



Ohio

Ohio Gifted Education Cost Study: Research Brief

OHIO EDUCATION RESEARCH CENTER

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The Ohio Education Research Center (OERC) addresses critical issues of education practice and policy through a preschool through workforce research agenda. The OERC identifies and shares successful practices; responds to the needs of educators and policymakers in Ohio and across the nation; and signals emerging trends.

The OERC is headquartered at The Ohio State University and is coordinated by the John Glenn College of Public Affairs. The OERC works closely with partner universities, research organizations and government entities to fulfill its mission.

Introduction

This research brief presents the findings of the *Ohio Gifted Education Cost Study*, a cost study mandated by the Ohio General Assembly as part of Am. Sub. House Bill 49, the Fiscal Year 2018-2019 state biennial operating budget. The bill included a charge to the Ohio Department of Education to complete the study by May 1, 2018. The Ohio Department of Education engaged in an agreement with the Ohio Education Research Center to conduct the study.

The central goal of the study is twofold: a) Develop a deeper understanding of the cost of providing gifted education services in a manner that is compliant with the state's gifted education operating standards; and b) Identify the most appropriate method for funding gifted education. Specifically, the statutory mandate stipulates:

The Department of Education shall conduct a study to determine the appropriate amounts of funding for each category and sub-category of students identified as gifted under Chapter 3324 of the Revised Code, as well as the most appropriate method for funding gifted education courses and programs. The study shall include, but not be limited to, costs for effective and appropriate identification, staffing, professional development, technology, materials, and supplies at the district level. The Department shall emphasize adequate funding and delivery of services for smaller, rural school districts, including statewide support needed for this population.

Not later than May 1, 2018, the Department shall issue a report of its findings and recommendations to the Governor, the President of the Senate, the Speaker of the House of Representatives, the Director and members of the Joint Education Oversight Committee, and the members of the primary and secondary education committees of the Senate and the House of Representatives. (SECTION 265.480. Am. Sub. H. B. No. 49 132nd G.A.)

Methods

The study uses a mixed methodological approach as outlined below. This approach addresses numerous practical issues, including challenges associated with two important realities. First, Ohio's gifted operating standards went into effect on July 1, 2017, which means that it is unlikely that all 610 school districts are fully meeting these new requirements in year one. The methodological approach did not assume full implementation of the standards, but the study was informed by detailed information from districts that were successfully implementing key components of the standards. Secondly, the operating standards continue a state law that requires the identification of gifted students, but does *not* require that school districts provide identified students with gifted education services. In fact, 46 school districts reported no gifted education expenditures and 55 school districts reported 0 percent of identified students received services in FY2017. Importantly, the new operating standards provide new requirements for the provision of gifted education; however, they do *not* include any changes to the threshold requirements for being identified as gifted. The most significant changes relate to a requirement for whole-grade screenings of all students for giftedness,

professional development and, when applicable, the sending of “no service” letters to families of identified students that do not receive gifted services. The whole-grade screening will have an impact on all school districts, as it is part of the mandate to identify gifted students. The professional development requirement only has an impact if districts elect to provide gifted education services through general education teachers who are designated service providers. The new “no service” letters apply to all districts that elect not to provide gifted services to students.

Methodological challenges and related data limitations, including a lack of reporting uniformity, argue for a cost study that is informed by an analysis of school districts that were substantially meeting the new operating standards in the year prior (FY2017) to their initial implementation. Using state and local data, a school district in each of the state’s eight geographically and demographically defined school district “typologies” was selected for participation in the study. Because the study calls for a particular emphasis on rural gifted education, an additional school district in Typology 1 (Rural – High Student Poverty and Small Student Population) was included. A decision was also made in comparing rural districts with non-rural districts to include Typology 3 (Small Town – Low Student Poverty and Small Student Population) in the rural category. This decision was made because Typology 3 school districts serve a substantial portion of rural students.

The study’s methodology includes both qualitative and quantitative analysis. Both efforts were advanced through field work that included site-based interviews with relevant school district personnel, including school treasurers and gifted education related teachers and administrators and with state gifted education experts at the Ohio Department of Education. This outreach included discussions with educational service center (ESC) personnel.

Informed by field findings and related data gathering and analysis, the quantitative focus of the cost study is its central element. Both the qualitative and quantitative findings are used to develop practice assumptions. From there, program implementation models are developed which are related to the four types of gifted education costs: identification of students; professional development (PD); gifted coordinators to oversee gifted education services, and; other gifted instructional services, including gifted intervention specialists.

The researchers created a set of reality-based assumptions by costing out program implementation models. Interviews, statewide data and other qualitative data with practice-based expenditures retrieved from sample districts shaped the implementation models. In so doing, data limitation issues were managed as effectively as possible. These models reflect school district policies and practices as they operate within the parameters of gifted education state operating standards and relevant fiscal policies. Instead of limiting the study to a simple extrapolation of data from nine school districts, the study uses the data from these districts and ESC personnel interviews to create constructs – gifted education program implementation models built upon key methodological assumptions – that are then costed out.

Consistent with broader school cost patterns, the study determined that different types of districts have different costs of delivering gifted services. These differences are reflected in the study’s statewide cost estimate.

Gifted education cost drivers were identified and quantified and include the four types of gifted costs referenced previously. Cost drivers include:

- Gifted student identification and testing using the following grade bands: K-2; 3-6 and 7-12.
- Service delivery, including preparation and maintenance of Written Education Plan (WEP) for gifted students Gifted program and support services by grade band.
- Other cost considerations, including: district size; number of gifted students, and; rural location.

Current State of Gifted Education Expenditures and Services

The study also provides a profile of FY2017 gifted education expenditures and service levels. The study findings include:

- Gifted education expenditures reported by 564 of the state's 610 traditional K-12 school districts totaled \$108.7 million in FY2017. Forty-five of the state's 52 educational service centers reported spending an additional \$10.3 million in gifted services in FY2017, while eight community schools reported spending \$2.2 million in gifted services the same year.
- \$73.5 million of the \$108.7 million (67.6 percent) was provided by the state (post "gains" cap). Interestingly, as a by-product of the school funding formula, \$2.5 million of this gifted education related appropriation was provided to the 46 school districts that reported no gifted education expenditures.
- Overall, from a statewide perspective, 16.4 percent of enrolled students are identified as gifted. Gifted identification falls into four categories: superior cognitive; creative thinking; specific academic ability in math, reading, science, social studies, and; visual and performing arts in the K-2 and 3-6 grade bands.
- Gifted identification also ranges broadly with regard to types of school districts.
 - Poor Rural: 12.7 percent;
 - Rural: 14.5 percent;
 - Small Town: 16.1 percent;
 - Poor Small Town: 11.4 percent;
 - Suburban: 19.1 percent;
 - Wealthy Suburban: 31.6 percent;
 - Urban: 8.8 percent; and
 - Major Urban: 9.7 percent.
- In terms of the percentage of students identified as gifted who *received* services, the percentages by typology are as follows:
 - Poor Rural: 55.3 percent;
 - Rural: 53.5 percent;

- Small Town: 55.2 percent;
- Poor Small Town: 57 percent;
- Suburban: 53.1 percent;
- Wealthy Suburban: 48.3 percent;
- Urban: 50.9 percent; and
- Major Urban: 46.7 percent.

Statewide, an average of 51.8 percent of gifted students *received* services in FY2017.

Cost Analysis Findings

The estimated FY2017 statewide costs of meeting, *but not exceeding*, the requirements of Ohio's gifted education operating standards are outlined below. The study's research team determined that the marginal cost of no service letters and other gifted education tasks, including the creation of Written Education Plans (WEPs) for gifted students and ongoing support for general education teachers who are designated providers of gifted service, would be considered costs that are included within the cost analysis categories listed below. The same is true for gifted education related technology, materials and supplies, which are costs that the study found not to be tracked separately. Finally, while there are categories of giftedness. As referenced previously, state law does not include – nor do districts report upon – “sub-categories” of giftedness. Therefore, this report does not include cost estimates for sub-categories of gifted education.

- 1. Gifted Student Identification Statewide Cost:** The current gifted operating standards require one whole-grade screening in grades K-2 and a second whole-grade screening in grades 3-6. Consequently, the study's estimated cost of identification, an average of \$24 per enrolled student, was only applied to the K-6 enrollment (824,963 statewide) of each Ohio school district. Additionally, for purposes of making a statewide estimate of referral costs, it is assumed that for student referrals an additional \$2.50 per student applies to 1 percent of the total enrollment of all school districts, which is 1,519,830. ***This amounts to a FY2017 total gifted student identification cost of \$23.6 million.***
- 2. Professional Development Statewide Cost:** The PD cost is based on the number of students identified as gifted in each grade band. Additionally, because it is impossible to predict precisely what the trend will be with regard to future gifted identification, the study costs out a reasonable identification scenario where a minimum of 10 percent identified students is used in order for the state to invest in professional development as a way to build capacity in districts with low percentages of identified students. This approach results in an estimated FY2017 total gifted professional development cost of \$8.2 million in each of two years. If gifted standards are adjusted to allow the 60 hours of required professional development to be acquired over four years instead of the current two-year timeframe, this cost will be reduced by \$4.1 million per year, but it would be extended over four years rather than two years. It is important to note that this cost estimate reflects the costs related to getting all districts into alignment with the current operating standards and to build capacity for an anticipated increase in identified students due to whole-grade screening. There will be ongoing professional development costs related to staff turnover, enrollment and staffing changes, and other local factors.

3. **Gifted Coordination Services Statewide Cost:** The study assumes the current state education aid formula policy, which funds one gifted coordinator for every 3,300 enrolled students, with a minimum of 0.5 coordinators per district and a maximum of eight. The average salary and benefit cost of each coordinator is \$85,776. ***Applying this salary data to the current gifted coordinator funding structure results in a FY2017 estimated cost of gifted coordination services of \$44.1 million.***

4. **Gifted Instructional Services Statewide Cost:** The state's gifted education operating standards prescribe that a maximum of 20 students can be in a self-contained classroom with a single teacher. The same 20-student limit applies to a resource room or pullout setting. Other gifted student instructional environments allow for maximum class sizes equal to the average class size in each school district. For the purposes of this analysis, a standard seven periods of teaching is assumed along with a student to gifted intervention specialist (GIS) ratio of 20 to 1 in grades K-8. In grades 9-12, gifted services are assumed to be provided by general classroom teachers in honors or Advanced Placement (AP) classes with an average class size of 20 students. ***Based on an estimated annual salary and benefit cost of \$89,378 for gifted intervention specialists and \$80,974 for high school classroom teachers, the FY2017 statewide cost of gifted instructional services is \$154.2 million.***

The comparison of these FY2017 gifted education statewide cost estimates and actual FY2017 gifted education funding are summarized on the following page. The first column shows FY2017 state funding for gifted education after the application of the gain cap. The second column shows FY2017 gifted expenditures as reported by local school districts. The OERC Estimated Gifted Cost column is an estimate of what the FY2017 statewide cost would be for providing gifted services to identified students in a manner that meets, but does not exceed, the requirements of the current gifted education operating standards, which went into effect on July 1, 2017. The final column of the table shows the estimated state share of this cost after application of the FY2018 State Share Index value for each school district. Table 1 shows that reported spending and current funding do not necessarily align by category. This can be the result of local decisions about expenditure categorization and/or service delivery.

TABLE 1: ESTIMATED GIFTED COST & FUNDING SUMMARY TABLE

Component	FY2017 Current State		FY2017 OERC Estimate	
	FY2017 Actual State Gifted Funding**	FY2017 School District Reported Gifted Expenditures	FY2017 OERC Estimated Gifted Cost	FY2017 Estimated State Share of Gifted Cost
Identification	\$7.7 million	\$6.2 million	\$23.6 million	\$11.6 million
Professional Development	\$0	\$0.2 million	\$8.2 million	\$3.5 million
Gifted Coordinators	\$17.9 million	\$0.4 million	\$44.1 million	\$21.1 million
Gifted Instructional Services	\$47.9 million	\$101.9 million*	\$154.2 million	\$64.8 million
Total	\$73.5 million	\$108.7 million	\$230.2 million	\$101 million

* \$101.9 million in FY2017 Reported Gifted Instructional Expenditures is the total of \$94.6 million in instructional services expenditure and \$7.3 million in gifted support service expenditure.

** FY2017 Gifted state funding figures are after the application of the gain cap.

As displayed in the table above, this study estimates that the overall statewide cost of delivering gifted education to identified students in accordance with the new operating standards would increase the current (likely under-) reported aggregate expenditure of \$108.7 million to \$230.2 million. **The state formula share of this cost will increase by \$27.5 million from \$73.5 million to \$101.0 million.** It is important to note the following about the FY2017 reported expenditures and actual state funding:

- The FY2017 reported expenditures reflect the current state of implementation, where approximately 51 percent of identified students (8.4 percent of all students) receive services, and where many districts are in the process of implementing the new standards, but not at full implementation.
- The FY2017 actual state funding reflects the current funding formula, which sets Gifted Coordinator and Gifted Instructional Specialist salaries at \$37,370.

Similarly, to understand the increase in the OERC estimated gifted cost, it is important to note that:

- The OERC estimated gifted cost (both state share and total) funds services for 100 percent of identified students, while holding identification rates constant (16.4 percent);
- The OERC estimated gifted cost (both state share and total) is based on the average salary and benefits for gifted coordinators (\$85,776), gifted intervention specialists (\$89,378), and for grades 9-12, general classroom teachers (\$80,974), all of which contributed to the increase.

Refer to Table 7 in the full research report for a summary of the gifted cost estimates. The table shows the cost per student for each component of the model, the student counts used to compute costs, and the cost estimate for each component.

The OERC gifted cost estimate is a theoretical construct where all identified students receive services in accordance with the standards. In this scenario, identification rates remain constant, all identified students receive services according to the standards and as typical to their grade band, and all school districts are implementing a program of gifted education in full compliance with the gifted operating standards. Ultimately, the scale and scope of district- and school-level implementation is a local decision. Current law does not require gifted services, and districts choosing to provide services may comply with the operating standards using a variety of service delivery models.

SMALL AND RURAL DISTRICTS

The study included a focus on gifted education in smaller, rural school districts. The central rural insights that emerge from the study relate to gifted education funding and service inequities that begin with low gifted identification rates of gifted students in rural school districts. These low identification rates may, in fact, point to under-identification of gifted students. Whole-grade screening has been identified as a promising strategy to address under identification and underserved populations. The cost study finds that addressing this funding and service gap will require proportionally more investments to meet the new state operating standards than would be the case in all other categories of school districts except urban school districts where the gifted education gaps are relatively larger.

Gifted Funding Policy Implications

The study concludes with a list of emerging public policy implications, detailed below. These policy implications highlight issues that deserve further review and, in some cases, possible administrative or legislative action. In each case, policy implications are designed to help strengthen Ohio's system of funding gifted education – a system that the study has found to be consistent with how most states fund gifted education, which is as part of a per pupil, “foundation” school funding model.

1. **Gifted Education Disparities.** A central issue in gifted education in Ohio is the large disparity in gifted education identification and service rates across school districts. There are particularly significant disparities in terms of under identification in both urban and rural school districts. An examination of the root causes of these disparities is beyond the scope of this study. However, this is an important issue meriting additional study by the state of Ohio to ensure equitable identification and services for gifted students regardless of locale.
2. **Fiscal and Programmatic Accountability.** Ohio's school funding formula provides funding for gifted education. However, this funding flows into school district general funds without a requirement that these resources be spent exclusively for their intended gifted education purpose. Fiscal and programmatic accountability would be increased by stipulating that state gifted funding must be based on the number of students identified and/or served and that these funds be used exclusively for gifted education provided by school districts or through sanctioned outsourcing. Foundation funds currently earmarked for use by educational service centers (ESC) for gifted education could be treated in the same manner.
3. **Mandate for Service Provision.** Current state law requires districts to identify gifted students, but there is no corresponding mandate to provide services for those students. The lack of a service mandate is one of the drivers of the disparity among gifted service rates and gifted

expenditures among school districts in Ohio. This cost study relies upon a theoretical construct that assumes service provision for 100 percent of identified students in accordance with Ohio's operating standards for gifted education. The operating standards require differentiated curriculum and instruction, as well as support within a continuum of services, and are inclusive of a variety of service delivery models. State policy leaders may wish to consider including a service provision mandate in future state policy in conjunction with increased fiscal and programmatic accountability to create a system that better ensures identified students have access to services that meet their educational needs.

4. **Fiscal Data Reporting Improvements.** Fiscal data reporting updates in EMIS support accurate and consistent reporting of expenditures for gifted services. All interviewed districts enter their gifted services expenditures information in EMIS accurately and to the best of their ability. However, during onsite interviews, it became apparent that improvements can be made to support more consistent and accurate reporting of gifted services expenditure data by districts statewide. In many cases, there was a clear and significant disconnect between how school districts were investing their funds to support gifted services and how "gifted" expenditures were reported by the school treasurer's office. Improvements can be advanced through updated expenditure guidance from the Ohio Department of Education and statewide associations; ad-hoc EMIS training on expenditure reporting, and; regular internal communications between each district's treasurer and gifted services personnel.
5. **EMIS Portability.** EMIS portability would provide schools with the best information about incoming students who have been identified as gifted. Every school year, large numbers of Ohio students change schools and these moves can occur at any point during the school year. According to research, families living in poverty have the highest mobility rates; and frequent moves can negatively affect a student's learning, achievement, social supports, and physical and mental health. Often, students experiencing frequent moves are categorized as vulnerable youth as defined in the Every Student Succeeds Act (ESSA). Though Ohio has policies in place for EMIS data to be exchanged between school districts, the research team found that the process and timeline for data sharing can be improved upon. Several school districts interviewed reported reliance on parent-provided information and the timely cooperation of other school districts to provide a child's gifted identification and service information. Improving upon implementation of EMIS data exchange guidelines can better support mobile families and provide students with the supports they need to succeed.

For students identified as gifted, transferring from district to district within Ohio does not result in gifted screening and identification information transferring in EMIS with the student. Districts interviewed report that many of the students who request referrals are students who have moved. Allowing information from gifted screening assessments to transfer in EMIS with Ohio students, would eliminate unnecessary evaluations for students who are already identified gifted and allow for gifted services to be arranged for identified students more quickly.

6. **Build ESC Capacity to Serve Rural and Other Under-Served Areas.** With respect to gifted coordination, identification, service and professional development, ESCs are only useful to rural districts and districts if they maintain gifted staff and gifted service agreements with school districts. With inadequate gifted staffing, districts that may otherwise have opted to

utilize their local ESC must use a different ESC with which they have little to no relationship, or take the gifted identification and service efforts in-house. This may not be an efficient or cost-effective use of limited district resources. This raises related questions regarding the adequacy of state gifted funding for ESCs, which has been reduced in recent years. This issue merits additional analysis beyond the scope of this report.

7. **Rural Gifted Education Disparities.** This study found disparities between rural and non-rural districts in gifted education spending, identification rates and service provision. Field visits with rural districts and ESCs raised issues that merit further consideration for policy development by state leaders. For instance, consideration could be given to funding and/or other incentives for talent development programs in rural school districts. Talent development programs, particularly in the early primary grades, can increase the likelihood that low-income students will meet gifted identification criteria thus helping to reduce the disparity in identification among rural and non-rural school districts. The state could also explore policies that incentivize services and programming in rural areas. Policy solutions could account for unique aspects of rural locales, such as community values and culture, geographic isolation and sparse population. This report suggests that policy solutions could include: place-based education programming to combat rural “brain drain” and counter a common narrative that gifted students must leave home to succeed; and creative means of providing access to advanced coursework in rural school districts. State leaders may wish to explore ways to better leverage ESCs, community colleges, career technical education centers and other regional educational institutions to provide services in rural areas. Lastly, the state could explore policies to help districts and ESCs attract and retain gifted education professionals in rural areas of the state.
8. **Shared Service Related Efficiencies.** Enhance the efficiency and effectiveness of gifted services by encouraging the use of shared service models within and between school districts. This could include the utilization of ESC administered assessment banks at the regional level, which would facilitate more district access to gifted education resources and could be more cost-effective in the process, or a regional approach to professional development that includes both the development and delivery of professional development modules (either online or in-person).
9. **Talent Development and Identification.** Talent development and identification initiatives could be incentivized in school districts with under identification problems, including rural school districts. Investments in “talent identification” for younger students and professional development to support teachers in developing and identifying talented students in the early grades could improve identification and service rates for gifted students.
10. **Gifted Education Funding and Community Schools and STEM Schools.** Currently, Ohio’s gifted education statute (ORC 3324) and Gifted Education Operating Standards (OAC 3301-51-15) apply to traditional school districts. The Ohio General Assembly and the State Board of Education may wish to consider exploring policy options that would provide for identification and services for gifted students in all Ohio public school settings, including community schools and STEM schools. According to the Ohio Department of Education’s 2016-2017 *Annual Report on Ohio Community Schools*, community schools enrolled more than 111,000 students in 2016-2017. That same year, more than 2,300 students attended independently governed

STEM schools not associated with a traditional school district. Expanding the revised code and operating standards to include these public school settings would help increase the likelihood that all gifted students are identified early in their academic careers, and that they receive services that support and develop their potential.

11. **Online Professional Development.** The state may wish to consider taking a lead role in investing in and developing online professional development modules to assist schools and districts in meeting the professional development requirements outlined in the gifted operating standards. High quality, online professional development provides learning opportunities for teachers across all school typologies and provides the flexibility for teachers to take professional development when it best fits their schedule. Face-to-face professional development presents travel barriers to those in rural areas; the use of online professional development effectively addresses these barriers.