GIFTED PROGRAMS ARE MAKING A DIFFERENCE IN ARKANSAS

<u>Arkansans for Gifted and Talented Education (AGATE)</u> and the <u>Arkansas Association of Gifted Education Administrators (AAGEA)</u> jointly want to provide a variety of fact-based support for members to answer the question, "Are Gifted Programs Making a Difference in Arkansas?" A rationale for gifted services is provided <u>here</u> by AAGEA.

An April 2021 study by Redding/Grissom covered in the Hechinger Report proposed broad generalizations that nationwide gifted and talented (G/T) services provide little or no academic boost for students. It was an alarming headline that got the attention of the National Association for Gifted Children (NAGC) and several other important stakeholders nationwide. When reviewing the report, several concerns are evident with the studies cited. Small numbers of students are included in the data sets, definitions of types and amounts of services provided for students are unclear, and the studies focus almost exclusively on standardized test scores to measure the impact of gifted programs.

<u>NAGC released an immediate response</u>, but simply put, giftedness is a local context with states and districts using a wide variety of identification assessments and program options for student services. To broadly paint all gifted programs nationally with one brush is an overgeneralization and misses the value and variances of gifted programs at the local level.

Equally, and perhaps more importantly, Arkansas has evidence to the contrary. Looking at data from a newly released policy brief from the University of Arkansas Office for Education Policy (OEP), JAVITS Stem Programs, and annual local district evaluation data postulates a different story of meaningful and worthwhile personal and academic growth of identified gifted students in our state.

The <u>study</u> released in May 2021 by OEP uses methods similar in rigor to the Redding/Grissom study; however, specifically focuses on the state of Arkansas and uncovers quite large replicated and robust associations between gifted ID/programming/services and academic growth, evidenced through standardized test scores. The Executive Director of OEP, Dr. Sarah McKenzie, states:

Using regression analysis and controlling for student and district characteristics, we find that students who received gifted services demonstrated statistically significantly greater academic growth on math and reading achievement across the time period examined than similarly high achieving peers that were not identified as gifted.

The OEP policy brief illustrates that G/T DOES matter and students can and do benefit from educational services as captured by growth in test scores.

Developed in Arkansas at the Jodie Mahony Center for Gifted Education and implemented in urban and rural schools, STEM (Science, Technology, Engineering, and Mathematics) Starters and STEM Starters+ served Grade 1-5 students using creatively challenging engineering, science, and non-fiction literacy curricula to encourage early emerging STEM talents. General educators who received training through the program were more likely to recognize academic talent in students and to recommend them for gifted program identification. Students who participated in STEM_Starters had higher science content and process skill achievement than those who did not participate. Those who participated in STEM_Starters+ had higher science and engineering achievement and engagement in Grade 1. Several replication studies found that gifted students in grades 2-4 who participated in STEM Starters+ had higher achievement on above-level science achievement tests.

There are additional evidence-based models funded nationwide by JAVITS that document improved student achievement and affective outcomes in real-world school settings. Developed at the National Research Center on Gifted Education (NRCGE), Project SPARK engaged K-2 teachers in recognizing and responding to high-potential behaviors and examined influences on achievement with advanced learning opportunities. Findings from Project SPARK indicated treatment effects on mathematics achievement were linked to program participation, that participating schools contributed a larger and more diverse pool of students to gifted program services than comparison schools. The Talent Identification and Career Education (TICE) developed at the University of Iowa uses an expanded rural school talent search model and a hybrid career exploration curriculum to give students the opportunity to identify and develop in academic, psychosocial, and career domains. Researchers report that the academic success of students from traditionally underrepresented groups improves when (1) they are identified early and (2) their learning is connected to potential career goals and their communities.

Annually, local district evaluations are required by <u>Arkansas Gifted and Talented Standards</u> (10.00), and when aligned well with definition, program goals, identification, and services can provide significant student impact data (see DESE Presentation on G/T Program Evaluation, <u>Part 1</u>, <u>Part 3</u>). Most program evaluations are dependent upon individual context, methods used to evaluate such programs, and include appropriate outcomes tailored to the identification and programming purposes of G/T. These evaluation reports are shared with stakeholders as well as the DESE Office of Gifted and Talented and Advanced Placement (OGTAP).

Gifted services impact numerous outcomes that achievement scores do not intend to capture. Longitudinal studies of the gifted illustrate that providing services to meet the needs of gifted students is helpful to develop student talents and improve outcomes in education, occupation, and creative areas years later in life.

John Hattie developed a way of synthesizing various influences in different meta-analyses according to their effect size. In his ground-breaking study, "Visible Learning," he ranked 150 influences that are related to learning outcomes from very positive effects to very negative effects. Hattie found the average effect size of all the interventions he studied was 0.40. Therefore, he decided to judge the success of influences relative to this 'hinge point' to find an answer to the question "What works best in education?" More importantly for educators of gifted students, "What works best in gifted education?" Various programming options utilized in gifted education, in particular acceleration (.68), creativity programs (.62), and enrichment (.53), were determined to have a positive effect size related to student achievement.

Students receiving gifted services have special needs that often require a range of services, including academic programming and/or social/emotional guidance. All students have the right and deserve the opportunity, no matter their age or grade (K-12), to experience new learning every day.

AGATE and AAGEA concur that more research is needed related to G/T programs, their effectiveness, and do engage in continual conversations on how best to identify and serve the needs of gifted students. Effectiveness of gifted programming is not based solely on test scores or short-term outcomes, but on a broad array of outcomes. It is important to highlight from Arkansas data that *context matters*, and that no individual study – most certainly not the Grissom/Redding study or any lone national study – can give conclusive answers or evidence about programming for the gifted.