

Ohio

Ohio Gifted Education Cost Study: Report

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.

Section I. Introduction

This gifted education cost study was mandated by the Ohio General Assembly and commissioned by the Ohio Department of Education. It reflects the importance of gifted education, which currently includes about 15 percent of Ohio's 1.7 million public school students. The gifted student population is diverse and it includes students from more than 600 school districts throughout rural, urban and suburban Ohio; however, Ohio's state aid funding formula provides funding for gifted identification and student services to the 610 "traditional" K-12 school districts. Funding for Ohio's over 300 community ("charter") schools does not include funding for gifted education. However, Ohio's 52 educational service centers (ESCs) receive a relatively small (\$3.8 million) amount within the foundation formula for the provision of gifted education related services. Current state law mandates that school districts identify students who are gifted, but gifted education service provision is a local choice and not mandated by law.

The central goal of the cost study is twofold: a) to 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) to identify the most appropriate method for funding gifted education.

LEGISLATIVE MANDATE

Included in Am. Sub. House Bill 49, the Fiscal Year 2018-2019 state biennial operating budget, which became effective July 1, 2017, the Ohio General Assembly directed the Ohio Department of Education to conduct a cost study to determine the appropriate amounts and the most appropriate method for funding Ohio's gifted education services.

The specific language is as follows:

SECTION 265.480. 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.

(Am. Sub. HB 49 of the 132nd Ohio General Assembly, pages 3090-3091)

The study was conducted through an agreement with the Ohio Education Research Center and its team of partners. Other external consultants with gifted education expertise who work on an ongoing basis with Department-provided additional assistance. The study team worked with

Department staff to design and conduct the study.

The project scope is anchored in Ohio's operating standards for gifted education that were adopted March 6, 2017, and became effective July 1, 2017. These standards govern the identification and provision of gifted education services; they include policies ranging from staffing and programming to accountability, written education plans, innovative gifted education proposals and a gifted education advisory council.

Section II. Research Methodology and Site Selection

The gifted education cost study methodology employs a mixed-methodological approach as articulated below. Before describing this approach, two significant challenges are noted because they have an important impact on the study's methodology.

A central challenge associated with the study relates to the fact that there is less than one year's experience with Ohio's new gifted education operating standards, which means it is unlikely that most school districts have implemented them fully. The situation is made more difficult because state law does not and has never required the provision of gifted education services. Instead, current standards simply stipulate that schools assess all students for giftedness through specified whole-grade screenings and through referrals using appropriate testing; they also stipulate that schools choosing to provide gifted services must meet relevant state operating standards.

Additionally, a review of state data shows irregular and inconsistent patterns of identification of students and under-identification of certain student populations, including minorities. There also is significant variability statewide in gifted services provided by school districts, including 46 districts that reported no gifted expenditures in FY17 and 55 districts that reported providing services to zero percent of identified students in the same year. Since districts can choose whether to provide gifted education, these service gaps can result in a fractured and incomplete set of expenditure data. The recent adoption of the new standards, data limitations and inconsistent identification and service makes the cost study a more complex project.

In addressing these and related issues, the study utilizes both state and district data. Statewide data includes fiscal information collected through the state's Education Management Information System (EMIS). As outlined below, the issue of how to cost out new, but not fully implemented, standards, is addressed by selecting and analyzing nine school districts with data indicating they were, in a significant manner, implementing the new gifted operating standard requirements in FY17 (July 1, 2016, through June 30, 2017). These select districts were identified by a review of EMIS and gifted program data provided by the Department. As outlined below, the cost analysis of these districts is then used to estimate a statewide cost of providing gifted education services.

The study also includes data collection via site-based interviews of knowledgeable (select) school district and educational service center personnel, including the school treasurer and relevant teachers and administrators. The ESC role is particularly important because of the study's mandate to prioritize rural gifted education. ESCs are sometimes especially supportive of rural school districts that have resource limitations because these districts can be more inclined to outsource gifted education services.

METHODOLOGICAL STEPS

The analytical steps that the study moves through include the following:

1. **Identification of Selected School Districts:** One school district from each of eight state-defined typologies – with an additional Typology 1 rural district (see below) – were identified through an iterative process. First, Department program staff reviewed gifted

EMIS data using the following categories: a) **Identification**, including: gifted categories, grade levels (K-2, 3-6, 7-12); economic disadvantage flag; under represented populations; and student achievement and growth; and b) **Service**, including: gifted intervention specialist; service program codes; general education teacher by identification area; and acceleration. Importantly, these select districts are not statistically representative of their typology or the state as a whole when it comes to gifted identification or service. Also, reflective of agreements with the Department, these select school districts and participating ESCs are not listed by name in the study.

The initial data analysis yielded a list of districts to be reviewed by the project team. The list was reviewed for geographic distribution, including rural representation. The project team then reviewed annual district gifted reports (self reports) and district identification and service plans and policies to inform the selection of the final sample of districts. These reports include guidance and technical assistance, professional development, details of formal gifted services, assurance of access to equitable services and program self-evaluation. A district was then selected from each of the state's eight typologies – with a second district selected for Typology 1 (rural) to provide additional rural data consistent with the charge to provide an emphasis on rural gifted education. The study also pays special attention to comparing rural districts (typologies 1-2) with non-rural districts (typologies 4-8) by including Typology 3 in the rural category. This is reasonable because districts in this category serve substantial numbers of students from rural areas.

2. **Assessment of Gifted Program Implementation Models:** The annual district self reports were analyzed and mapped to the new gifted education operating standards to determine areas of strength and weakness in implementation. The study team extracted school district reported expenditure data over a number of years to determine accuracy. The study team also conducted on-site data collection with the specified districts and ESCs to collect data specific to program implementation and gifted education expenditures, which included the use of expenditure protocols to gain deeper-level understanding of the local implementation process. The study team then conducted a cross-case analysis through the lens of the gifted education operating standards to determine the costs of the various elements of the gifted program implementation model.
3. **Quantitative Analysis of District Level Expenditures and Estimate of Statewide Costs:** The detailed expenditure and program/service data (from selected districts and ESCs) were applied to statewide district-by-district data showing the number of students identified as gifted in FY17. This provided foundational information necessary to create a baseline, per pupil estimate of the cost of providing gifted services in Ohio at FY17 levels of gifted identification. This estimate focuses on the cost of meeting, but not exceeding, Ohio's gifted education operating standards.

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. They 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.

As previously stated, this methodological approach involving nine selected school districts that (substantially) met state gifted education standards in FY17 is a reasonable and practical approach to a cost analysis of new state gifted education standards. It is, however, important to highlight four qualifications regarding this analytical approach:

- a) Because technology, materials and supplies are included in the statutory charge but not in the state's gifted education operating standards – and because the school districts in this study are not quantifying their gifted education specific use of these tools – there is not, at this time, the ability to provide a cost analysis for these items. However, the study describes this situation, which will provide relevant contextual information for future analyses;
- b) Because gifted education programming at the high school level is largely focused on providing gifted students with the opportunity to go faster and farther educationally through participation in Advanced Placement (AP), International Baccalaureate (IB), Honors and/or College Credit Plus (CCP) programming – all of which are open to qualifying non-gifted students – the authors of the study determined that the best approach to a cost analysis involves the consideration of two costing scenarios. The first scenario takes a narrow-focus approach by limiting costs to upper-grade expenditures that are directly and exclusively made to serve gifted students. The second scenario utilizes a proportional analysis that includes costs associated with the previously mentioned curricular options that are equal to the percentage of gifted students receiving these services;
- c) As previously referenced, the legislative mandate for this study includes a requirement to determine the appropriate amounts of funding for each “category and subcategory” of students identified as gifted, as well as the most appropriate method for funding gifted education courses and programs. The first step in determining appropriate funding is to gather expenditure data and determine cost factors associated with programming. All school districts report gifted education expenditure data; however, this information is not reported by the type of service and associated expenditures for each of the four types of gifted identification (superior cognitive, creative thinking, specific academic ability, and visual and performing arts) in their local accounting structures or their expenditure reports to the Department. This lack of granularity in the data renders this analysis unfeasible. Additionally, Ohio Revised Code 3324 identifies the four categories, but not the subcategories, of students

identified as gifted. Given the data limitations to determine appropriate funding for the four major categories of giftedness, it would be logical to extend this limitation to their subcategories of giftedness as well, were they defined; and

d) This study addresses the practical realities of data limitations – not just with nine school districts and four ESCs – but also with regard to the fact that not all participating school districts provided researchers with the full complement of requested data. It does so by using interviews and other data requests to inform the shaping of empirically based constructs – or program implementation models. These models reflect school district policies and practices as they operate within the parameters of state gifted education operating standards and fiscal policies. So, instead of limiting the study to an extrapolation of data from nine school districts, the study uses the data from these districts to create program implementation models that are then costed out.

With these data limitation in mind, the Department should explore updates to its USAS accounting codes and EMIS reporting requirements to include a deeper level of specificity. This may include capturing expenditures associated with the four types of giftedness. Further, the Department could recruit a small cohort of school districts to report these types of expenditures to learn what potential challenges may exist to inform future changes in Department reporting with the intent of strengthening understanding of gifted programming expenditures in the future.

Finally, the state's list of school district typologies

(<http://education.ohio.gov/Topics/Data/Report-Card-Resources/Ohio-Report-Cards/Typology-of-Ohio-School-Districts>) is as follows:

- **Typology 1:** Rural – High Student Poverty and Small Student Population;
- **Typology 2:** Rural – Average Student Poverty and Very Small Student Population;
- **Typology 3:** Small Town – Low Student Poverty and Small Student Population;
- **Typology 4:** Small Town – High Student Poverty and Average Student Population Size;
- **Typology 5:** Suburban – Low Student Poverty and Average Student Population Size;
- **Typology 6:** Suburban – Very Low Student Poverty and Large Student Population;
- **Typology 7:** Urban – High Student Poverty and Average Student Population; and
- **Typology 8:** Urban – Very High Student Poverty and Very Large Student Population

4. Educational Service Centers

Because school districts often outsource gifted education to ESCs, the study includes interviews with ESC providers. Insights from this effort are included in the study.

It is important to reiterate that while school districts provide the majority of gifted education services directly, some districts outsource these services to ESC partners through service contracts. This means that it is imperative to understand the gifted funding realities of ESCs.

ESCs are school districts under state law and local education agencies, or LEAs, under federal law.

Ohio's 52 ESCs are service providers offering administrative, academic, fiscal and operational support services to Ohio's school districts, chartered nonpublic schools, community schools and STEM schools. Every district in Ohio with enrollment of 16,000 students (ADM) or fewer is required to be aligned with an ESC. Those with enrollment greater than 16,000 may opt to align with an ESC. To date, all districts, except for one, are aligned with an ESC.

ESCs also are an important component of Ohio's regional education support system, which facilitates continuous improvement efforts in local school districts. Under the system, ESCs implement state- or federally funded initiatives assigned to them by the General Assembly or Department.

ESCs are funded through a combination of federal, state and local resources of which local, fee-for-service contracts are the primary source of funding.

5. The Study's Quantitative, Cost-Based Analysis Centers on Key Components of Gifted Education include:

- Effective and appropriate student assessment and identification;
- Staffing Requirements;
- Professional Development;
- Educational Technology, Materials and Supplies.

6. Gifted Education Cost Estimates, Related Analyses and Funding Policy Implications

The study concludes with a review of common gifted education related challenges found among the selected school districts and ESCs; an overview of gifted education best practices; estimates of the per pupil, statewide cost (FY17) of implementing Ohio's gifted education operating standards; and, finally, gifted education funding policy implications.

Section III. Status of Ohio's Gifted Funding: Questions and Answers

Outlined below are key cost study research questions. Most relate to relevant state gifted education funding information. Each question is followed by an answer rooted in data collection and related research and analysis.

1. What are the costs directly associated with the following gifted student-related services:

- Student Assessment and Identification;
- Staffing Requirements;
- Professional Development;
- Educational Technology, Materials and Supplies.

Additionally, what are the current (FY17) estimated annual expenditures for gifted education in Ohio?

Answer:

This section of the report discusses Ohio's mechanism for funding identification of and service provisions for gifted students.

I. Ohio's Current Gifted Funding Formula

Ohio's current gifted funding formula has three components. These components are:

- Gifted Identification;
- Gifted Coordinator Units;
- Gifted Intervention Specialist Units.

Identification of Gifted Students – Ohio's 610 public school districts are each provided with a flat amount of \$5.05 per student for gifted identification. Districts receive this amount based on their Formula Average Daily Membership (ADM) figure.

Gifted Coordinators – The state school funding foundation formula for traditional school districts calculates funding for gifted coordinators based upon the Formula ADM of each school district not including the ADM of community schools. The formula calculates gifted funding as one gifted coordinator for each 3,300 students. Each coordinator is funded at a salary of \$37,370.

Gifted coordinator funding is pro-rated so districts can receive funding for "partial" gifted coordinators. Each district is assured funding for a minimum of 0.5 gifted coordinator units and a maximum of 8.0 coordinator units. Calculations for FY18 show that 332 districts – more than half – receive the minimum 0.5 gifted coordinator units. At the upper end, only Cincinnati, Cleveland and Columbus are large enough to receive funding for the maximum eight gifted coordinators.

Gifted Intervention Specialists – The state school funding foundation formula for K-12 school districts also provides funding for gifted intervention specialists based upon the Formula ADM of

each school district not including the ADM of community schools. Districts are eligible to receive funding for one gifted intervention specialist for each 1,100 students. Each gifted intervention specialist is funded at the same salary of \$37,370 and the SSI is not applied to gifted intervention specialist unit funding. Districts are assured funding for a minimum of 0.3 gifted intervention specialists; simulations of the FY18 formula show that 10 districts receive this minimum level of funding.

Gifted Funding for Community Schools and ESCs – Even though a handful of community schools provide gifted education services, they do not receive funding from the state explicitly for these services. Community schools receive funding through a transfer of funds from the community school student’s resident district. As noted above, funding for gifted coordinators and gifted intervention specialists does not include community school students and, therefore, the deduction of funds from the traditional school district to the community school does not contain the formula calculation for gifted education.

ESCs receive a flat funding amount from the state and receive \$3.8 million in state funding (FY18) for gifted services. According to a 2017 survey, 44 ESCs provide gifted education coordination and 39 provide “direct” gifted education services.

Table 1 provides a brief overview of expenditures by type of school district in Ohio. These expenditures are reported to the Department by each school district.

Table 1 shows that traditional K-12 school districts were responsible for nearly 90 percent of reported gifted education expenditures in Ohio in FY17.

Furthermore, 78.9 percent of community school gifted spending is by a single school - Menlo Park Academy in Cuyahoga County (\$1,760,129).

Table 1: FY17 Gifted Expenditures by Type of District

Expenditure Category	K-12 Districts (N=564)	ESCs (N=45)	Community Schools (N=8)
Instructional Services (1210)	\$94,573,657	\$6,944,716	\$2,206,810
Gifted Identification (1211)	\$6,253,694	\$505,154	\$0
Support Services (2230)	\$7,276,760	\$2,834,781	\$4,397
Gifted Coordination (2231)	\$382,202	\$0	\$0
Training Services (2232)	\$201,423	\$0	\$15,401
Gifted Total	\$108,687,736	\$10,284,652	\$2,226,607

II. Assessment of Ohio’s Current Gifted Funding Formula

This analysis highlights two fundamental problems with Ohio’s current gifted funding formula.

The first problem is that **there is no clear cost basis for the current funding parameters relating to gifted education**. Gifted identification was increased to \$5.05 per pupil (1 percent increase) in FY15. It has remained at that amount ever since. There is no explanation for how the \$5 per pupil figure was arrived at in FY14. Similarly, the salary amount by which gifted

coordinator and intervention specialist units are funded was set at \$37,000 in FY14 and increased by 1 percent to \$37,370 in FY15, where it has remained ever since.

The second fundamental problem with the current gifted funding formula is that ***funding is based on the Formula ADM of the school district rather than the number of students identified as gifted and then provided with gifted education services***. Although it makes sense to provide funding for gifted identification based on the total number of students in each school district (as each student needs to be assessed), it is less logical to provide funding for gifted services on the same ADM basis. This is especially true considering there is no mandate that gifted funds be spent on gifted students in Ohio.

The problem can be easily illustrated by looking at the data in Table 2, which shows the mismatch between state funding for gifted education in FY17 and gifted education expenditures reported by school districts to the Department in FY17.

Table 2: FY17 District Spending and State Funding on Gifted Education

	# of Districts	FY17 Reported Gifted Expenditures*	FY17 Gifted State Funding (Post Gain Cap)	Difference (Spending – Revenue)
Districts Reporting Gifted Expenditures	564	\$108,687,736	\$71,031,267	\$37,656,469
Districts NOT Reporting Gifted Expenditures	46	\$0	\$2,506,335	-\$2,506,335
All Districts	610	\$108,687,736	\$73,537,602	\$35,150,134

* Note that the gifted expenditure figures are as reported by local districts to the Department through the EMIS system. Reporting practices vary across school districts, and it is highly likely that these figures underestimate actual spending on gifted students in Ohio.

Table 2 above shows that Ohio’s 610 K-12 school districts spent at least \$108.7 million on gifted education in FY17; however, not all school districts reported gifted expenditures through EMIS. In fact, though 564 of Ohio’s 610 school districts (more than 92 percent) reported gifted education spending in FY17, 46 school districts reported spending nothing on gifted services. Furthermore, FY17 state funding for gifted education (after the state appropriation growth “gain cap” limitation is applied) was \$73.5 million. The 564 school districts that reported spending on gifted services received \$71.0 million in state funding for gifted education. This means that the 46 districts that reported no expenditures on gifted services still received \$2.5 million in state funding. This is because gifted funding through the state foundation aid formula is based on each district’s total number of students (as measured by Formula ADM) and NOT on the number of students identified and/or served in gifted education programs.

Furthermore, just because a district provides gifted education does not mean that it reports spending all the state funding it receives on gifted identification and services. This is illustrated

by the fact that in FY17, 303 of Ohio’s 610 school districts – nearly half – reported spending less money on gifted education than the amounts they received from the state in FY17. Tightening up of gifted expenditure requirements would allow for future analysis that could assess the extent to which the current mismatch between reported gifted expenditures and state funding received is the result of incomplete reporting or actual expenditures falling short of funding received.

Table 3 provides a comparison of FY17 gifted education reported spending and revenue by typology group.

Table 3: Comparison of FY17 Gifted State Funding and Gifted Reported Spending By Typology Group

Type of District	# of Districts	FY17 Reported Gifted Expenditures	FY17 Gifted State Funding (Post-Cap)	Spending - Revenue
Poor Rural	123	\$6,990,841	\$8,246,347	-\$1,255,506
Rural	106	\$4,417,885	\$5,722,624	-\$1,304,739
Small Town	111	\$8,528,128	\$8,487,637	\$40,491
Poor Small Town	89	\$10,793,688	\$9,074,322	\$1,719,366
Suburban	77	\$19,717,556	\$13,499,271	\$6,218,285
Wealthy Suburban	46	\$28,284,023	\$9,570,079	\$18,713,944
Urban	49	\$15,336,358	\$10,154,324	\$5,182,034
Major Urban	6	\$14,565,033	\$8,731,826	\$5,833,207
Other	3	\$54,225	\$51,172	\$3,052
Total	610	\$108,687,736	\$73,537,602	\$35,150,134

The data in Table 3 shows that rural and poor rural school districts in Ohio report spending less on gifted education than they receive in state funding and less wealthy small towns report spending about the same as they receive. Meanwhile, small town, suburban and urban school districts tend to report spending more than they receive in state funding on gifted education.

The data shown above has two clear implications:

- 1) Ohio is currently funding about two-thirds of the reported gifted education expenditures provided by the traditional K-12 school districts, which is higher than the percentage the state contributes to all educational spending. However, considering that the reported spending figures are widely believed to err on the low side, the state likely is funding a lower percentage of actual expenditures.
- 2) The combination of providing funding based on the total number of students in each school district combined with no mandate to actually serve gifted students who have been identified creates both a mismatch between spending and revenue and an incentive for districts to under-identify and/or under-serve gifted students in order to allocate the funding to other areas of their budgets.

2. What are current (FY17) gifted student service delivery costs in rural school districts and how do these costs differ from non-rural Ohio school districts? For this analysis, rural districts are typologies 1-3.

Answer:

Of the nine selected districts, three are from Typologies 1 and 2, which are formally labeled rural, and one is from Typology 3, which is not labeled rural but is composed primarily of small, relatively rural school districts. Because of the state mandate to include a particularly close analysis of rural district gifted education in the cost study, a decision was made to consider typologies 1-3 as rural because they share both significant rural populations and small or very small student populations. These districts also share challenges associated with limited financial resources and small gifted student populations – numbers that make it difficult to hire gifted staff.

Data analysis, site visits and interviews with ESC personnel revealed that small, rural school districts are more likely than their non-rural counterparts (typologies 4-8) to hire shared coordinators that may serve multiple districts. One risk of this approach, as noted by an ESC, is that if a gifted intervention specialist is only present one or two days a week, gifted services may be more disruptive, less integrated into a student's everyday routine and, ultimately, less successful. At the extreme, students may be pulled out for extended periods of time to fulfill gifted service-hour requirements, missing instruction in areas they will ultimately be responsible for learning. While they may not have the student population or budget to fund an FTE for gifted coordination or services, smaller rural districts utilizing ESC services are doing so not as a compliment to district services but for the entirety of their gifted services. Of the four rural selected districts, two outsourced gifted coordination to ESCs and two provided these services themselves.

Rural districts not utilizing ESCs for gifted coordination frequently report utilizing ESCs' professional development resources; however, in one case used for this study, a rural district that was not utilizing ESC-provided professional development relied, instead, on a network of local gifted coordinators to find or develop trainings to fulfill the required hours for district staff.

Online instructional resources are utilized more frequently among the rural districts in this study than their non-rural counterparts. This is noted as a strategy to meet gifted student needs when there may not be enough students in a certain grade to compose a cluster. These students may, for example, be doing subject-accelerated math lessons online in a resource room/pull-out environment or in the math classroom with their grade-level peers.

3. What is the estimated combined (state and local) statewide cost of operating a system of gifted education that aligns with, but does not exceed, current gifted education state operating standards?

Answer: See Section V (page 31).

4. What are leading Ohio examples of cost efficiencies related to shared service systems for the delivery of gifted education services?

Answer:

Per the mission of Ohio's regional education service model, educational service centers serve as the primary example of cost efficiencies related to gifted education shared service systems. These services include an assessment-specific collaborative network, which maintains a portfolio of referral assessments. As for costs, utilizing the ESC-related assessment bank is included in costs associated with membership in the ESC collaborative.

Additional shared services systems that were reported as beneficial were informal networks of local school district gifted education coordinators. These networks serve as places to brainstorm about implementation plans, refine whole-grade screening assessment selection, share resources and leverage the feedback of local colleagues through email listservs.

5. Based on the state's current gifted education operating standards, what is the most appropriate method for funding gifted education services?

Answer: See Section V (page 35).

6. Based on observations from selected school districts and interviewed ESC personnel, what innovative practices could result in increased effectiveness and efficiency of gifted education services related to:

- Identification;
- Staffing;
- Professional Development;
- Technology, Materials and Supplies.

Answer:

With respect to identification, the selection of the whole-grade screening assessment and the frequency of its administration were efficiencies reported from selected school districts. Selection of an assessment that may serve multiple purposes, such as informing specific learning objectives or individualized education programs (IEP), as well as gifted identification placement, is a practice reported as resulting in more school district efficiency. Many districts noted the frequency of the whole-grade screening as a practice that enables them to identify more effectively and efficiently.

The gifted education operating standards require whole-grade screening of students in four different areas at least twice, but many districts are offering the specific academic ability in math and reading whole-grade screening more than once a year, which is beyond state requirements. For example, a district may offer the NWEA MAP assessment three times a year in grades 2-6. While not as fiscally efficient as offering the assessment once in grade 2 and once in grade 5, which would meet state requirements, this approach does reduce the number of referrals. Districts report that because of the way the student-based licenses for this assessment are purchased, they incur no additional expenses from the testing company for multiple administrations per year. However, this needs broader

school district analysis to determine: a) if this experience can be extrapolated statewide; or b) if it is an efficiency that is unique to MAP.

Importantly, districts with small enrollment sizes and/or gifted populations can achieve staffing efficiencies through ESCs. While the ESCs can provide a partial FTE (Full Time Equivalent) or specific gifted services that the district may need, it may not be as cost efficient for these services to be provided by school district staff. Realizing these efficiencies depends upon the availability of gifted staff in ESCs. Some districts and ESCs interviewed in the study reported attrition of gifted staff at the ESC level, which was attributed, in some cases, to a reduction in state gifted funding to ESCs.

The required hours of professional development for general education teachers who are designated gifted education service providers outlined in the state operating standards provides additional opportunities for innovative practices. These practices include online professional development options, such as the Department-developed Javits modules (I-GET-GTEd), GTIgnite, as well as ESC-provided professional development. Using online professional development allows teachers to obtain the required hours of professional development outside the bounds of the school day. This avoids the cost of substitute teachers. For teachers who prefer in-person professional development, the ESC can provide professional development opportunities to fulfill the required hours. Importantly, districts report that extending the time teachers have to achieve the required hours results in more professionals obtaining the required hours of professional development needed to be qualified as gifted education instructors. Districts also report difficulty in finding professional development that is relevant and meets the requirements of the operating standards.

Finally, field interviews suggest that operational efficiencies can be gained by housing gifted intervention specialists within school buildings rather than administrative offices. This is primarily true because it allows gifted education staff additional face time with students and staff.

Section IV. Key Findings and Cost Estimate-Related Information Provided by Sample School Districts

School district site visits were an essential element of the cost study. Data collection and on-site interviews with gifted education related personnel, including the school treasurer, produced facts and insights regarding the cost of providing gifted education services. The site visits included nine selected school districts and were divided into programmatic and fiscal interview protocols. The combined interview times lasted between two to three hours. Fiscal interviews were designed to understand if fractional costs for certain programs were applicable, which gifted services were included in the district's expenditures and how the costs of assessments and services were distributed by grade bands. Programmatic interviews were structured with an eye to understanding the current state of the district's gifted identification, staffing and services by different grade bands, as well as changes that have been or will be made in response to the new gifted operating standards. Districts also were asked what changes would be made if additional funds were available specifically for identifying or serving gifted students. These interviews revealed the impact of the state's new gifted education operating standards, especially with regard to three important components: whole-grade screening assessments for giftedness; required hours of professional development; and letters of no service.

Determining the costs to implement the new gifted standards requires analysis of a variety of information, both qualitative and quantitative, to triangulate and understand how sampled districts are meeting the gifted requirements. The following section describes general themes and findings based on the data gathered from sampled school districts in an attempt to build estimated program costs for the major components of the operating standards, including identification, professional development, gifted programming and other associated costs. The collection and review of gifted expenditure reports by districts, on-site interviews with program staff and treasurers and follow-up conversations yielded very particular expenditure information that reflects a certain set of local contexts, local priorities dictating staffing and other priorities, and varying degrees of commitment to providing gifted services. The research team found that these variables affect not only the provision of gifted services but, to a major extent, their associated expenditures.

The following section details the components for meeting the gifted operating standards, discusses the factors driving expenditure levels for these components and describes the varying approaches a district may employ to meet the requirements. The information collected and described in this section informed the cost models for the new gifted operating standards and for estimating statewide costs for gifted services.

STUDENT IDENTIFICATION

The state of Ohio has made concerted efforts to improve access to educational opportunity for all students and advances the concept of equity throughout the system. Consistent with these efforts, the updated gifted operating standards require whole-grade screening for giftedness in the kindergarten through grade 2 band and in the grades 3-6 band. Whole-grade screenings are required in each of four areas: superior cognitive ability; creative thinking ability; and specific academic ability in reading, writing or a combination of the two, and mathematics. Access to referrals for all students in kindergarten through grade 12 is required for all categories of

giftedness: superior cognitive ability; creative thinking ability; specific academic ability in reading, writing, mathematics, science and/or social studies; and visual or performing arts ability.

The Ohio Department of Education established an implementation guide, as well as other materials, to support districts in their decisions related to the adoption of the new operating standards. The Department advises districts to be mindful of their local student needs when selecting assessments and references that not all assessments are appropriate for all students – with variances depending, in part, on students’ demographic and socio-economic statuses. Outside of the operating standards, the guidance from the Department is designed to provide options and allow for local decision-making rather than prescriptive directions relative to the steps necessary to arrive at compliance with the operating standards.

An example of local decision-making within the operating standards can be found in the list of approved assessments that may be used for gifted identification in each of the categories defined in the standards, which are maintained and periodically updated by the Department. The list also identifies assessments that may be used as “pre-screens” but are not approved for gifted identification. This is an important distinction in that many districts interviewed use a “talent development” approach in their testing protocols to ensure they are capturing as many students as possible who potentially may be gifted in one of the four areas. The use of a pre-screening instrument provides teachers and the gifted intervention specialist, coordinator or supervisor with a preview of potential giftedness. A whole-grade screening typically follows these pre-screenings. However, the individual referral testing may occur at any point as part of the identification process.

For many districts interviewed, the identification cycle components include pre-screening, whole-grade screening and referrals.

Pre-screening (not required): Some school districts choose to administer pre-screening assessments to test for giftedness; however, these tests are not for identification nor do they count as one of two whole-grade screening requirements.

Whole-Grade Screenings (required): These must occur once during the kindergarten to second grade band and once during the third to sixth grade band in the four areas. Many districts interviewed went above and beyond the minimum standards for whole-grade screening, conducting the majority of gifted identification in kindergarten through fifth grade.

The state has approved tests for multiple areas that districts are required to use (gifted identification, academic achievement, progress monitoring, etc.). For the purposes of gifted identification, the state of Ohio assembled a list of approved assessments, which is listed on the Department’s website. Districts may choose a combination of gifted identification instruments with single-purpose use or tests used for multiple purposes. Given multiple uses, the full cost of such assessments should not be attached to gifted identification. The rationale used for differing approaches is driven by perceptions of quality, cost effectiveness and preference for one instrument over another. These decisions have implications in terms of costs, resulting referrals for students who did not meet the required score on the chosen assessment, time spent in

testing for both the teacher and the students and, in some cases, expanded opportunities for identification in an effort to increase equity.

Referrals (required): Any student can be referred for gifted services per Ohio Revised Code Section 3324.04 by a parent, teacher, or peer or self-referred. Upon initial referral, a school district has 90 days to assess the student for giftedness. In at least one district interviewed, the district administers the NWEA MAP test every three months, supporting the timeline requirements and representing an efficiency in that multiple administrations are included in the base cost of the testing instrument. The multiple administrations allowed potential referrals to be tested in the more economical whole-grade screening environment; however, if the individual referring the student did not want to wait until the next MAP administration, arrangements were made to assess through identification instruments. Non-verbal assessments are approved for both whole-grade and individual referral administration to better accommodate an English learner or a student who is too young to read. School districts have a variety of assessment instruments that can be used in these instances and much of costs are for the school psychologist or other appropriate personnel administering the assessment and the particular type of assessment instrument used.

With regard to cost, it appears that the cost differential hinged on a decision as to whether referral testing was done by the district or sent out for independent scoring, with the latter option the more expensive one. Though it should be noted that outsourcing the referral service was not an approach used by all districts interviewed

The operating standards require that districts establish criteria and methods to select students for further testing who may be on the “bubble” or cusp of reaching minimum standards for gifted identification used for the whole-grade screening. Districts in the study involve teachers and gifted services personnel in this process and take into consideration a student’s grades and classroom performance.

A major finding in this analysis is that expenditures may vary between districts based on quality and quantity of services or products purchased. The summary below highlights general findings from on-site interviews, including:

Specific Academic Ability: *Typically, assessments used to identify this category of giftedness also were used to meet other assessment requirements. In several districts, a separate instrument was used in grades 5-8 for subject-level placement and/or acceleration in math and English language arts.*

Superior Cognitive Ability/Creative Thinking: Often, the same assessment was used for identification in both areas and separate from that used for specific academic ability.

Visual and Performing Arts: Several of the interviewed districts identify for visual and performing arts and all use the Ohio Department of Education’s visual and performing arts rubric. Many districts interviewed contracted with their partner ESCs to support identification. Typically, this type of evaluation consists of multi-district engagements on one or two days during the year for students to demonstrate their abilities through performance or for assessors to review portfolios of student work. Districts reported their perception that this approach was cost effective and represented minimal costs.

A common practice among these school districts is the use of multi-purpose assessments. These are termed “multi-use” in that the assessments can serve a variety of needs and requirements, such as required academic achievement testing. For example, overlaps exist in assessments approved for gifted identification, as well as those approved for use for the diagnostic requirement in Ohio’s Third Grade Reading Guarantee (each child must participate in a fall diagnostic at each of grades K-3 to determine whether a child is on track for reading proficiently by grade 3). In many cases, it is cost effective for a district to purchase the full battery of tests from a particular vendor for reading and math. It also meets the specific academic achievement requirements in the gifted standards. Further, in many specific cases, these assessments are available for multiple administrations throughout the year at no additional cost, which reduces the number of referrals. Gifted services personnel interviewed also recognized that there are no perfect measures for identification and having access to several different types of assessments is thus critical to ensuring equity in identification.

Of the nine identified school districts, all provided detailed descriptions of their identification practices during the on-site interviews and all verified their expenditure reports as submitted to the Ohio Department of Education; however, only four provided a more detailed level of expenditure information for inclusion in this analysis.

This approach allowed the research team to make assumptions about the identification costs informed by actual expenditures from sample school districts regarding assessments, administration of assessments, scoring assessments and assumed costs for specialized instruments and personnel responsible for individual referrals. Of the districts interviewed, most of gifted identification expenditures were isolated in kindergarten through fifth grade, with smaller expenditures made for referrals and acceleration placements made in sixth through eighth grades. Per the identification section in the operating standards, the following information was examined in the expenditure analysis:

- **Average per-pupil amount encompassing assessments for specific academic ability for students in grades K-2.** The blended average is limited to this grade band since the primary assessments used for this purpose in grades 3-8 already are mandated and used for a variety of purposes (state diagnostic and alternative assessments, progress monitoring, teacher evaluations, etc.). Though the Third Grade Reading Guarantee does require testing in reading, there are no such requirements already existing for mathematics.
- **Average per-pupil amount encompassing whole-grade screening expenditures for superior cognitive and creative thinking at two grade levels,** per the standards. It is important to note that expenditures for various types of assessments vary considerably in cost.
- **Typical referral expenditures** include purchase of an assessment, estimated time involved with the specialized staff in the district authorized to administer the assessment, and time necessary for parent engagement and discussion.

The sample districts' approach to identification and associated expenditure data provide valuable information regarding approximate identification costs that may reasonably be applied generally to other districts. However, due to the variability to approach, it is reasonable to assume that a portion of the expenditures for whole-grade testing in kindergarten through second grade may be attributed to gifted identification. Further, it also is reasonable to attribute to gifted identification the specific expenditures for whole-grade screening in two grades to meet the requirements for identification in creative thinking and superior cognitive ability that informs student placement in accelerated or honors coursework in the elementary or middle school levels. Given these assumptions and related expenditure data, a blended per pupil average expenditure was derived and assumed to be \$24.11. Though imperfect, this amount provides a basis for developing a data-informed cost assumption.

WRITTEN EDUCATION PLAN (WEP)

Students identified for giftedness who receive gifted services are required to have Written Education Plans (WEPs). Per gifted operating standards, the gifted supervisor, gifted coordinator or intervention specialist develops these plans. Depending on the staffing present in the school district, which often is a function of the resources available, this service also may be contracted through the partnering ESC. In interviews conducted by the research team, this arrangement occurs more often in smaller school districts.

Districts interviewed typically did not capture actual expenditures made specifically for WEP development. These functions are part of the gifted coordinator's or gifted intervention specialist's role or the overall coordinating services contracted with the partnering ESC. For the purposes of analysis, the research team assumed no additional separate costs associated with this function.

Informal services in the early grades often are not documented in a WEP. Undocumented educational services may be functioning informally as talent development programs to help ensure that identified students who may not receive K-2 services are prepared for gifted services beginning in third grade.

Site visits revealed that scheduling is a consideration for gifted service delivery, especially as students matriculate from grade to grade. Many districts report high school students opting out of gifted services. This often happens when a student chooses to take a course that conflicts from a scheduling perspective with course on the WEP plan. If this happens, the student may no longer receive gifted service.

ONGOING SUPPORT FOR GENERAL EDUCATION TEACHERS

The role of gifted coordinator or gifted intervention specialist includes ongoing support of general education teachers providing gifted services. This support can be in the form of curriculum development or instructional assistance. The amount of support is not specified within the gifted operating standards; therefore, the level of support provided is expected to vary across districts.

NO SERVICE LETTERS

School districts must provide gifted students' parents/guardians a "No Service Letter" when gifted education services are not provided to identified students.

The fact that these letters announce a de facto deficiency in educational services is, in some districts, serving as a motivation to encourage teachers to meet professional development requirements in gifted education, thus being able to provide gifted education services. A relevant example relates to the provision of advanced placement (AP) courses. If AP teachers meet professional development requirements, AP classes can be written into a gifted student's WEP. However, site visits revealed that Letters of No Service did not result in new gifted services, but, instead, resulted in increased numbers of teachers obtaining required professional development so that the delivery of existing educational services, such as AP, could be counted as gifted services.

The "No Service Letter" represents a new requirement for districts and applies even in cases where there are no gifted services provided by a district. Few of the school districts included in the field interviews had already implemented this requirement. The cost estimates were derived based on actual and planned activities to adhere to this new component of the standards. The cost estimates were based on the estimated rate of non-service by subtracting the total number of students served from the total number of students identified. Districts represented were asked to estimate the amount of time used to plan, develop and communicate that gifted services would not be available to identified students. The additional expenditures estimated by interviewed schools to meet this requirement were negligible and are, therefore, not included as a separate and specific cost for the purposes of this analysis. (Note: Mailing costs are reduced to the extent that these notices can be emailed.)

PROFESSIONAL DEVELOPMENT

The Ohio Department of Education provides guidance to school districts and teachers regarding quality professional development for general education teachers who are designated providers of gifted services. The guidance provides details regarding the competencies that allowable professional development must cover, the amount of hours a teacher must earn, who can provide this professional development and the continued requirement to document these hours.

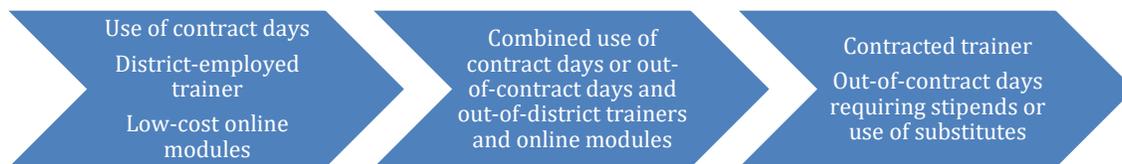
Further, general education teachers who provide gifted services must participate in 60 hours of professional development. According to the gifted operating standards, there is an expectation that additional hours will be required in subsequent years, at the discretion of individual districts.

For the purposes of this study, the new professional development requirements are reflected in two separate cost scenarios. At the time of this report, all general education teachers providing gifted services are required to undergo 60 hours of professional development over a two-year period, however, pending changes to this requirement will extend the timeline to a four-year period (Ohio Administrative Code 3301-51-15). Further, there also are proposed changes that will amend requirements for teachers of Advanced Placement and International Baccalaureate coursework.

Data gathered from the sample school districts demonstrate a wide variation in approach and associated expenditures in meeting this standard. Each approach represents differing cost factors. The sample districts interviewed use a combination of face-to-face and online modalities. The face-to-face approach may take the form of district-employed staff providing upwards of 18 to 20 hours combined with districtwide use of no-cost online courses through the Department or the purchase of other approved courses from external providers.

Associated costs supporting teacher participation ranged from planned professional development days scheduled as part of the teaching staff’s contracted days to days requiring the contracting of substitutes to provide classroom coverage to out-of-school or out-of-contract time (evenings, weekends, summer hours) requiring additional pay for teachers either on a per diem or per hour rate. Given the wide variation of approaches used by school districts, an approximation of expenditures was used to calculate this component.

The districts interviewed provided examples of how they are meeting or plan to meet the new gifted standards. Given the information provided, there is a significant range of approaches that dictate expenditures. The cost variables include whether a teacher is using in-contract days or out-of-contract days and the modality of training. This includes whether a district chooses to use in-house training, contracted trainers or a variety of high-quality online modules that they may choose to support their teachers in meeting these new requirements.



Least expensive —————> Most expensive

Given the range of approaches and expenditures made to support these efforts, the research team made the assumption that district spending is a function of their available resources, local decision-making in how staff time is used (e.g., professional development days) and local preferences in adult learning modalities. The wide range in expenditure data reflected these factors. Further, the research team assumed that a state funding model should incentivize cost effective practices. Assuming the state would prefer to incentivize the opportunity to provide gifted services to all students identified, the decision was made to apply an average expenditure reflecting a combination of cost-effective approaches to support a continuum of gifted services for all students. The statewide average of gifted identification among the total statewide student population (10 percent) is used to multiply a per-pupil amount of \$28 to provide for professional development.

SITE-BASED SERVICE DELIVERY

Per Ohio Administrative Code and the updated operating standards, there are a variety of approved gifted services that provide for a robust continuum of gifted programming from the

time a student enters school through high school graduation. Per requirements, gifted services must include instruction that is differentiated from the standard curriculum for that course in depth, breadth, complexity, pace and/or where content is above grade level. The availability of these services is greatly dependent on a number of factors, including availability of gifted intervention specialists and staff with the requisite professional development; availability of resources to support services; scheduling limitations; critical mass of students in certain grade levels and subject areas; and parental demand. The following section identifies the most commonly used programming and provides a range of expenditures to consider.

Districts interviewed for this study report frequently delivering during “no new instruction” periods. These periods are reserved for intervention or enrichment activities. Every student receives some additional support during these periods. “Twice exceptional” students – defined as those who are formally identified as both gifted and eligible for special education services – are reported to receive intervention and enrichment programming on alternating school days. It is critical that districts not condition twice-exceptional special education students’ participation in enrichment activities during “no new instruction” time on reduction of intervention time, as this would be in conflict with the free and appropriate public education standard defined under federal IDEA Part B and Section 504.

Site findings revealed a lack of consensus as to whether or not AP, IB, Honors and College Credit Plus courses would exist without the presence of gifted students. Some districts reported they would not have enough students to warrant these classes without the participation of gifted students, while others reported that gifted students were a relatively small percentage of enrolled students.

A summary of gifted services is shown in the Appendix 2 of this report.

Table 4. Gifted Services Considered in Cost Estimate

Early Admittance Kindergarten and First Grade
Pull-out Programming
Self-contained Classroom
Co-Teaching with Gifted Intervention Specialist Programming
Cluster Grouping
Grade Level Acceleration
Subject Acceleration (Accelerated Course work)
Honors Courses
High School Advanced Placement
High School International Baccalaureate (IB)
College Credit Plus
Internship and Mentoring Programs
Independent Study: Specialized Technology and Online Content

Estimated Expenditures for Gifted Services

Provision of services is varied by district based on identification, staffing, professional development, local preferences for certain types of program, and student participation in

statewide programs, such as College Credit Plus. The expenditures reported to provide these programs vary significantly by district and are dictated by parent demand and available resources. An overarching theme from the on-site interviews is that local context matters and prescriptive programs of gifted services are not feasible. Given the imprecision in available expenditures data, the factors identified, as well as the general preference for local control in service decisions, the research team recommends providing flexible funding to support local districts in meeting their specific needs and preferences. Identifying a specific amount based on limited and imprecise expenditure data is challenging; however, a baseline is needed to begin support services for gifted students. The professional judgment of the research team is to provide **\$638 on a per-pupil basis** for identified students at the high school level that can be used districtwide to begin gifted services, develop services where gaps exist and/or strengthen their current continuum of gifted services throughout the educational program.

COORDINATION OF SERVICES

Requirements for gifted policies at the school district level, including identification plans, continuum of service plans and required reporting, are all part of coordination of services. Responsibility for these activities typically is assigned to the district's curriculum and assessment director, partnering ESC personnel, district-employed gifted coordinator – or an intervention specialist. Coordination of services varies depending on the resources of the school district and its commitment to providing gifted services to students. For the purposes of this study, it is assumed that these services are accounted for in the provision of funding for a gifted coordinator and the associated costs are reflected in the salary and fringe benefit assumptions for this staff category.

Data analysis, site visits and interviews revealed that among districts participating in this study small, rural school districts are more likely than their non-rural counterparts (typologies 4-8) to hire shared coordinators that may serve multiple districts. However, there is insufficient data to generalize this finding statewide. Of the four rural districts selected, two outsourced gifted coordination to ESCs and two provided these services themselves. The two who provided all services in house had in the past contracted with ESCs for at least some or all gifted services. It appears that a motive for this policy shift in these districts was related to ESC personnel changes, including retirements and layoffs that likely attributed to a reduction in state funding to ESCs. It also could be related to district cost and service capacity issues.

OTHER CONSIDERATIONS

Ensuring Equity in Identification

According to a recent Thomas Fordham Institute study, minority students and those of low socio-economic status were disproportionately not represented in gifted services programs. In other words, the demographics of who is served in gifted programs throughout the United States, in general, is not representative of the student population, resulting in under-representation in certain populations. This under-identification and subsequent lack of participation are the result of many systemic factors that can impact a child's development and are directly related to an institutionalized lack of opportunity that manifests itself in economic instability, food insecurity and a lack of adequate housing options, among other issues.

Mitigation of under-identification and under-representation of children of color in gifted programs can be achieved through whole-grade screening and implementing talent identification and development programs in the early grades. Importantly, the number of urban districts identifying more than 10 percent of their minority students as gifted is only two out of 55 districts in Ohio.

Technology, Materials and Supplies

Districts interviewed reported minimal, if any, expenditures, related to technology, materials and supplies. The usage of classroom supplies, such as paper, was not impacted by the provision of gifted education. Costs related to online curricula, such as ALEKS, were not commonly reported or regarded as gifted education service costs when they were reported. Supplies and materials related to gifted education assessment, including consumable tests, were included in assessment costs.

Large-scale and often costly supplies/equipment, such as robotics and 3D printers, were occasionally reported but not paid for from local or state funds. These supplies were obtained through private or grant funds and, therefore, not counted as gifted education costs. Districts that reported 1:1 technology, such as Chromebooks, in gifted education had this available for all students in the grade and thus determined that it was not a gifted-only expense. In fact, only one of the districts in the study reported technology expenses (Chromebooks) for gifted students and this was for a blended education-related purpose.

Table 5 provides a summary of the percentage of students identified as gifted and the percentage of identified students receiving gifted services by typology group. This table shows that suburban districts identify a much higher percentage of their students as gifted than do other types of districts and that urban districts identify the lowest percentage of their students as gifted. Importantly, the number of urban districts identifying more than 10 percent of their minority students as gifted is only two out of 55 districts in Ohio. Table 5 also shows that the disparity across typology groups in serving gifted students once they are identified is much narrower than is the disparity in identification rates.

Table 5: FY17 Percent of Gifted Students Identified and Served by Typology Group

Type of District	% Gifted Students Identified as a Fraction of Enrollment	% Gifted Students Receiving Services as a Fraction of Students Identified
Poor Rural	12.7%	55.3%
Rural	14.5%	53.5%
Small Town	16.1%	55.2%
Poor Small Town	11.4%	57.0%
Suburban	19.1%	53.1%
Wealthy Suburban	31.6%	48.3%
Urban	8.8%	50.9%
Major Urban	9.7%	46.7%
State Average	16.4%	51.8%

Section V. Gifted Cost Estimates

As has been previously discussed, this study has highlighted four types of gifted education costs: 1) identification of students; 2) professional development for teachers; 3) gifted coordinators to oversee services; and 4) gifted instructional services to deliver content to students, which includes gifted intervention specialists. The next step, which is outlined below, is to develop statewide costs estimates based on FY17 data on student enrollment and the number and percentage of students identified as gifted in each of Ohio's 610 K-12 school districts.

Table 6 provides a summary of the estimated cost of provided gifted education in accordance with the current standards, the estimated state share of this cost based on the application of the State Share Index currently used in the school foundation formula, and a comparison with FY17 reported gifted expenditures and FY17 state funding of gifted expenditures in the 610 traditional K-12 school districts.

Table 6: Estimated Gifted Cost and Funding Summary Table

Component	FY17 Current State		FY17 OERC Estimate	
	FY17 Actual State Gifted Funding**	FY17 Reported Gifted Expenditures	OERC Estimated Gifted Cost	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	\$101.0 Million

* \$101.9 million in FY17 Reported Gifted Instructional Expenditures is the total of \$94.6 million in instructional services expenditure and \$7.3 million in gifted support service expenditure.

** FY17 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 million.** It is important to note the following about the FY17 reported expenditures and actual state funding:

- The FY17 reported expenditures reflect the current state of implementation, where approximately 51 percent of identified students (8.4 percent of all students) receive services and many districts are in the process of implementing the new standards but not at full implementation.
- The FY17 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 cost estimate, it is important to note that:

- The OERC estimated 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 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.

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. Detailed information about the cost estimate components follows below.

1. IDENTIFICATION

As described in the preceding section, activities related to the identification of students as gifted include: the acquisition, administration and scoring of whole-grade screenings based upon a battery of state-approved assessment instruments used at the discretion of individual school districts, communication of results to students and families, development of Written Education Plans (WEPs) for gifted students, and delivery of “No Service” letters to parents in the instances where children are identified as gifted but no services are being provided by the school district. Districts also are required to administer “referral” screenings upon request, although this occurs infrequently in the study’s sample districts. Some English language learners and students with disabilities may require accommodations and supports in order to participate in the identification process.

Data provided by the sample districts included in this study were sufficient to develop an average identification cost of \$24 per K-6 student. This reflects the cost of one whole-grade screening in grades K-2 and a second whole-grade screening in grades 3-6, as required by the new gifted standards. This figure is based on districts using a variety of screening instruments available for use in Ohio and suitable for evaluating students as gifted in creative thinking, superior cognitive, and the specific academic ability areas of reading and mathematics. In this regard, the approach can be considered as a “blended” assessment cost. As mentioned above, this cost figure represents the average cost of administering, scoring and communicating gifted status to parents, as well as for preparing the WEPs. Note that some districts may use these screening instruments for multiple purposes and some districts also may choose to administer screenings more than the two times in grade K-6 outlined in the standards. These costs are not included in this figure. The sample districts were consistent in their identification costs despite their varied size and location in the state.

Analysis of the data provided by the sample districts also found an additional cost of \$2.50 per K-12 student, which reflects the cost of referral screenings requested by parents after the whole-grade screenings have been administered. These referrals typically apply to only a very small fraction of the students; however, they can be employed for students in all grades from K-12.

Estimation of Statewide Cost: Key Methodological Assumptions

To use the figures above to estimate the statewide cost of identification of gifted students, several methodological decisions or assumptions need to be made.

1) The current gifted standards require one whole-grade screening in grades K-2 and a second whole-grade screening in grades 3-6 for specific identification areas. Consequently, the \$24 per-pupil average identification cost is applied only to the total K-6 enrollment of each Ohio school district. While districts may opt to screen more frequently in grades K-6 or also employ whole-grade screening in later grades, these assessments are not part of the standards and as such are not costed out here.

2) As mentioned above, referral screenings are employed infrequently in Ohio. For the purposes of making a statewide estimate of referral costs, it is assumed that referrals apply to 1 percent of the total enrollment of the school districts. Because referrals are not limited to particular grade levels, K-12 enrollment in each district is the appropriate basis for making a statewide estimate of these costs.

FY17 Estimated Cost of Identification of Gifted Students = \$23.6 million

Based on FY17 K-6 enrollment in the 610 traditional K-12 school districts of 824,963 students and statewide K-12 enrollment of 1,519,830 students, the estimated cost of gifted identification is shown above.

2. PROFESSIONAL DEVELOPMENT

As described in the preceding section, the updated gifted standards currently require that all general education teachers providing gifted services receive 60 hours of professional development over a two-year period. This requires that teachers receive 30 hours of professional development in year one and an additional 30 hours in year two. At the time of this study, this requirement is under consideration for revision. In the future, the 60 hours of required professional development may be acquired over four years instead of the two-year timeline. The study presents cost estimates for both scenarios.

Also explained in the preceding section is that the delivery of professional development can take many forms. These forms include:

- A) Professional development can be provided either face-to-face or through an online delivery platform (which is typically less expensive).
- B) Professional development can be provided by district personnel, by personnel brought in by the school districts or through a contract with an ESC.
- C) Teachers can receive professional development on a planned district in-service day when students are not at school; on another day during the school year, which requires substitute teachers to cover classrooms; or outside of the school calendar, which typically requires that a stipend be paid to teachers for their participation.

As might be expected, the sample districts included in this study chose various options among

those listed above for providing the required professional development for general education teachers who are designated as providers of gifted services. Excluding outlier districts with excessively high or excessively low professional development costs, the data proved by the sample districts found an average professional development cost of \$28 per student (it is important to note that this cost is per *student*, not per *teacher*). This cost reflects 30 hours of professional development provided through a mix of face-to-face and online delivery platforms. Costs for a district providing professional development itself proved similar to those of a district using an ESC to deliver professional development.

Estimation of Statewide Cost

In order to use the figures above to estimate the statewide cost of professional development for general education teachers who are designated as providers of gifted services, several methodological decisions or assumptions need to be made.

1) The professional development cost estimate is based on the number of students identified as gifted in each of the K-2, 3-8 and 9-12 grade bands. The reason for this is that the number of teachers who will require professional development in accordance with the new standards is a function of the number of students each district identifies as gifted, NOT as a function of the total enrollment in each district.

2) Because there is a very significant variation in the number of students that are currently identified as gifted across Ohio's 610 K-12 school districts (see Table 5 on page 26), for the purposes of the statewide professional development cost estimate, it is assumed that a minimum percentage of 10 percent students (the estimated statewide percent) are identified as gifted in each of three grade bands (K-2, 3-8, 9-12) in every school district. In this manner, the professional development cost estimate will reflect the cost of providing the professional development necessary in a system where gifted identification practices are more equal across districts, rather than the cost reflecting Ohio's current identification patterns.

FY17 Estimated Cost of Professional Development = \$8.2 million

It is important to note that the updated gifted standards require that all general education teachers designated as providers of gifted services receive 30 hours of gifted-related professional development for each of two years. The above cost figure reflects the cost of providing this professional development for each of these two years. After the initial 60 hours of professional development is provided, districts will only incur additional costs mandated by the standards only when teacher turnover or an up-tick in students identified as gifted requires it. In this regard, the \$8.2 million professional development cost estimate is not expected to be an ongoing cost, as it reflects a one-time investment to bring districts into alignment with the operating standards and build capacity for the anticipated increase in identified students due to whole-grade screening. However, there will be ongoing professional development costs related to staff turnover, enrollment and staffing changes, and other local factors.

Finally, the State Board of Education has recently recommended that the gifted professional development requirement be modified to require 15 hours of professional development annually over a four-year period. While the total of 60 hours remains unchanged, the rationale for lengthening the time frame is to allow teachers more time to find the most appropriate

professional development to meet their needs.

If the professional development is standard is in fact revised, the impact will be to reduce the annual estimated cost of professional development by half, from \$8.2 million in each of two years to \$4.1 million in each of four years.

3. GIFTED COORDINATORS

Information gathered from the sample districts and the educational service centers included in this study confirmed the central importance of the gifted coordinator position, whether directly employed by the school district or through a contracting arrangement with an ESC. Additionally, in-depth discussions with the selected districts revealed that gifted coordinators play varied roles from district to district, a fact that was confirmed in discussions with the ESCs.

One approach to computing the cost of gifted education would be to allocate the varied functions and duties of gifted coordinators across different gifted education functions and, thereby, include gifted coordinator costs indirectly. However, far more information about varying gifted coordinator roles in different types and sizes of districts, as well as detailed information from a variety of ESCs regarding how they provide gifted coordinator services to their client districts than could possibly be collected in the time frame of this project, would be necessary to operationalize this approach.

The current state aid formula funds one gifted coordinator for every 3,300 students based on enrollment, with a minimum of 0.5 coordinators per district and maximum of eight. One way to think about how gifted coordinator funding currently works is to consider that the national average percentage of gifted students is roughly 15 percent. Fifteen percent of 3,300 equals 495. By this logic, Ohio's current funding formula for gifted student funding essentially allocates 1 gifted coordinator for every 495 gifted students (on average), while also recognizing that smaller districts will require at least a half-time person in this role regardless of district size and/or the number of gifted students. Note that districts are free to employ gifted coordinators directly, contract for coordination services through ESCs or share coordinators with other districts under this type of model.

As the discussions with the districts participating in this project clearly emphasized the importance of the gifted coordinator role and as the above interpretation of the current gifted funding formula appears consistent with practice, this same structure will be used compute the cost of gifted coordination services.

Estimation of Statewide Cost

In order to estimate the statewide cost of gifted coordination services, several methodological decisions or assumptions need to be made.

1) The parameters used in the funding formula for allocating gifted coordinators across districts are also used here. Thus, costs will be based on the assumption of one gifted coordinator for each 3,300 enrolled students, with a minimum of 0.5 coordinators and a maximum of eight coordinators regardless of district size.

2) Currently, each gifted coordinator is funded at a salary of \$37,370. However, Department salary data shows that the average gifted coordinator salary is \$64,300.

Department data also shows that fringe benefits for gifted staff cost an additional 33.4 percent on average. Thus, the average current statewide cost for a gifted coordinator salary and fringe benefit total cost is \$85,776 per coordinator.

Applying the updated salary data to the current gifted coordinator funding structure results in:

FY17 Estimated Cost of Gifted Coordination Services = \$44.1 million

4. GIFTED INSTRUCTIONAL SERVICES

Instructional services are by far the largest share of the costs related to serving gifted students. Of the \$108.7 million reported, \$94.6 million (87 percent) of gifted expenditures by Ohio's 610 K-12 school districts are instructional in nature. It is important to note that neither state law nor state policy requires districts to provide gifted services. This cost estimate reflects a scenario where all school districts are implementing a program of gifted education in full compliance with the gifted operating standards. As described above, in grades K-8 gifted intervention specialists typically are responsible for delivering content to gifted students while high school students primarily receive gifted services through Honors, AP and College Credit Plus coursework.

The new gifted standards prescribe that a maximum of 20 students can be in a full-time, self-contained gifted classroom with a single teacher (note that single-subject, self-contained classrooms must be consistent with each district's average class size ratio). Additionally, the gifted standards also dictate that a maximum of 20 gifted students can be in a resource room or pull-out setting at a single time. These maximum student/teacher ratios provide a method for estimating the cost of gifted instructional services staff in the context of the new gifted standards. Because of the nature of service delivery in earlier vs. later grades, in practice these standards apply primarily to elementary and middle school grades.

The discussion contained in "Gifted Services Provided to Support a Comprehensive Program" in the preceding section of this report provides a detailed overview of the variety of approved gifted services that comprise a robust continuum of programming for gifted students from grades K-12. The research conducted in the course of this study has revealed that not all of the options on this continuum actually impose additional costs on a school district when serving gifted students.

For example, early admittance to kindergarten (or to first grade) is not expected to impose additional costs so long as the numbers of students gaining early admission in a school building are small enough that classrooms in the school districts can easily add an extra child or two. The rationale for this is that these students would eventually be in this classroom but are simply advancing earlier. Similar logic applies to an older student experiencing grade-level acceleration (with the same small numbers "absorption" condition) as the student would ultimately end up in that classroom and again is simply advancing early.

Subject-level acceleration – again in small enough numbers that classroom space issues are not in play –also is not expected to incur significant marginal costs as long as the student

remains in the same building. For students that switch buildings for only a portion of the day (i.e., a fifth-grader going to middle school for math, or an eighth-grader going to high school for chemistry), additional transportation costs will be incurred; however, it is not possible to quantify these costs in a meaningful way as transportation costs vary dramatically from district to district based on geography, population density and building location.

Research as part of this study also revealed “clustering” of gifted students in (typically) elementary classrooms in their current grade level as a gifted service option that imposes relatively low marginal cost. Clustered classrooms are required to have teachers who have undergone the required hours of gifted professional development; however, this cost is addressed separately in the professional development component described above.

At the high school level, International Baccalaureate (IB) programs and College Credit Plus are among the options by which gifted students can be served according to the state standards. IB programs are fairly (some might say “extremely”) expensive, yet they are rarely used. As Honors and AP classes are more cost effective and popular ways to meet the standards, IB programs will not be included in cost estimates here.

College Credit Plus also will not be included here but for a different reason. One criteria for evaluating whether a particular program constitutes a legitimate gifted education cost is “would the program exist in the absence of gifted students?” If the answer to this question is “yes,” then it is inappropriate to include the program as a gifted cost. College Credit Plus clearly fails this test as it is open to all students meeting minimal eligibility criteria whether they are identified as gifted or not and would exist without any gifted students at all.

The discussion immediately above leaves pull-out programs (primarily in elementary grades), middle school and high school Honors courses, and high school Advanced Placement (AP) courses as the gifted service delivery options that will impose additional costs on a school district. Each of these programs essentially functions as a cluster classroom with a teacher assigned to working with gifted children for at least part of a day.

Note that for AP courses, the research team was given conflicting information regarding the extent to which AP courses would be provided in the absence of gifted students. Some districts were adamant that the AP courses only existed because of demand by gifted students, while other districts took the exact opposite approach asserting that these courses would be offered even in the absence of gifted students. This issue is addressed here by costing out the need for gifted intervention staff based on the number of identified gifted high school students and using the 80-student limit for a gifted intervention specialist in a pull-out program as a method for apportioning the share of AP course costs that should be attributed to gifted students. In essence, this approach results in using the gifted coordinator structure as a method for computing an estimated per-pupil instructional cost for high school students.

Estimation of Statewide Cost: Key Methodological Assumptions

In order to estimate the statewide cost of gifted intervention services, several methodological decisions or assumptions need to be made.

- 1) It is assumed that gifted intervention specialist staff will serve the maximum 20 students at a

time.

2) It is assumed that teachers function on an eight-period day consisting of seven teaching periods and one preparation period. For K-8 gifted instructional staff, this model reflects our estimation of the average cost of serving K-8 students. As described above, many modes of gifted service delivery service are judged to impose little or no marginal cost beyond that of educating non-gifted students. Additionally, class-size ratios for single-subject, self-contained classrooms can be provided at the district's average class size, which is typically greater than the 20-student class size assumed here. These instances of lower costs are presumed to offset the higher costs in pull-out classrooms. With additional time and data, more information on the percentage of K-8 gifted students served in the various classroom settings could be used to make a more precise cost estimate.

While high school Honors and AP teachers and middle school Honors teachers likely spend the entire day teaching and may even have gifted students in their classes in every teaching period throughout the day, this does NOT mean their entire day (and hence their entire salary and benefits cost) should be attributed to gifted students. The sample districts examined in this study revealed that in some cases an Honors or AP class only is offered because of the demand created by gifted students, while in other cases, gifted students benefit from a class that would be offered in their absence due to demand created by non-gifted students in the school or district. In this case, an assumption that 4/7th of high school Honors and AP course teachers' days are spent with gifted students reflects a reasonable apportionment of high school instructional costs to be attributed to gifted students consistent with the information on service delivery provided by the sample districts in this study. In addition, the fact that many gifted students take College Credit Plus courses and that these courses impose no *additional marginal cost* to the school district beyond that imposed by a non-gifted student opting to pursue College Credit Plus also argues for not costing out an entire day of instructional staff for every high school gifted student in Ohio.

Ideally, the data provided by the participating districts would have been sufficient to inform this apportionment percentage, however both the data and time limitations of this project prevented that. However, as noted below, the per-pupil amount reached through this approach is consistent with the data collected on the cost of high school Honors and AP courses, suggesting that this assumption is both reasonable and realistic.

3) The necessary number of gifted intervention specialists will be a function of the number of students identified as gifted.

4) As is the case with the current gifted intervention specialist funding formula component, a minimum of 0.2 gifted intervention specialist staff will be assumed, regardless of district size. However, only 48 districts are at this minimum level of gifted intervention specialist staff.

5) Currently, each gifted intervention specialist is funded at a salary of \$37,370. However, the Department salary data shows that: \$67,000 = average gifted intervention specialist salary.

Department data also shows that fringe benefits for gifted staff cost an additional 33.4 percent on average.

Thus, the average statewide cost for a gifted intervention specialist is: \$89,378 per gifted intervention specialist staff member (\$67,000 * 1.334).

On a per pupil basis (based on 140 pupils per gifted intervention specialist staff unit), this equals \$638 per identified gifted K-8 pupil.

For grades 9-12, general education teachers typically deliver services. The cost calculation uses the average salary for those teachers, \$60,700 (\$6,300 lower than the average gifted intervention specialist salary). When benefits are included, this figure equals \$80,974 per high school teacher. Using the same assumptions and formula as above, the 9-12 per-pupil cost is \$578. Therefore, using this cost structure and allotting one instructor for each 140 students identified as gifted results in:

FY17 Estimated Cost of Gifted Instructional Services = \$154.2 million
Corroboration of the Above Cost Estimate

Examination of the data submitted by the sample districts chosen for study in this project showed that the average cost figure of \$638 per gifted pupil for K-8 instructional services is toward the higher end of the range of costs found when examining the cost of pull-out programs and AP and Honors courses. As explained above, this method reflects the computation of a per-pupil amount for serving gifted students in middle school Honors and high school Honors and AP courses.

Table 7 provides a summary of the gifted cost estimate explained above. This 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.

Table 7: Summary of Gifted Services Cost Estimate

Service Category	Cost Per Student	Grade Level of Students	Student Count Basis	# of Students	Estimated Cost
Identification - Testing	\$24	K-6	# Enrolled	824,963	\$19.8 Million
Identification - Referrals	\$2.50	K-12	# Enrolled	1,519,830	\$3.8 Million
Professional Development	\$28	K-12	# Identified with 10% Minimum	294,639	\$8.2 Million
Gifted Coordinators	\$29	K-12	Enrollment	1,519,830	\$44.1 Million
Instructional Services K-8	\$638*	K-8	# Identified	156,864	\$100.5 Million

Instructional Services 9-12	\$578	9-12	# Identified	92,848	\$53.7 Million
Total					\$230.2 Million

* When the 0.2 gifted intervention specialist minimum in K-8 is included, per pupil avg. cost is \$641

Comparison of Estimated Gifted Cost with State Funding, Reported Expenditures and Current Gifted Funding

Table 6 at the beginning of this section provides an overview of the gifted costs estimates described above, estimated state funding of gifted services based upon these costs and the application of the State Share Index (this is discussed in Section VI below), and FY17 reported gifted expenditures and state funding.

Table 6 shows that estimated gifted services costs are more than double FY17 reported expenditures and nearly triple FY17 state funding for gifted services prior to the application of the Gain Cap. Professional development costs are higher because they are not included in the current state funding formula. Identification costs estimated here increase \$15.2 million over current state funding levels because the costs estimated in this study are higher than the \$5.05 per pupil (based on enrollment) used in the state funding formula. However, after the application of the State Share Index, the state share of gifted identification is only \$3.2 million higher than current state funding.

Gifted coordinator costs are estimated to be \$24.5 million higher in this study than the amount currently provided in the funding formula because the salary level is increased from \$37,370 to \$85,776 (including benefits costs). However, the estimated cost of gifted coordination services to the state only increases by \$1.5 million after the state share is applied.

Finally, gifted instructional services costs are estimated to be nearly three times as high as current state funding for gifted intervention specialists (\$154.2 million vs. \$52.7 million). This is due to two factors. First, the salary cost used here is \$89,378 for gifted intervention specialists and \$80,974 for high school teachers as opposed to the \$37,370 used in the funding formula. Second, the current funding formula is based on one gifted intervention specialist for every 1,100 enrolled students. Using the 15 percent rule of thumb for average identification rate, this results in the state currently funding one gifted intervention specialist for every 165 students. The ratio used in the cost estimate here is equivalent to one teacher per every 140 gifted students. As a result, the cost method used here for gifted instructional services is higher both because it *effectively* funds more gifted instructional staff and because the salary used is higher than that used currently in the funding formula. However, once again, the net cost to the state of gifted instructional services after the State Share Index is applied only increases by \$14.6 million.

Estimation of Cost Impact if Identification Rates Increase

Table 5 on page 26 showed the dramatic difference identification rates across the typology groups. This disparity is even greater when individual districts are examined. One objective of

the change in the gifted standards is to increase identification of and service to gifted students in areas of the state where identification is lower than would be expected.

If identification rates do indeed improve, then the cost of serving gifted students will be expected to increase. Using a minimum identification rate of 9 percent (roughly that of the average rate currently in Ohio's urban school districts that have the lowest rate of identification) would result in an estimated cost of gifted instructional services of \$160.2 million — \$6 million more than the figure estimated above based on current identification rates.

Section VI. Allocation of Funding Between the State and Local Districts

K-12 education funding in Ohio is a shared state and local responsibility. The state school funding formula is based on 10 components that reflect varying aspects of primary and secondary education and the varying needs of school districts. One component – core opportunity aid – reflects the estimated base cost of educating the typical student. Five additional components are designed to reflect the additional costs of educating students with particular educational needs. These components are:

- Special education funding;
- Career-technical education funding;
- Funding for limited English proficient (LEP) students;
- Funding for economically disadvantaged students;
- Gifted and talented student funding.

As is the case with the other pupil-based components of Ohio's funding formula, the funding structure provided by the state of Ohio for gifted programs and services should meet the following criteria:

- 1) Funding is reflective of the costs of identifying and serving gifted students.
- 2) The funding structure should allow for flexibility at the local level in identifying and serving gifted students.
- 3) The funding structure should provide incentives for districts to both identify and serve gifted students.

Estimation of the costs of serving gifted students was discussed in the preceding section of this report. Flexibility of service delivery simply means that the methodology used to determine the costs of identifying and serving gifted students does not imply that services have to be delivered in exactly the same manner as was used for determining average costs. Thus, school districts will still retain the right to make local decisions regarding the utilization of student screening instruments and the frequency of their usage; options of providing required professional development for gifted personnel; and the employment of various strategies for meeting the needs of gifted students through options such as clustering, pull-out groups, self-contained classrooms and other options previously discussed.

With regard to creating a funding structure that creates proper incentives, funding for gifted programs should follow the example set by funding for the other pupil-based funding elements in the formula. Special education, career-technical education, limited English proficient and economically disadvantaged funding in Ohio all are based on the actual number of students in each school district who fall into each of those categories. In contrast, gifted funding in Ohio is currently based on the Formula ADM of each school district. When school districts receive funding for children with additional needs that require additional funding and that funding is based on the number of students in a cost-based manner, there is no incentive for districts to over- or under-identify students in these categories. However, the current ADM-based approach to gifted funding, combined with the lack of a mandate to serve gifted students, can result in an incentive for districts to under identify students since state funding is independent of identification and service levels.

Finally, a decision needs to be made about the share of costs of gifted education between the state and local school districts. The current Ohio school funding formula applies the State Share Index to core opportunity aid, special education, career-technical education, and limited English proficiency funding. This means that the state pays each school district a portion of the computed funds for each of these components based on the relative wealth of each school district (as measured by the State Share Index based on district property wealth and the income of district residents).

Currently, no local share is applied to economically disadvantaged student funding or to gifted funding. The rationale for not applying the State Share Index to economically disadvantaged student funding is that the use of the ratio of each district's percentage of economically disadvantaged students to the statewide average (and then also squaring this ratio) serves to "equalize" the amount of economically disadvantaged student funding given to each school district without employing the State Share Index. As a result, it can be argued that the application of the State Share Index to economically disadvantaged funding would be redundant.

However, the provision of gifted and talented services more closely resembles that of special education, career-technical education and limited English proficiency services in which the need to serve students with specific additional educational needs is considered in each case to be shared state and local responsibilities. This resemblance, argues that the State Share Index also should be applied to gifted funding.

Estimation of State Share of Gifted Cost

Based on the principles outlined above, the state share of funding gifted education was estimated in the following manner:

1. Identification costs will be funded in the manner described in the preceding section of this report, and funding is based on district enrollment.
2. Professional development costs will be funded in the manner described in the preceding section of this report, and funding is based on the number of students identified as gifted with a minimum of 10 percent identified in each school district enrollment. As described above, because the current gifted standards only mandate 60 hours of professional development over a two-year period, this funding stream will only be assured for two years. Also, as described above, if this standard is ultimately changed to 60 hours over a four-year period, then the annual cost will be cut by half while the period of funding is extended to four years. In either circumstance, professional development funding beyond the period prescribed in the standards should be continued in a manner consistent with evolving standards and rates of identification of gifted students.
3. Gifted coordinators are funded in much the same manner as is done currently, with each school allocated district coordinators on the basis of one per every 3,300 enrolled students and a minimum of 0.5 and a maximum of eight gifted coordinators allotted regardless of district size.
4. Gifted instructional services are funded in the manner described above on the basis of the number of students identified as gifted in each district, with a minimum allocation of 0.2 gifted intervention staff allocated to each district regardless of size.

5. The FY18-19 state share is applied to each of the four components listed above. This is the most current state share figure available and, while it makes sense to use student data from the most recently completed school year, it makes little sense to use state share percentages that are no longer in use in Ohio.

This approach results in the state assuming \$101 million of the estimated \$230.2 million cost of gifted education, with the actual share varying from district to district in accordance with the State Share Index.

Other variations of this approach are possible. For example, a judgment could be made that identification of gifted students and/or professional development for general education teachers who are designated providers of gifted services are largely state functions and the State Share Index should not be applied to these components (funding for gifted coordinators and gifted intervention specialist staff would have the State Share Index applied).

Alternately, a judgment could be made that funding for gifted intervention specialists should be capped at a certain percentage of gifted students identified. For example, a 35 percent identification is roughly two standard deviations above the mean percentage of students currently identified and state funding (with the State Share Index applied) would only be provided for a maximum of 35 percent students identified as gifted. Costs beyond that would be left entirely up to individual school districts. This adjustment would reduce the state share of gifted instructional services funding from \$64.8 million to \$60 million.

Finally, costs in this report have been based on per-pupil amounts and these amounts have been used in the state funding formula calculation. It also is possible to convert these per-pupil amounts to weights if that is preferred.

Section VII. Common Gifted Education Challenges

The common gifted education-related challenges facing the select school districts in this study include significant differences in elementary and secondary schools; multiple types of giftedness; high percentages of students identified as gifted; and populations underserved by gifted education, including low-income and minority students, English learners and students with disabilities.

Rooted in socio-economic realities, these differences, to varying degrees, can appear in schools throughout Ohio. The challenge of serving diverse gifted education populations increases since gifted education services are not required by state law. Moreover, as a practical matter, there is very little discrete, gifted-only education in high school nor is whole-grade testing required in the high school years. This means that districts report few, if any, new referrals for gifted education in the high school years.

The majority of gifted education referrals are in grades 3-8. General education teachers who are not licensed gifted education teachers typically deliver services for gifted students in both K-2 and 9-12. Services for students in grades 3-8 may be provided by gifted intervention specialists or general education teachers who meet relevant professional development requirements. Gifted services begin with a relatively narrow selection in grades K-2 (typically clustering) and then expand to a larger menu of services in grades 3-8, including self-contained classrooms, resource room/pull-out, co-teaching, clustering, subject/grade acceleration and honors courses. In high school, services are tied almost exclusively to a broader array of curricular offerings that also are open to eligible non-gifted students. As previously mentioned, these options include AP, IB, Honors and College Credit Plus.

Site visits revealed no distinct differences in services for students identified as specific academic ability, superior cognitive or creative thinking. The type of giftedness that is unique with regard to identification and service is the visual and performing arts category. Whole-grade screening is not required with any grade band for this category; therefore, identifications are only occurring through referral. Referrals for gifted identification in the visual and performing arts typically involve preparation of a student performance or portfolio, which is a more time-intensive effort than the whole-grade or referral processes. Scoring also is more time intensive, as the rubric for the arts referral process is based on professional judgment.

The incentive for gifted education identification in the visual and performing arts is often modest because there are no services exclusively for these students. This was true in all the selected districts. Additionally, the study team found no evidence of services made available only to gifted students identified as gifted specifically in visual or performing arts. It also is the case that arts-focused curricula or programs are not limited to students identified as gifted. In fact, many gifted arts students are likely to not be formally identified because there are no services for them to receive.

As for art instructors, they are not required to engage in gifted education professional development in order to provide art education to gifted students as long as these students are served in classes open to non-gifted students. Additionally, state standards allow arts instructors

to provide services to individuals identified as gifted in creative thinking, so long as an area of strength for the student is in the arts.

Finally, for districts whose students are characterized by populations traditionally underserved in gifted education (high-poverty, English learners, students with disabilities and/or minority) the challenge is twofold:

- Ensuring that the assessments chosen for whole-grade screening result in proportionate identification; and
- Making sure that identified students are not losing learning opportunities due to economic disadvantage.

The role of assessment choice cannot be overstated when serving populations traditionally underserved in gifted education. Districts participating in the cost study reported that their gifted populations are not appropriately reflective of the district's economically disadvantaged or minority student populations.

Section VIII: Gifted Funding Policy Implications

- 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 ESCs 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 on 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 districts interviewed enter their gifted services expenditure information in EMIS accurately to the best of their abilities. However, during on-site 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 treasurer's office. Improvements can be advanced through updated expenditure guidance from the Department 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 Underserved Areas.** With respect to gifted coordination, identification, service and professional development, ESCs generally 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 ESCs must use a different ESC with which they have little to no relationship or take the gifted identification and service efforts in house, which 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 also could 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.** The efficiency and effectiveness of gifted services could be enhanced 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. It could include 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 traditional school districts. 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 leading 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.

Section IX: Appendices

APPENDIX 1: HIGH-QUALITY PROFESSIONAL DEVELOPMENT (HQPD) FOR GIFTED SERVICE IN GENERAL EDUCATION SETTINGS¹

The Operating Standards for Identifying and Serving Students Who are Gifted require general education teachers who are designated providers of gifted education services to receive high-quality professional development in gifted education. This professional development must meet the following eight gifted education competencies:

1. Differentiate instruction based on a student's readiness, knowledge and skill level, including using accelerated content, complexity, depth challenge, creativity and abstractness;
2. Select, adapt or create a variety of differentiated curricula that incorporate advanced, conceptually challenging, in-depth, distinctive and complex content;
3. Provide an extension or replacement of the general education curricula, to modify the learning process through strategies such as curriculum compacting, and to select alternative assignments and projects based on individual student needs;
4. Understand the social and emotional needs of students who are gifted and to address the impact of those needs on student learning;
5. Recognize and respond to characteristics and needs of students from traditionally underrepresented populations who are gifted and create safe and culturally responsive learning environments;
6. Use data from a variety of sources to measure and monitor the growth of students who are gifted;
7. Select, use and interpret technically sound formal and informal assessments for the purpose of academic decision-making; and
8. Participate in the development of the Written Education Plan.

¹ <http://education.ohio.gov/Topics/Other-Resources/Gifted-Education/Teaching-Gifted-Students-in-Ohio/High-Quality-Professional-Development-HQPD-in-Gi>

APPENDIX 2: GIFTED SERVICE MENU

Early Admittance to Kindergarten and First Grade

Ohio allows for early admittance to kindergarten and first grade. For students who turn five or six years of age respectively after a district's age-eligibility date (August 1 or September 30) but prior to January 1, school districts are responsible for establishing an evaluation process to accommodate these students. When students turn five or six years of age January 1 or later, school districts are responsible for evaluating these students in accordance with acceleration policies adopted under Ohio Revised Code 3324.10. In many of the school districts interviewed, the primary costs for early admittance to kindergarten (and first grade) were primarily in the areas of evaluation. Typically, a parent will refer his or her own child and, depending on the district, the parent will receive information on early admittance and a scheduled time for testing. In general, approximately 1 percent of students in each incoming kindergarten class qualifies for early admittance. However, these individual referrals are atypical and costs are not consistently captured for the one to two hours that may be spent administering face-to-face evaluations and subsequent support for parent engagement.

Self-contained Classroom

Gifted services may be provided by a gifted intervention specialist in either a full-time self-contained classroom or in a single-subject self-contained classroom. In a full-time classroom, minimum instructional time is equivalent to the district instructional time for the corresponding subject, grade level and setting. The maximum class size is 20 identified students, and the setting serves only students identified as gifted. Districts may apply for temporary waivers for class size for this setting.

In a single-subject self-contained classroom, minimum instructional time is equivalent to the district instructional time for the corresponding subject, grade level and setting. Maximum class size is equivalent to the district class size for the corresponding subject, grade level and setting. Maximum caseload is equivalent to district caseload for the corresponding subject, grade level and setting. This setting serves only students identified as gifted.

Pull-out Programming

In many school districts that provide gifted services, staff may choose to employ a gifted intervention specialist (who is not the student's teacher of record) to work with gifted students and their teachers to provide services during the school day.

For pull-out services, the initial cost is the identification of gifted students and the focus for the services. These pull-out services may be offered to extend the curriculum in math or English language arts or provide additional creative thinking or other types of services to provide for greater depth in the learning experience.

Expenditures from districts in the study that employ a pull-out program include those associated with maintaining a separate dedicated classroom and related staffing needs. A consideration for

using this approach is that a critical mass of students in the grade levels served must exist to justify dedicating a full classroom for these services.

Co-Teaching with Gifted Intervention Specialist

Gifted intervention specialists and general education teachers may provide services to identified students in general education classrooms through co-teaching services. The general education teacher remains the teacher of record for the student in this scenario. The co-teaching arrangement allows the gifted intervention specialist to provide services to identified students in the class through tailored group work or material without removing the student from the general education environment.

Cluster Grouping

The use of cluster groupings within a classroom, where a small group of identified students are deliberately placed together, allows for students to remain in their grade level with their peers for the delivery of service. However, a teacher must undergo appropriate professional development to be adequately prepared to differentiate instruction for students who are gifted. The in-class differentiation allows students to move at a faster or more in-depth pace to push their thinking and development.

Grade-Level Acceleration

Ohio allows for grade-level acceleration and school districts are responsible for establishing an evaluation process to make accommodations for students who qualify. In many of the school districts interviewed, there are minimal costs associated with grade-level acceleration. The number of students accelerated is so small that they can typically be absorbed into a classroom or grade without hiring additional teachers. This is similar to school district policies regarding open enrollment students. According to a 2004 Templeton Foundation study, there are minimal costs, outside of evaluation, associated with grade-level acceleration. For grade-level acceleration, there is typically no additional transportation costs incurred because the student remains in the same building.

Subject Acceleration

Ohio allows for subject-level acceleration and school districts are responsible for establishing an evaluation process to make accommodations for students who qualify. In many of the school districts interviewed, there are minimal costs associated with subject-level acceleration. The number of students accelerated is so few that they can typically be absorbed into a classroom without hiring additional teachers. According to the previously referenced 2004 Templeton Foundation study, there are minimal costs (if any) associated with subject-level acceleration. However, for the purposes of this analysis, the research team considered evaluation costs, specialized materials or technology and potential transportation costs.

Transportation for students to take advantage of subject acceleration is provided by a number of sample districts interviewed. This is typical in school districts where the subject-accelerated student is moving from an elementary to a middle school building or a middle school to a high

school for one subject or period out of the instructional day. In these cases, there is a cost associated with running additional bus routes during the day. Given that building configurations differ among districts throughout the state and there are no typical configurations for certain types of school districts, the research team determined it impractical to make assumptions that cannot be reasonably applied to all school districts.

Honors Courses

In districts interviewed with an honors option for middle/high school students, there are typically additional costs involved to substantially differentiate curricula for students. In some of the districts, identification for giftedness is the initial screen used for student placement; however, it was not universally the case that all students in these classes were identified as gifted academically. An approximation of expenditures for the provision of these services was identified by collecting staff costs and approximate percentages of students identified as gifted and with WEPs.

High School Advanced Placement

Advanced Placement (AP), developed by the College Board, provides students with the opportunity to take qualifying exams upon course completion to earn college credit or advanced placement in college courses. The costs associated with the program are typically ongoing professional development, curriculum development and qualifying exams, which may be subsidized. For AP teachers to provide this course as a qualifying gifted service, they must meet the required professional development hours. In districts where AP exists, expenditures were calculated on a fractional basis using the teachers' salaries, number of AP courses offered and percent of students identified as gifted with WEPs in place enrolled in these courses. This estimate of expenditure was used to inform costs for provision of gifted services at the high school level.

High School International Baccalaureate (IB)

International Baccalaureate programs typically follow a multi-year implementation plan involving staff professional development, curriculum adoption, and site visits and audits by IB program staff. The costs associated with the program are typically ongoing professional development, curriculum development and other costs for the designation as an IB World School. For IB teachers to provide courses as qualifying gifted services, they must meet the required professional development hours.

College Credit Plus

According to Ohio Revised Code (3365.01), all students who meet an institution of higher education's minimum entrance score on a qualifying college entry exam qualify for the College Credit Plus (CCP) program. These courses allow students who are still in high school or middle school to access college coursework and earn transcribed credit hours that count for both high school graduation and toward associate or bachelor's degrees. The costs for these types of programs vary significantly and are dependent on the approach used by the school district. The least expensive approach is an arrangement where a student takes CCP courses at their home

high schools with a teacher employed by their home school districts who has been granted adjunct status with their partnering institutions of higher education (IHE). However, the costs significantly increase as students choose to take courses at college campuses and with qualifying private institutions of higher education that charge higher rates of tuition. In all cases, there are no gifted professional development requirements to count this as gifted service. A general approximation of expenditures made to provide gifted services at the high school level was calculated and encompasses provision of these services. However, it is important to note that CCP costs are variable from district to district dependent on the number of students participating, the availability of staff credentialed to offer courses at the high school and tuition rates negotiated with partnering IHEs.

Internship and Mentoring Programs

Internships and mentoring programs are allowable gifted service programs per the Ohio Revised Code; however, no school district interviewed for this study reported using this approach (or associated expenditures) to meet the needs of its gifted student population. Therefore, this component was not considered for inclusion in the expenditure analysis.

Independent Study: Specialized Technology and Online Content

School districts servicing advanced students may choose to provide online coursework accommodating personalized learning needs of the gifted student. This may be done through a variety of services and content providers and costs are variable depending on the approach. As such, the costs associated with these services ranged in price. The actual use of these types of programs for differentiation was not widespread and, therefore, not included in the expenditure analysis.

APPENDIX 3: AUTHOR BIOGRAPHIES

Greg Browning is the president of Capital Partners. Founded in 1998, the firm's primary focus is policy, strategy and leadership advisory services. From 1991 to 1998, Dr. Browning was the director of the Ohio Office of Budget and Management. In this cabinet position, he was the chief financial officer of the state of Ohio. From 1993 to 1998, he also served as senior policy advisor to the governor, providing advice on a range of policy issues and major system reforms, including health care, education, tax and fiscal policy. Prior to these positions, Dr. Browning headed a public policy research and consulting firm. Dr. Browning holds a bachelor's degree from Ohio University, where he studied history and philosophy, and a doctorate in education from The Ohio State University.

Howard B. Fleeter focuses his research on education finance, education policy, and state and local tax policy. Since his 1992 report, *Equity, Adequacy and Reliability in Ohio Education Finance*, he has been one of the state's leading education finance experts, working extensively with Ohio education policymakers to improve the state's school funding system. He currently serves as a research consultant for the Ohio Education Policy Institute. Previously a faculty member at The Ohio State University and University of Massachusetts Amherst, Dr. Fleeter taught courses in Public Sector Economics, Public Finance, State and Local Government Finance, Economics of Education and School Finance. In 2002, he joined with Richard Levin and Bill Driscoll to form the state and local government finance and tax policy consulting firm Levin, Driscoll & Fleeter, now known as Howard Fleeter & Associates. Dr. Fleeter received his Ph.D. in Economics from the University of California, Berkeley.

Tracy Nájera served on the research team contributing to the research methodology and its implementation conducting on-site interviews and school district expenditures analyses. She holds a doctorate in Educational Administration from The Ohio State University. Tracy has expertise in education budget and policy issues ranging from early childhood education through higher education. Throughout her career, Tracy has worked with school districts across Ohio and, nationally, nonprofit organizations, foundations, state departments of education and the U.S. Department of Education.

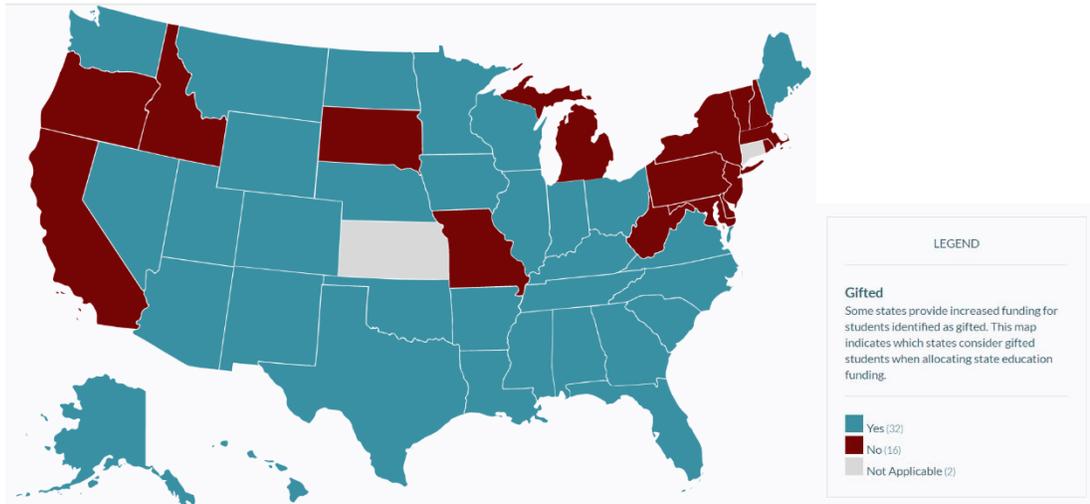
Lauren Porter serves as a research manager and research analyst at the Ohio Education Research Center. She holds a doctorate in Educational Studies from The Ohio State University specializing in Quantitative Research, Evaluation, and Measurement. Dr. Porter is the coordinator and instructor for the Public Sector Data Science Internship Program within the John Glenn College of Public Affairs. She also has served as an evaluator for an early childhood professional development program funded through the Race to the Top Early Learning Challenge Grant. She contributes methodological and research efforts to projects involving infant mortality, outcomes for youth in Appalachian areas of Ohio, and outcomes for Ohio students participating in workforce programs. Dr. Porter has been an author of reports on OERC research spanning early childhood through workforce outcomes.

Erin Joyce is the associate director of the Ohio Education Research Center. In her role, Erin manages the day-to-day operations of the Ohio Education Research Center and leads client engagement for the OERC and Ohio Analytics partnership. Prior to joining the OERC, Ms. Joyce worked in both the nonprofit and government sectors, including six years with the Ohio

Department of Education. Her career has focused on improving outcomes for children, youth and families. Ms. Joyce earned her MA in Government and International Relations from the University of Notre Dame.

APPENDIX 4: A PROFILE OF GIFTED FUNDING PRACTICES IN OTHER STATES

Thirty-two states provide state funding for gifted and talented students (EdBuild, 2018a). EdBuild’s gifted funding by state graphic is detailed in below



In terms of state funding mechanisms, there are four broad funding models for gifted and talented students outlined by the Education Commission of The States (ECS). Eleven states, including Ohio, provide funding through the state funding formula. The majority of states providing gifted funds do so through non-competitive grants based on total enrollment. Only three states provide gifted funding through competitive grants and/or reimbursement for a portion of gifted expenses rather than through the state funding formula (Woods, 2016). Ohio and Utah provide gifted funding through program-based gifted education allocations that are part of the state’s foundation funding formula (EdBuild, 2018b). Ohio’s unit funding of gifted coordinators is consistent with the multiple funding mechanisms noted in school funding literature (Verstegen, 2016).

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