the original research, which is still valid today, as well as studies that have been completed since the original was written.

By 2006, the information referenced above was removed from the report and did not reappear until Odden and Picus completed the Bench Audit for the existing Adequacy committee in 2014. In their Bench Audit, Odden and Picus resubmitted the original research rationale by Dr. Robinson, and re-inserted the original notation for Gifted and Talented with the recommendation to “Retain extant standards and expenditure requirements. No specific funding in the Matrix.” The reason they did not put funding in the matrix was that funding was already provided by a formula that was developed with the initial legislation and appropriations to fund GT program services to identified students.

From this submission by Odden and Picus, only the following was placed into the report of 2014, under **Section 11, Recommendations by Picus Odden and Associates:**

ITEMS NOT CURRENTLY IN THE MATRIX

Picus Odden and Associates recommended adding funding for items that are not included in the current matrix.

Gifted and Talented Per Student		
	FY15 Matrix	Picus Odden Recommendation
Tutors	No funding specifically provided in the matrix	1 tutor per 500 students
Gifted and Talented	No funding specifically provided in the matrix	\$25 per regular student

Since funding for GT program services was already provided by a formula, the committee apparently chose to ignore their recommendation, so nothing else appeared in the Adequacy Report of 2014.

Subsequent reports in 2016 and 2018 do not reflect any information about GT Education as a part of Adequacy and that is our concern. Dr. Ann Robinson, Director of the Jodie Mahony Center for Gifted Education at the University of Arkansas at Little Rock, who provided the original research rationale for the 2003 report, has updated the rationale with new studies and added an additional bullet point for consideration:

“Gifted and Talented Students”

“A sound analysis of educational adequacy should include the gifted and talented student, most of whom perform above state proficiency standards. Research shows that developing the potential of such students requires:

- Effort to discover and develop the talents of students from low-income households and/or students from culturally diverse groups.
- Attention to excellence gaps and resource inequities (added since 2003)
- Access to curriculum materials designed specifically to meet the needs of talented learners.
- Acceleration of the curriculum to meet the needs of students performing at advanced levels.
- Special training in how teachers can spot talents in their students and work effectively with advanced learners.”

Discovering and Developing Talents in High Ability Learners from Low-Income Households and/or Culturally Diverse Groups.

Research studies on the use of universal screening (Lakin, 2016; McBee, Peters, & Miller, 2016), open-ended tasks and performance assessments (Baum, Owen & Oreck, 1996; Scott, Deuel, Jean-Francois & Urbano, 1996; VanTassel-Baska, Feng, & Evans, 2007), nonverbal measures (Naglieri & Ronning, 2000; Naglieri & Ford, 2003), extended try-out and transitional periods (Maker, 1996), teacher training in talent spotting (Robinson, Adelson, Kidd, & Cunningham, 2018) and inclusive definitions and policies (Gallagher & Coleman, 1992) document increased and more equitable identification practices for high ability culturally diverse and/or low-income learners. However, identification is not sufficient; it must be accompanied by comprehensive services to develop talents sustainably (Olszewski-Kubilius & Clarenbach, 2012).

Access to specialized services for talented learners in the elementary years is especially important for increased achievement among vulnerable students. For example, high ability culturally diverse learners who participated in three or more years of specialized elementary and/or middle school programming had higher achievement at high school graduation than a comparable group of high ability students who did not participate (Struck, 2003). Bridging programs from Grades 3 through 12 focused on high ability ethnic minority and talented learners from low-income households resulted in sustained academic growth particularly in mathematics and science (Lee, Olszewski-Kubilius, & Peternel, 2009).

Attention to Excellence Gaps and Resource Inequities (new since 2003)

Educators and policy makers are mindful of achievement gaps among students based on ethnicity, gender, income levels, and language proficiency. One form of achievement gap has been the subject of recent research and policy

study—the excellence gap. Excellence gaps are defined as differences between subgroups of students performing at the highest levels of achievement. Under No Child Left Behind (NCLB) with its emphasis on minimal proficiency, excellence gaps were largely invisible to policy makers. Under the Every Student Succeeds Act (ESSA), excellence gaps have gained attention. Policy studies have documented that substantial excellence gaps exist between students from low-income households and students from more economically advantaged households and among students of varying ethnicities and English language proficiency (Plucker, Burroughs, & Song, 2010) and have continued in some cases to grow larger (Plucker, Hardesty, & Burroughs, 2013).

In addition, research by Kettler, Russell, & Puryear (2015) reports that rural schools and schools with higher proportions of students from low-income households are less likely to allocate resources to or to staff gifted programs and services than suburban and higher wealth communities. Given the average income levels and demography of Arkansas, such a pattern of differential resource allocation provides a strong rationale for including gifted and talented students in school adequacy studies.

Access to Curriculum.

Overall, research shows that curriculum programs specifically designed for talented learners produce greater learning than regular academic programs. Increase in the complexity of the curricular material is a key factor (Robinson & Clinkenbeard, 1998). Large-scale curriculum projects in science and mathematics in the 1960s, such as the Biological Sciences Curriculum Study (BCSC), the Physical Science 29 Study Committee (PSSC), and the Chemical Bond Approach (CBA), benefited academically talented learners (Gallagher, J., 2002).

More recently, curriculum projects designed to increase the achievement of talented learners in core content areas such as language arts, mathematics, science, and social studies particularly in the elementary grades produced academic gains in overall language arts achievement (Callahan, Moon, Oh, Azano, & Hailey, 2016), persuasive writing and literary analysis (VanTassel-Baska, Johnson, Hughes & Boyce, 1996; VanTassel-Baska, Zuo, Avery & Little, 2002), mathematics achievement in geometry and measurement (Gavin, Casa, Adelson, Carroll, Sheffield, & Spinelli (2007), problem generation and social studies content acquisition (Gallagher & Stepien, 1996; Gallagher, Stepien & Rosenthal, 1992), scientific understanding of variables (VanTassel-Baska, Bass, Ries, Poland & Avery, 1998), and science knowledge and skills (Robinson, Dailey, Hughes, & Cotabish, 2014). Finally, curriculum implementation studies, some conducted in Arkansas schools, indicate that hands-on curricular domains such as engineering are especially suited to increasing science achievement in children from low-income households (Robinson, Adelson, Kidd, & Cunningham, 2018).

Access to Acceleration.

Because academically talented learners learn quickly, one effective option for serving them is acceleration of the curriculum. Many educators and members of the general public believe acceleration always means skipping a grade. However, there are at least 17 different types of acceleration ranging from curriculum compacting (which reduces the amount of time students spend on material they already know) to subject matter acceleration (going to a higher grade level for one class) to high school course options like Advanced Placement, International Baccalaureate, or concurrent credit (Southern, Jones, & Stanley, 1993). In some cases, acceleration means content acceleration, which brings more complex material to the student at his or her current grade level. In other cases, acceleration means student acceleration, which brings the student to the material by shifting placement. Reviews of the research on different forms of acceleration have been conducted across several decades and consistently report the positive effects of acceleration on student achievement (Assouline, Colangelo, VanTassel-Baska, & Lupkowski-Shoplik, 2015; Steenburgen-Hu, Makel, & Olszewski-Kubilius, 2016), including Advanced Placement classes. Other studies report participant satisfaction with acceleration (Swiatek, 2002) and benign effects on social and psychological development (Rogers, 2002).

Access to Trained Teachers.

Research and teacher reports indicate that general classroom teachers make very few, if any, modifications for academically talented learners (Archambault et al, 1993; Westberg, Archambault, Dobyns & Salvin, 1993), even though talented students have mastered 40 to 50 percent of the elementary curriculum before the school year begins (Reis et al, 1993). A national survey of teachers reports that 32 percent of them view advanced students as a low

priority in their schools and only 10 percent of the teachers surveyed report that advanced learners are taught with curriculum and instruction specifically designed for their abilities (Farkas & Duffet, 2008). In contrast, teachers who receive appropriate training are more likely to provide classroom instruction that meets the needs of talented learners; students report differences and independent observers in the classroom document them (Hansen & Feldhusen, 1994). Curriculum and instructional adaptation requires the support of a specially trained coach at the building level, which could be embedded in the instructional facilitators recommended above (Reis et al, 1993; Reis & Purcell, 1993). Overall, learning outcomes for high ability learners are increased when they have access to programs whose staff have specialized training in working with high ability learners (Delcourt, Loyd, Cornell & Golderberg, 1994.)

AGATE and AAGEA respectfully request that the preceding information be reviewed by the Adequacy Oversight Committee, and the original notations of the 2003 matrix be reintroduced into the report to insure that future reviews of adequacy include GT Education and address our recommendations provided below. With the introduction of the growth model in the new ESSA reporting requirements, we believe it is even more timely and important that any review of adequacy include a review of gifted and talented education in the same way the committee reviews the other elements of the adequacy study and matrix. We understand that GT funding is included in foundation funding and thus not a part of the matrix, but an analysis of expenditures on GT education and the outcomes associated with those expenditures should be a part of this report in the future. AGATE and AAGEA do not request any changes in GT funding at this time, but do request that the Adequacy Committee review the percentage of GT students identified to be served by each district and the total expenditures on that population by categories. We do not expect the matrix to reflect anything but the original content of the first matrix in 2003, which is “Retain current standards, expenditure requirements, and program monitoring.”

Summary:

Once again, we thank you for the opportunity to provide these comments to the committee about the 2018 Adequacy Report. AGATE and AAGEA request that after a review of the updated rationale, the committee will consider our request to include Gifted and Talented Students, and the programs that serve them in this and all future Adequacy Reports. Based on our extensive research into the initial report of 2003 and all subsequent reports, we believe that it was the intention of the original Adequacy Oversight Committee, based on the recommendations of Odden and Picus, and supported by research, that the following be included in any review of adequacy.

Specifically:

- **Reintroduce GT Teachers into the Matrix with the recommendation: “Retain current standards, expenditure requirements, and program monitoring”**
- **Include in each Adequacy Report a review of GT expenditures by district, the percentage of identified students served, and the categories of the expenditures.**
- **Disaggregate GT students as a sub-population in state assessments (Currently ACT Aspire) to assess whether the population is demonstrating growth.**

AGATE and AAGEA suggest these minimal steps as a place to begin in reviewing GT programs as an essential part of Adequacy in Arkansas Public Schools. We are eager to work with the Adequacy Oversight Committee and the Bureau of Legislative Research to identify other points for analysis in assuring that Gifted and Talented Programs are meeting the standards of Adequacy.

Sincerely,

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Janet Calloway, President, Arkansas Association of Gifted Education Administrators
Sandra Johnson, Legislative Chair, AGATE and AAGEA
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References

- Archambault, F.X., Jr., Westberg, K.L., Brown, S., Hallmark, B.W., Zhang, W., & Ennons, C. (1993). Regular classroom practices with gifted students: Findings from the Classroom Practices Survey. *Journal for the Education of the Gifted*, 16, 103-119.
- Baum, S.M., Owen, S.V., & Oreck, B.A. (1996). Talent beyond words: Identification of potential talent in dance and music in elementary students. *Gifted Child Quarterly*, 40, 93-101.
- Delcourt, M.A.B., Loyd, B.H., Comell, D.G., & Golderberg, M.C. (1994). *Evaluation of the effects of programming arrangements on student learning outcomes* (RM94108). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- Gallagher, J. (2002). *Society's role in educating gifted students: The role of public policy* (RM02162). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- Gallagher, J., & Coleman, M.R. (1992). State policies on the identification of gifted students from special populations: Three states in profile.
- Gallagher, S., & Stepien, W. (1996). Content acquisition in problem-based learning: Depth versus breadth in American studies. *Journal for the Education of the Gifted*, 19, 257-275.
- Gallagher, S., Stepien, W., & Rosenthal, H. (1992). The effects of problem-based learning on problem solving. *Gifted Child Quarterly*, 36, 195-200.
- Hansen, J., & Feldhusen, J.F. (1994). Comparison of trained and untrained teachers. *Gifted Child Quarterly*, 38(3), 115-121.
- Kulik, J.A., & Kulik, C.C. (1984). The effects of accelerated instruction. Review of *Educational Research*, 54(3), 409-425.
- Maker, C.J. (1996). Identification of gifted minority students: A national problem, needed changes and a promising solution. *Gifted Child Quarterly*, 40, 41-50.
- Naglieri, J.A., & Ford, D.Y. (2003). Addressing under representation of gifted minority children using the Naglieri Nonverbal Ability Test (NNAT). *Gifted Child Quarterly*, 47(2), 155-160.
- Naglieri, J.A., & Romring, M.E. (2000). Comparison of White, African-American, Hispanic, and Asian children on the Naglieri Nonverbal Ability Test. *Psychological Assessment*, 12, 328-334.
- Reis, S.M., & Purcell, J.H. (1993). An analysis of content elimination and strategies used by elementary classroom teachers in the curriculum compacting process. *Journal for the Education of the Gifted*, 16(2), 147-170.

- Reis, S.M., Westberg, K.L., Kulikowich, J., Caillard, F., Hebert, T., Plucker, J., Purcell, J.H., Rogers, J.B., & Smist, J.M. (1993). Why not let high ability students start school in January? The curriculum compacting study (RM93106). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- Rito, G.R., & Moller, B.W. (1989). Teaching enrichment activities for minorities: T.E.A.M. for success. *Journal of Negro Education*, 58, 212-219.
- Robinson, A., & Clinkenbeard, P.R. (1998). Giftedness: An exceptionality examined. *Annual Review of Psychology*, 49, 117-139.
- Rogers, K.B. (2002). Effects of acceleration on gifted learners. In M. Neihart, S.M. Reis, N.M. Robinson & S.M. Moon (Eds.), *The social and emotional development of gifted children: That do we know?* (pp. 3-12). Waco, TX: Prufrock Press.
- Scott, M.S., Deuel, L.S.S., Jean-Francois, B., & Urbano, R.C. (1996). Identifying cognitively gifted ethnic minority children. *Gifted Child Quarterly*, 40, 147-153.
- Southern, W.T., Jones, E.D., & Stanley, J.C. (1993). Acceleration and enrichment: The context and development of program options. In K.A. Heller, F.J. Monks & A.H. Passow (Eds.), *International handbook of research and development of giftedness and talent* (pp. 387- 410). Exeter, United Kingdom: Pergamon.
- Struck, J. (2003, April). A study of talent development in a predominantly low socioeconomic and/or African American population. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Swiatek, M.A. (2002). A decade of longitudinal research on academic acceleration through the study of mathematically precocious youth. *Roeper Review*, 24(3), 141-144.
- VanTassel-Baska, J., Bass, G., Ries, R., Poland, D., & Avery, L.D. (1998). A national study of science curriculum effectiveness with high ability students. *Gifted Child Quarterly*, 42(4), 200-211.
- VanTassel-Baska, J., Johnson, D.T., & Avery, L.D. (2002). Using performance tasks in the identification of economically disadvantaged and minority gifted learners: Findings from Project STAR. *Gifted Child Quarterly*, 46, 110-123.
- VanTassel-Baska, J., Johnson, D.T., Hughes, C.E., & Boyce, L.N. (1996). A study of language arts curriculum effectiveness with gifted learners. *Journal for the Education of the Gifted*, 19, 461-480.
- VanTassel-Baska, J., Zuo, L., Avery, L.D., & Little, C.A. (2002). A curriculum study of gifted student learning in the language arts. *Gifted Child Quarterly*, 46, 30-44.
- Westberg, K.L., Archambault, F.X., Jr., Dobyms, S.M., & Salvin, T. (1993). The classroom practices observation study. *Journal for the Education of the Gifted*, 16, 120-146.