Ohio Gifted Education Incentives Study

Prepared for the
Ohio Department of Education

By

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December 20, 2022

Executive Summary

Introduction

This study was authorized by Ohio's Senate Bill 310 (2020), which required multiple education finance-related studies. The Ohio Department of Education (ODE) selected Augenblick, Palaich, and Associates (APA) through a competitive process, with the support of a group of academics specializing in gifted education from the University of Denver to perform this study.

The study's goals were to **identify the challenges, barriers, and best practices in gifted education,** including issues in the identification process, service provision, and other aspects of gifted education. Additionally, the authorizing legislation requires the development of "**recommendations for an incentive program for school districts in rural areas of the state that provide services to students identified as gifted**".

To identify possible incentives to support gifted education in rural settings, the study team:

1. Reviewed the literature on gifted rural education and Ohio gifted rules and regulations,
2. Surveyed rural gifted educators and statewide gifted leaders,
3. Conducted focus groups with rural gifted educators and state gifted leaders, and
4. Convened Professional Judgment (PJ) panels to identify the costs associated with providing specific components of gifted education as a basis for identifying the cost of different incentives.

Through its review of Ohio law, regulation, and policy, the study team described all aspects of Ohio's gifted education system. Four of these components of gifted education are under a school district's control, and these are identified in the table below.

Table E.1: Key Components of Gifted Education

Component	Related Ohio Regulation
Identification of students for gifted services	The gifted identification process is defined by state rule and law. The state requires districts to identify students, even if they choose not to serve those students. Gifted identification in Ohio involves assessing students using state-approved assessments and identifying students whose scores meet or surpass gifted identification thresholds.
Provision of gifted services	While gifted service provision is not required, state statute and regulation do outline the requirements for gifted services to students when they are provided. These require teachers to have appropriate training to provide services. The state has recently clearly defined the amount of training needed for general education teachers to qualify as designated providers of gifted services.
Written education plans (WEPs)	Districts providing gifted services are required to annually document the gifted services students receive in a WEP, developed collaboratively.
Professional learning opportunities	Gifted education requires a specialized set of skills to implement effectively and gifted educators in rural contexts require skills specific to the context where they are working.

These key components provided a framework for the study's subsequent data collection, analysis, and conclusion. The study team's surveys and focus groups sought to identify successes, challenges, and barriers related to these key components. The survey and focus groups also gathered feedback on the potential *use of incentives* to address these challenges and barriers. The PJ panels identified the

resources needed to implement each of the four key components and informed *the types and levels of incentives that may be proposed* to address existing challenges.

A fifth component area, evaluation and accountability, is also highlighted in the literature and regulatory review. While it is not directly within a district's control, it incentivizes outcomes identified by the state and is Ohio's means for measuring whether districts are meeting state expectations.

Other Ohio Gifted Studies

It is important to note that this is not the only study being conducted by ODE related to gifted education. In collaboration with the Auditor of State's office, the ODE convened a workgroup and hosted a series of public meetings in Fall 2022 consisting of educators, auditors, and ODE employees to review funding reporting protocols and requirements for gifted services with the intention of recommending improvements regarding accountability. The workgroup did not recommend any changes or additions to the Uniform School Accounting System (USAS) object codes and thought that the guidance developed by the Department was clear and sufficient to assist schools and districts on the allowable uses for gifted funding. One recommendation that came out of the workgroup was to provide more training and promote greater awareness of gifted spending requirements with school administrators. They recommended the Department discuss the need for professional development around these gifted spending requirements with the Ohio Association of School Business Officials (OASBO) and the Buckeye Association for School Administrators (BASA)."

Gifted Education in Rural Ohio School Districts

This study focused on schools within two ODE district classifications: Typology 1 Rural — high student poverty and small student population (124 districts); and Typology 2 Rural — average student poverty and very small student population (107 districts). Table E.2 displays enrollment and gifted identification information for the two rural district types and the state.

Table E.2: Student Enrollment and Gifted Identification in Ohio and in Rural Ohio Districts

		Enrollment	% of State Enrollment	Economically Disadvantaged	White	Non-White
Total	State	1,495,948	100%	47%	70%	30%
	Rural Typology 1	140,441	9%	52%	94%	6%
	Rural Typology 2	93,857	6%	38%	95%	5%
		Enrollment	% of Enrollment	Economically Disadvantaged	White	Non-White
Gifted	State	228,648	15%	21%	83%	17%
	Rural Typology 1	16,374	12%	34%	96%	4%
	Rural Typology 2	12,843	14%	19%	97%	3%

Table E.2 highlights that overall, economically disadvantaged students are identified gifted at a lower rate than the overall population, as indicated by the fact that economically disadvantaged students are a

smaller proportion of the gifted population than the overall population statewide. There are similar under-identification challenges with the non-white population[1](Ford, 2013).

The study team analyzed 2021 expenditures across Ohio districts for gifted and talented education based on required gifted expenditure reporting. A comparison of the expenditures between rural and non-rural districts is shown in Table E.3.

Table E.3: Gifted Expenditures by Category, Per Enrolled Student

Typology	1210: Special Instruction and Services for Academically Gifted	1211: Gifted Identification	2230: Gifted Support Services, Unspecified	2231: Coordination Services (ALL)	2232: Training Services	Grand Total
Rural Combined	$44	$6	$-	$7	$0.1	$57
All Other	$96	$6	$-	$4	$0.3	$106

Gifted expenditures per student in rural districts are about 50 percent of the amount of all other districts in Ohio, with expenditures for special instruction and services for the academically gifted driving this difference. This analysis identified **two key challenges that must be addressed by a rural gifted education incentive system**: 1) **lower identification rates**, particularly of economically disadvantaged students; and 2) and **lower spending** to provide services to gifted students once identified.

Ohio Rural Gifted Education Challenges and Successes

Rural gifted education challenges and successes were identified through the study team's survey and focus groups with rural educators. Key successes identified by rural educators who participated in the study included:

- Access to assessments, particularly the permitted use of assessments for multiple purposes.
- The recognition in ODE policy and guidance that giftedness comes in many forms.
- The designated provider route for general education teachers who provide gifted services and its associated training requirements expand gifted services and educator knowledge around giftedness and gifted services.
- The College Credit Plus program as a means of providing gifted services to secondary students.
- The technical support and quality of professional development provided by ESCs.
- Recent changes to funding which were viewed as a success despite perceptions that state funds pay for only a portion of gifted service costs.

[1] ODE uses a representation index that is the ratio between a given student group's representation in the gifted population and is representation in the overall student population to determine whether a sub-groups identification rate is unequitable. A representation index below .8 is considered inequitable. The representation index for Typology 1 gifted students is .76, Typology 2 gifted students is .9, economically disadvantaged students in Typology 1 districts is .68, economically disadvantaged students in Typology 2 districts is .51, non-white students in Typology 1 districts is .64, and non-white students in Typology 2 districts is .62. Information on the representation index can be found at https://education.ohio.gov/getattachment/Topics/Data/Report-Card-Resources/Resources-and-Technical-Document/Gap-Closing-Component/Gifted-Performance-Indicator/Gifted-Performance-Indicator-Details_August-2022.pdf.aspx?lang=en-US

Key challenges identified by rural educators included:

- Staffing shortages.
- Under-identification of students through existing processes.
- The level of financial resources currently available for providing gifted services.
- WEPs being completed, but not fully leveraged in a way that would impact student services.
- Overall capacity to provide gifted education services was lacking, particularly newly prepared teachers who often have little exposure or training in gifted education.

How Incentives Can Address Gifted Education Challenges in Rural Settings

Incentives can impact challenges related to identifying students both in positive and negative ways. For instance, incentives that reward higher identification with no limit to those rewards can incentivize identification of students who are not actually gifted. However, incentives could be used to positively address under-identification concerns by supporting investments in new materials and in the capacity building of teachers to develop and identify gifted students and to create opportunities to expose rural students to new experiences that will prepare them to fully express their capabilities on assessments. These types of investments in gifted identification can be supported through financial incentives.

Investments in staffing through financial incentives to districts can address challenges related to gifted service provision and staff capacity by: 1) creating more positions for gifted staff; 2) paying for training of gifted staff; and 3) providing incentives for people to receive their gifted endorsements. However, developing a workforce takes time and some level of certainty. It takes time to build capacity at districts, ESCs and teacher preparation institutions to provide training. These institutions will not want to develop new programs, fill new gifted positions, or invest in additional gifted training programs without some level of funding certainty to provide confidence that such positions can be maintained long term.

Based on feedback from the field, challenges related to WEPs can best be directly addressed through statute and code and would be difficult to address effectively with incentives.

Professional Judgment Panel Results

The PJ panels identified the resources needed to implement the four key components of gifted education (identification of students, provision of services, WEPs, and professional learning opportunities). The PJ process is not intended to be prescriptive — the study team is not suggesting that rural districts should organize their programs in the exact manner the panels designed. Rather, the PJ program model is used to understand the types and levels of resources needed to identify and serve gifted students in rural Ohio districts.

The study team asked panelists to identify the personnel and non-personnel resources needed to implement each key component of gifted education, so that costs could be applied to those resources. This information provided the study team with a sense of *the scale of incentives* that might be needed to address the barriers rural districts face in implementing gifted education. The review panel sought to ensure that resources identified by the program panel were at appropriate levels and were aligned with best practice research while also meeting Ohio's rules and regulations governing gifted education.

Based on these resource recommendations, the study team identified cost estimates by key components of gifted education, which can be used to estimate the level of incentives that could be provided to support gifted education in rural Ohio. These cost estimates by component ranged from about $5 per student (for developing WEPs) to $500 per student (for providing gifted services) and were in part dependent on the size of the district and percentage of economically disadvantaged students.

Common Incentive Types

Three types of incentives were considered in this study: accountability, capacity building, and financial. Feedback from the field suggests each has a place in addressing rural gifted education challenges.

Accountability: Changes to the accountability system were implemented in the 2021-22 school year. Participants in the data collection process had very little experience with the new system and were not able to provide many insights to the strengths and challenges associated with the new system.

Capacity Building: Throughout the study, the need for additional gifted education capacity was a clearly articulated need. Throughout every aspect of this study, the issue of staffing shortages was identified as a key theme. These shortages are impacting the ability of districts to provide and grow gifted services. Study participants stressed the need to improve educators' ability to serve gifted students through on-going professional development and coaching. Rural educators need added skills and knowledge in gifted education and characteristics of gifted economically disadvantaged students and students from rural backgrounds. However, the limiting factor to much of the capacity building of staff is funding. So, while study recommendations will discuss capacity building incentives, the key to building more capacity is the financial ability to pay for training, including incentives for teachers to receive gifted endorsements.

Financial: Overall, financial incentives were study participants' preferred form of incentives to help address the challenges of gifted education and participants provided guidance on how to structure incentives to make them more successful. The guidance was:

- **Funding needs to be consistent**: The biggest gifted education challenge facing rural districts is staffing and staff capacity — districts are hesitant to hire staff if funding is inconsistent and they cannot continue to pay people in the future. This suggests that incentive structures need to include longer-term, consistent grants.
- **After-the-fact rewards serve to increase disparities**: Addressing the challenge of under-identification and lack of services for gifted students in rural areas requires up front investments in people and programing. Rural areas that are currently not able to make these up-front investments will fall further behind if the only way to receive additional gifted funding is through after-the-fact rewards.
- **Funds from financial incentives must be specifically reserved for gifted education.** Participants in this study were very positive about recent changes to gifted financial reporting that *restrict* state gifted funding to be spent on gifted activities. Participants viewed this requirement as increasing state expenditures on gifted education, and rural gifted educators supported this requirement for any new state gifted funding.

Recommended Plan

This study's recommendations are based on findings across the study's data collection efforts on the use of incentives, the challenges identified, and the PJ Panels' panels work identifying resources needed to provide specific components of gifted services in rural Ohio.

The study team ***recommends an incentive system focused on financial incentives***. Given the feedback that districts need consistent funding to implement change, and that incentives structured as rewards will negatively impact rural districts serving populations that are difficult to identify for gifted education, the study team ***recommends providing financial incentives through a multi-year grant*** mechanism. Under this approach, districts or ESCs would receive five-year grants and would be ***held accountable by ODE for spending the funding on gifted services and for meeting growth targets on their Gifted Performance Indicator*** by the end of the grant period. In their applications districts will set their own growth targets using the Gifted Performance Indicator with support from ODE to ensure these are stretch targets for districts. The grant amount per district could range from about $60,000 to $300,000 per year to provide gifted services based upon estimated costs from the professional judgement panels.

If the grant recipient is unable to make the investments into gifted related activities, or not fully meet all their targets on Gifted Performance Indicator, the grant would not be renewed after the five years. However, ***if districts maintain their investment in gifted education and meet accountability growth targets, then the grant would be ongoing***. This multi-year, grant incentive structure would incentivize rural districts that are committed to this work by encouraging them to feel more confident in making longer term investments in both hiring and staff development around gifted education.

Existing ODE systems could be used to monitor grant implementation. Recipients would need to report gifted expenditures using the Education Management Information System (EMIS). The current School Report Card accountability system would be used to measure whether grants have resulted in meeting district goals for gifted student performance, growth, identification and/or services.

In grant applications, districts should briefly describe gifted identification and service provision challenges and describe how they will address those challenges over the five-year grant period. They will then describe their growth targets for the grant period based upon the Gifted Performance Indicator. It is expected that most districts will focus their work on staffing and professional learning opportunities to develop the capacity of their staff. Districts that have not been awarded grants should be able to annually apply or reapply. ***The state should provide support to rural districts that apply to ensure they can set appropriate growth targets and that those districts with little grant writing capacity are able to successfully engage in the process***. Districts that do not write successful grants should receive focused technical assistance. ESCs can be a key source of this technical support. ODE should consider training ESC staff in providing this assistance and providing financial support to ESCs for grant writing technical assistance. ODE can monitor ESC engagement in this grant writing technical assistance to ensure all regions of the state have access to support, and the agency may require additional staff to implement the recommended incentives system and to work with rural districts to support and grow the gifted education capacity of current and future educators in rural areas.

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Chapter 1: Introduction and Overview of this Study

Introduction

This study was authorized by Ohio's Senate Bill 310 (2020), which required multiple education finance-related studies. The Ohio Department of Education (ODE) selected Augenblick, Palaich, and Associates (APA) through a competitive process, with the support of a group of academics specializing in gifted education from the University of Denver to perform this study.

The study's goals were to **identify the challenges, barriers, and best practices in gifted education,** including issues in the identification process, service provision, and other aspects of gifted education. Additionally, the authorizing legislation requires the development of "**recommendations for an incentive program for school districts in rural areas of the state that provide services to students identified as gifted**".

To identify possible incentives to support gifted education in rural settings, the study team:

1. Reviewed the literature on gifted rural education and Ohio rules and regulations for implementing gifted education,
2. Surveyed rural gifted educators and statewide gifted leaders,
3. Conducted focus groups with rural gifted educators and state gifted leaders, and
4. Convened Professional Judgment (PJ) panels to identify the costs associated with providing specific components of gifted education as a basis for identifying the cost of different incentives.

Through its review of Ohio regulations and rules, the study team identified the major components of Ohio's gifted education system (ODE, 2022c). The state of Ohio has a complex gifted education system with a variety of moving parts structured by both Ohio state law and administrative rules adopted by the Ohio State Board of Education, known as the Operating Standards for Identifying and Serving Students Who Are Gifted: Administrative Code 3301-51-15 (2018b). Four of these components of gifted education are under a district's control so are the primary areas of focus for this study, and potential incentives, including:

- Gifted student identification,
- Provision of gifted services by districts or Educational Service Centers (ESCs),
- Written Education Plans (WEPs),
- Professional learning opportunities for gifted education.

These key components provided a framework for the study's subsequent data collection, analysis, and conclusion. The surveys and focus groups sought to identify success, challenges, and barriers to gifted education in rural settings in the first key areas, as well as more broadly the successes, challenges, and barriers they face related to funding and policy in Ohio. The survey and focus groups also gathered feedback on the use of incentives to address these challenges and barriers in these areas. The PJ panels

identified the resources needed to implement each of these four key components and inform the types and levels of incentives that may be proposed.

A fifth component of the gifted education system, evaluation and accountability, will also be highlighted in the literature and regulatory review. While it is not directly within a district's control, it provides an incentive to districts to meet the states goals for gifted education and is the state's means for measuring the effectiveness of gifted programing.

The following section provides a high-level introduction to rural education in the United States, and then specifically gifted education in rural Ohio.

Overview of National Rural Education

According to a 2019 report from The Rural School and Community Trust, 9.3 million students are enrolled in American rural public schools — nearly one out of every seven students in the country (Showalter et al., 2019). Fifty-three percent of America's 13,515 school districts are classified as rural (Klar & Huggins, 2020), and one in six of those students lives below the poverty line.

Rural communities are diverse. Not all members of rural communities share in the relationships, identities, and resources available within the state's geographic boundaries. For example, rural districts in northwest Ohio have different needs from rural districts in southwest Ohio. "There are many rural Americas … with rural communities demonstrating wide variation in geography, demographics, economics, politics, and social configurations" (Flora et al., 2018, p. 568). One consistent thread across the continuum of rural contexts is the profoundly important connection of rural inhabitants to the land.

Having limited resources in rural schools is a common situation because rural districts have historically received less funding per student (because of their smaller tax base) and generally have fewer beneficial economies of scale than larger districts (Kolbe et al., 2021; Starr & White, 2008; US Department of Education, 2012). However, educational leaders in rural communities are expected to meet the same standards as other schools with more funding and resources. These conditions also negatively influence teacher recruitment and professional learning opportunities for teachers and staff (Wieczorek & Manard, 2018). Rural districts frequently experience a mismatch between reforms and the local capacity to implement them (Budge, 2010; Gibbs & Howley, 2000; Yettick et al., 2014). These challenges are exacerbated by physical isolation of districts and the fact that programs developed for metropolitan sites may not be relevant to rural school needs (Johnson & Strange, 2009).

For decades, research has shown that rural schools face nuanced challenges in adequately staffing their classrooms (Biddle & Azano, 2016). In 2020, Goldhaber et al. conducted a rigorous study examining differences in rural school districts' staffing challenges, including high vacancy rates, teachers with emergency credentials, and significantly higher staffing challenges. The isolation of rural districts negatively influenced teacher and leader recruitment and retention. Other staffing challenges resulted from low pay scales because of eroding tax bases or significant outmigration of young people seeking economic opportunities not readily available in many rural towns. Rural areas are more vulnerable to

staffing shortages than non-rural areas because they employ fewer staff and have a smaller pool of resources. Many rural districts struggle with even finding teacher candidates for their openings.

Overview Gifted Education in Rural Ohio School Districts

ODE classifies districts using a typology created in 2013 with data from 11 different measures.[2] Ohio's school districts were organized into eight different classifications. This study focuses on schools with two classifications: Typology 1 Rural — high student poverty and small student population (124 districts); and Typology 2 Rural — average student poverty and very small student population (107 districts).

Table 1.1 displays the enrollment (measured in full-time equivalent, or FTE, students) of the two rural district types and the state using data school year 2020-21 data provided by the ODE.

Table 1.1: Enrollment and Gifted Identification in Ohio and Rural Ohio Districts

		Enrollment	% of State Enrollment	Economically Disadvantaged	White	Non-White
Total	State	1,495,948	100%	47%	70%	30%
	Typology 1	140,441	9%	52%	94%	6%
	Typology 2	93,857	6%	38%	95%	5%
		Enrollment	% of Enrollment	Economically Disadvantaged	White	Non-White
Gifted	State	228,648	15%	21%	83%	17%
	Typology 1	16,374	12%	34%	96%	4%
	Typology 2	12,843	14%	19%	97%	3%

Rural districts account for 15 percent of the state student population, with 140,441 students in Typology 1 districts and 93,857 in Typology 2 districts. The Typology 1 districts have a similar share of economically disadvantaged students (52 percent) when compared to the state (47 percent), while Typology 2 districts have a slightly smaller share when compared to the state (38 percent). The Typology 1 and Typology 2 rural districts serve a predominantly white (94 percent and 95 percent, respectively) population compared to 70 percent for the state overall.

Across Ohio, 15 percent (228,648) of the student population is identified as gifted compared to 12 percent (16,374) in Typology 1 districts and 14 percent (12,843) in Typology 2 districts. Overall, economically disadvantaged students are identified at a lower rate than the overall population. This under-identification is indicated by the fact that economically disadvantaged students are a smaller proportion of the gifted population than the overall population statewide (21 percent gifted compared to 47 percent of the total population). In Typology 1 districts, 52 percent of the population is economically disadvantaged compared to 34 percent of the gifted population. In Typology 2 districts, 38 percent of the students are economically disadvantaged compared to 19 percent of the gifted students. There are similar under-identification challenges with the non-white population. Overall, 32 percent of

[2] For more information see: https://education.ohio.gov/Topics/Data/Frequently-Requested-Data/Typology-of-Ohio-School-Districts

students in the state are non-white, compared to 17 percent of the gifted population. In rural districts, there are similar issues. In Typology 1 districts, 6 percent of the population is non-white compared to 4 percent of the gifted population. In Typology 2 districts, 5 percent of the population is non-white compared to 3 percent of the gifted population (Ford, 2013).[3]

ODE uses a representation index that is the ratio between a given student group's representation in the gifted population and is representation in the overall student population to determine whether a sub-groups identification rate is unequitable. A representation index below .8 is considered inequitable. The representation index for Typology 1 gifted students is .76, Typology 2 gifted students is .9, economically disadvantaged students in Typology 1 districts is .68, economically disadvantaged students in Typology 2 districts is .51, non-white students in Typology 1 districts is .64, and non-white students in Typology 2 districts is .62[4]. This indicates gifted identification rates in Typology 1 districts just meets the threshold for being considered unequitable and gifted identification rates for economically disadvantaged and non-white students is well below the threshold for being considered unequitable. This all indicates that under identification, particularly of economically disadvantaged and non-white students is a challenge in rural districts

Ohio's Gifted Funding Formula

Ohio has recently revised its funding system for gifted education. ODE published a summary of how funding is calculated. For fiscal years 2022 and 2023, gifted funding is determined as follows:

- Identification funds in the amount of $24.00 multiplied by the district's enrolled average daily membership (ADM) in kindergarten through sixth grade multiplied by the district's state share percentage. Gifted referral funds in the amount of $2.50 multiplied by the district's enrolled ADM multiplied by the district's state share percentage.
- Gifted professional development funds in the amount of $7.00 in fiscal year 2022 and $14.00 in fiscal year 2023 multiplied by 10 percent of the district's enrolled ADM or the percentage of the district's enrolled students who are identified as gifted (whichever is greater) multiplied by the district's state share percentage.
- Gifted coordinator unit funds in the amount of $85,776.00 multiplied by the district's number of gifted coordinator units multiplied by the district's state share percentage. The number of units is determined as one unit for every 3,300 students in the district's enrolled ADM, with a minimum number of units of 0.5 and a maximum number of units of 8.0.
- Gifted Intervention Specialist (GIS) unit funding in kindergarten through eighth grade in the amount of $89,378.00 multiplied by the district's number of GIS units in kindergarten through eighth grade multiplied by the district's state share percentage. The number of units is

[3] Non-white is used to describe racial and ethnic groups that are historically disadvantaged. Because of suppression in the data used for this analysis, the data describing each racial and ethnic group is unreliable.

[4] Information on the representation index can be found at https://education.ohio.gov/getattachment/Topics/Data/Report-Card-Resources/Resources-and-Technical-Document/Gap-Closing-Component/Gifted-Performance-Indicator/Gifted-Performance-Indicator-Details_August-2022.pdf.aspx?lang=en-US

determined as one unit for every 140 students identified as gifted and enrolled in kindergarten through eighth grade, with a minimum number of units of 0.3.

- GIS unit funding in ninth through 12th grade is $80,974.00 multiplied by the district's number of GIS units in ninth through 12th grade multiplied by the district's state share percentage. The number of units is determined as one unit for every 140 students identified as gifted and enrolled in ninth through 12th grade, with a minimum number of units of 0.3 (ODE, 2022e).

A few things are important to note about this funding formula. First, the formula establishes funding related to different components of the gifted education process, including identification, professional development, and staffing for coordination and service provision, which align with the components of gifted education that guide this study. However, state funding is not required to be spent on specific gifted education tasks, but on gifted education overall. Second, the minimum for staffing funding for gifted coordinators and GISs creates a funding floor for small schools. This funding floor means that per-pupil gifted funding is higher in smaller schools. Third, there is no adjustment for gifted identification costs associated with economically disadvantaged students, a population that has been under-identified. However, districts do receive additional funding through the Disadvantaged Pupil Impact Aid based on the number and concentration of economically disadvantaged students enrolled at each school and district. Fourth, the funding is related to both total enrollment, and the number of students that are identified as gifted. Finally, it is crucial to recognize that the Ohio funding formula identifies a share of funding that districts should provide based on their local capacity to raise funds for education. That means the state funding formula estimates how much revenue a district needs for gifted education and then reduces that total by the share of funding that the district is expected to provide. The approach of applying a state share percentage to the gifted funding component of the formula is consistent with other categorical aid elements of the larger school funding formula.

In the PJ panel and concluding sections of the report, the study team used three representative district sizes — 508 students, 984 students, and 1,865 students — as part of our financial analysis. These district sizes were selected based on the statewide enrollment data for rural districts in Ohio to represent a small, average, and larger rural district. In these simulations, we assumed a district is identifying 10 percent of its students as gifted based on the identification goals set in the state's accountability system.

The study team compared the 2021 and 2022 total gifted expenditures by typology 1 and 2 to all other typologies. Spending increased in rural areas from 2021 to 2022, while there was a decrease in all other types from 2021 to 2022.

Table 1.3: Yearly Comparative Gifted Expenditures Per Enrolled Student

Typology	Total 2021	Total 2022
Rural Typology 1	$57	$64
Rural Typology 2	$57	$63
Rural Combined	$57	$63
All Other	$106	$95

Additionally, the study team analyzed the 2021 expenditures across Ohio districts my function code (this data was not available for the 2022 data). The team compared the expenditures between rural districts and non-rural districts in Table 1.4.

Table 1.4: Gifted Expenditures by Category, Per Enrolled Student

Typology	1210: Special Instruction and Services for Academically Gifted	1211: Gifted Identification	2230: Gifted Support Services, Unspecified	2231: Coordination Services (ALL)	2232: Training Services	Grand Total
Rural Typology 1	$44	$7	$-	$7	$0.1	$57
Rural Typology 2	$45	$4	$-	$7	$-	$57
Rural Combined	$44	$6	$-	$7	$0.1	$57
All Other	$96	$6	$-	$4	$0.3	$106

Total Gifted Education expenditures per enrolled student in rural districts are about half the amount of all other districts in Ohio. The main driver of this difference is in special instruction and services for the academically gifted (function code 1210). This indicates that rural districts are providing fewer services or services at a lower cost to their gifted students.

Incentive Approaches

This study aims to identify possible incentives to improve the provision of gifted education services in rural districts. Incentives are defined broadly as a set of external stimuli that can induce organizations and individuals to act in a certain way (Clark & Wilson, 1961). The study team defined incentives broadly to allow for the identification of new or particularly creative policy approaches to address gifted education challenges in rural Ohio. **Overall, the incentives addressed in this study fall into three categories: financial, capacity building, and accountability**. Financial incentives included reimbursement to districts or ESC as well as incentives to individuals for obtaining a gifted endorsement. Capacity building incentives included training and technical support. Accountability incentives included more informal incentives such as public recognition as well as more formal incentives such as additional points on the accountability report card.

Example Incentive Systems

These three types of incentives are used in Ohio. Currently, there are numerous existing financial incentives that the state of Ohio and other states provide school districts, individuals, and organizations to support educational programming advancements. For example, in 2021, Ohio launched an innovative workforce incentive partnership with 54 school districts (ODE, 2021c). These districts receive incentive reward payments when graduating students also hold industry-recognized credentials (ODE, 2021c). These 54 school districts will receive a total of $13.5 million to help spur the growth of career and technical education in the state of Ohio. The partnership aims to ensure that more students in Ohio graduate with industry-recognized credentials (ODE, 2021c). Another example is a monetary incentive program, Franklin County RISE, that provides additional funding to licensed childcare providers to support and grow their programs. This $10.8 million program will benefit as many as 750 providers over the next two years. Franklin County RISE is funded by a combination of the Franklin County Board of

Commissioners and the city of Columbus (Franklin County Board of Commissioners, n.d.). Lastly, the Ohio Rural Business Growth Program is designed to increase capital investment in businesses located in rural areas. The program provides an incentive to investors that capitalize on companies with a principal business in a county with less than 200,000 people through awarding tax credit allocation authority to Rural Business Investment Companies, Small Business Investment Companies, or their affiliates that serve as intermediaries between investors and projects.

Capacity building, or technical assistance, incentives develop human capital and organizational capacity. Within Ohio, gifted education sources of technical assistance for rural districts are often ESCs, with ODE, higher education institutions, associations, and other private or non-profit providers. There are many examples of states using technical assistance to support education improvement. For example, the Mississippi Department of Education provides technical assistance to schools and districts trying to improve and offer special education services to their students. The Office of Special Education ensures that local school districts in Mississippi have special education programs, policies, and procedures that comply with the Federal Individuals with Disabilities Education Act (IDEA) (Mississippi Department of Education, n.d.). Another example is the North Dakota Department of Public Instruction, which oversees many state grants and initiatives and provides technical assistance and professional development to education partners as they implement grant programs in their local districts. They aim to strengthen education programs statewide by ensuring compliance with all state and federal grant requirements and supporting schools as they strive to meet the needs of all North Dakota students (North Dakota Department of Public Education, 2019).

Accountability incentives within standards-based accountability operates under the idea that performance standards and content should describe what students know and are able to do. The primary architecture for accountability was established by the No Child Left Behind Act (NCLB) in 2001. States then use student assessments and other measures to promote student mastery of the standards. These policies incentivize educators to focus on improving achievement in core subjects and boosting student proficiency. Districts are then supposed to use these milestones to guide their curriculum, professional development, and other school activities (Hamilton et al., 2007).

Over the past 20 years, accountability systems have evolved in Ohio and across the nation. Accountability expectations for gifted education have recently changed, with the changes implemented in the 2021-22 school year. The state report cards hold districts accountable for gifted student achievement on state assessments, growth on state assessments, as well as identification and services, including identification and services to students from underrepresented sub-groups.

Approach to Describing Incentives `

Table 1.5 provides additional detail on the incentives mechanisms that were used in the data collection within the categories of financial, capacity building and accountability incentives that guided incentive conversations during this study. Respondents to our survey were asked about implementing the different types of incentives in Table 1.5 to address challenges in gifted education. The focus group respondents were asked more general questions about how incentives can be used to support rural gifted education. Professional judgment panels took a different lens of identifying the resources needed

to provide each the four key components of gifted education (identification, provision of service, WEPs and professional learning opportunities), that could then be incentivized through financial or capacity building incentives.

Table 1.5: Complete List of Incentives

Financial	1. **Reimbursement Beyond Cost**: The state pays the full cost of gifted identification and services, plus an additional amount as an incentive.
	2. **Full Reimbursement**: The state pays the full cost of gifted identification and services.
	3. **Partial Reimbursement**: The state pays a portion of the costs of gifted identification and services.
	4. **ESC Reimbursement**: Additional funding to ESCs for gifted support based on the number of students in their region that are identified as gifted.
	5. **Gifted Endorsement Financial Incentives**: The state pays districts for every educator on staff with a gifted endorsement.
Capacity Building	6. **Resource Staff (gifted coordinator, assessment experts, professional development leaders, etc.)**: The state provides staff to provide technical and/or administrative support to a district's gifted identification process and services.
	7. **Technical Support**: The state helps with gifted processes, such as assessments, identification, writing WEPs, gifted instruction, and/or reporting requirements.
	8. **Professional Development**: The state provides professional development to district staff to support gifted identification and services.
Accountability	9. **Recognition of Success:** The state recognizes districts, schools, and/or teachers for effective gifted identification and services.
	10. **Gifted Endorsement Report Card Points**: Districts receive additional points on their report card for having more educators with gifted endorsements.
	11. **Additional Report Card Points**: The state provides additional points on the accountability report card for meeting certain identification or service provision benchmarks.

Remainder of the Report

The following sections of the report summarize the four components of the study: a literature and regulatory review, followed by the findings of the survey, focus groups, and PJ panels. These sections are followed by recommendations for an incentive system to address gifted education in rural Ohio.

Chapter 2: Summary of the Literature and Regulatory Review

This review summary offers contemporary research relative to rural contexts and an overview of gifted education systems in both Ohio and across the United States. The full review is in Appendix A.

Rural Schools

What does rural mean? Typically, rural education definitions are derived from sources such as the US Census Bureau and the National Center for Education Statistics (Gillon, 2017), based on population density and proximity to urban space. Most of the geospatial space in which we live in the US is considered rural, situated within communities with small populations that are geographically isolated.

Gifted students are present in public school settings throughout various contexts (National Association for Gifted Children, 2019; Plucker & Puryear, 2018; Stambaugh & Wood, 2021). Systemic challenges exist in identifying and serving rural gifted students (Mattingly & Schaefer, 2015; Sherman & Sage, 2011; Yaluma & Tyner, 2018), creating an urgency to address the needs of these students.

Rural School Staffing Shortages

In a 2018 study of rural high school students, Agger et al. found consistent reporting of a strong sense of connectedness resulting from the social capital developed over the years with community members, including teachers. The school often serves as the center of community activities (Mette & Stanoch, 2016).

While scholars have written about urban school-community partnerships (Leonard, 2011), Semke and Sheridan (2012) observe that “rural settings present unique conditions that influence the availability and delivery of coordinated family-school services” (p. 23). These conditions can include changing demographics, changes in the community and school populations, eroding tax bases, fewer organizations to partner with, and limited resources to do so (Seelig, 2017; Semke & Sheridan, 2012; Witte & Sheridan, 2011).

For decades, research has shown that rural schools face nuanced challenges in adequately staffing their classrooms (Biddle & Azano, 2016). In 2020, Goldhaber et al. conducted a rigorous study examining differences in rural school districts’ staffing challenges, including high vacancy rates and teachers with emergency credentials. In some places, teacher and leader recruitment and retention were negatively influenced by the geography of rural districts. Others resulted from low pay scales because eroding tax bases or significant outmigration of young people seeking economic opportunities not readily available in many rural towns.

Rural areas are more vulnerable to staffing shortages than non-rural areas because they employ fewer staff and have a smaller pool of resources. Many rural districts struggle with finding teacher candidates for their openings. White’s research (2019) suggests the urgency to transform educator preparation specifically tailored to the needs of rural teachers and leaders. Meaningful preparation would include place-based professional experiences in and with rural communities, learning about the range of needs among the residents and rethinking professional learning (including coaching) for rural teachers and

leaders once they accept a rural position. The need for high-quality early childhood educators, certified math and science teachers, special educators, and teachers for English Language Learners (ELL) remains high in rural communities across the country (Showalter et al., 2017), resulting in educators hired with emergency certification and without appropriate preparation to provide best practice content instruction to rural students.

National Rural Gifted Context

For decades, rural gifted education has been of concern within the field and recognized as an area of potential improvement (Aamidor & Spicker, 1995; Jung et al., 2022; Meriweather & Karnes, 1986; Spicker et al., 1993; Yoder, 1985). Multiple definitions and variations of giftedness exist in rural areas, and one singular approach cannot comprehensively understand the numerous contextual complexities. Regardless, rural gifted students deserve equity in service, programming, curricula, staffing, resources, and research (Rasheed, 2020), and these elements should reflect the community in which the gifted students live. Vander Ark et al. (2020) refers to this concept as the "power of place." Conflict exists as rural students contemplate whether to remain in their rural communities or leave for further academic pursuits (Matthews, 2020; Sherman & Sage, 2011). Howley et al. (2015) discuss rural gifted students' challenges as they decide to leave or stay in their home communities.

Gifted education services in rural districts typically lag behind those in non-rural areas (Plucker & Puryear, 2018; Puryear & Kettler, 2017). Lewis and Boswell (2020) identify three areas of challenges in rural gifted education: limited funding, limited time, and limited resources available for gifted programming. Pendarvis and Wood (2009) found increased numbers of under-identified gifted students in rural areas. Hafenstein (2018) echoed these findings, recognizing discrepancies in professional development for educators in rural settings. Building on rural gifted education inequities, Kettler et al. (2015) noted shortcomings of equity and access in gifted education for in-school programs and observed "even more significant" inequities in enrichment programs outside the school day and with those located off-site.

While urban and suburban students may have access to extensive extracurricular programs and community resources, such as museums, clubs, athletic centers, and music and arts centers, the availability of such programs for rural students may be hours away, limiting access and opportunity. Researchers have found that rural schools receive far fewer human resources and funding designated for gifted services than non-rural and other economically resourced schools. Yaluma and Tyner (2018) found that a "gifted gap" exists in under resourced schools, in which students do not receive the same level of education as those attending better resourced settings. Stambaugh (2015) encourages recognition of talent in gifted rural students, asserting that the context of rural settings matters. Kettler et al. (2015) also argued that context matters, asserting that the context requires understanding the value of place and community, both elements of rurality.

Critical Components of a Gifted Education System

The state of Ohio has a complex gifted education system with a variety of moving parts informed by both Ohio state law and administrative rules adopted by the Ohio State Board of Education, known as

the *Operating Standards for Identifying and Serving Students Who Are Gifted: Administrative Code 3301-51-15* (2018b). ODE maintains a robust website with policies, supports, and resources for gifted education, several of which are translated into Arabic, Chinese, Russian, Somali, and Spanish. ODE provides school districts with an implementation guide for the operating standards (ODE, 2018a). This section will focus on the critical components of gifted education systems, as described in the operating standards (2018b) and in the national literature. The components discussed include: (1) definitions of giftedness, (2) gifted identification processes, (3) the provision of services, (4) WEPs, (5) professional learning about gifted education, (6) program evaluation and accountability, (7) funding for gifted education, (8) gifted advisory councils, (9) gifted education policy, and (10) innovative gifted service proposals (ODE, 2018b). The first six of these components will be described below, with additional information about the last four components in Appendix A.

1. Definition of Gifted

National Definitions of Gifted

The National Association for Gifted Children describes the definition of gifted (NAGC, n.d.-c). The current federal definition of gifted students was initially developed in the Marland Report to Congress (Marland, 1971) and has been modified several times since then. The US' *Every Student Succeeds Act of 2015* presents a definition that can be interpreted through either a state or local lens:

> "Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities" (*Every Student Succeeds Act of 2015*, p. 1539).

Note that states and districts are not required to use the federal definition, although many states base their definitions on the federal definition.

Ohio's Definition of Gifted

In 1999, the state of Ohio developed a definition for gifted: "Gifted" means students who perform or show potential for performing at remarkably high levels of accomplishment when compared to others of their age, experience, or environment" (Chapter 3324.01, 1999). This definition focuses on gifted students obtained or potential achievement and provides room for identifying students using local or demographic comparison levels.

2. Identification

Gifted identification is a key component of the gifted education system that is implemented by districts within the structure provided by the state through law, regulation, and policy. As this work is conducted by districts, it is one of the components of the gifted education system that can be impacted by incentives to districts.

National Gifted Identification

The National Association for Gifted Children addresses identification, including issues for consideration and an overall description (NAGC, n.d.-a). Gifted learners exhibit different characteristics, traits, and

ways to express their giftedness. NAGC (n.d.-a) suggests various issues that must be considered for identification:

- Giftedness is dynamic, not static. Identification opportunities must be provided over time, with multiple opportunities to demonstrate gifts and talents. One test at a specific point in time should not dictate whether someone is identified as gifted.
- Giftedness is represented through all racial, ethnic, income levels, and exceptionality groups. Underrepresentation impacts many sub-groups, including black students.
- Giftedness may be exhibited within a specific interest or category — and even a specific interest within that category. Professionals must seek ways to gather examples across various domains and contexts.
- Early identification in school improves the likelihood that gifts will be developed into talents.

Early Identification

Early identification of giftedness is essential, so young children's potential will be recognized and nurtured. Story (1991, para. 2) describes young, gifted children:

> "Make themselves known by their observable behaviors at an early age. These behaviors include using a large vocabulary and creating metaphors and analogies, demonstrating a long attention span, beginning reading at an early age, exhibiting curiosity, sharing a sense of humor with others, learning rapidly and easily, attending to detail, and displaying a good memory. These children may also have superior physical coordination and at the same time become easily frustrated by their lack of fine motor coordination. They often have many mature, in-depth interests, a strong sense of moral values, and highly developed imaginations which allow them to create stories and songs. The children may be unusually sensitive to changes in their environments, have a heightened awareness of their own differences, and make mental connections between the past and the present. They can also be sensitive to other children's needs and feelings and are often effective and efficient problem solvers in both social and academic settings."

In the public education realm, early identification of giftedness is often considered as early entrance to kindergarten, while some states include early access regulations for early admittance. In Ohio, a student could qualify for early admittance to kindergarten, then may need further gifted identification.

A national perspective on early identification was provided by the National Association for Gifted Children (2015), reporting that early access to kindergarten was an often-underutilized strategy despite ample evidence of effectiveness. Early access to kindergarten is considered an effective strategy in supporting young, gifted learners. Reinert (2017) examined the limitations of school districts' adoption of early access processes and found that school districts were reluctant to adopt early access policies, even when policies were provided for consideration. Recommendations included increasing professional learning to address barriers toward adoption and increased funding options. Manning-Freeman (2017) found that open communication among stakeholders, as well as following clear process guidelines and decision-making based on a body of evidence, both contributed to the adoption of an early access

policy. In Ohio, public school districts (city, local, and exempted villages) are required to provide early entrance evaluations under ORC 3321.01 and ORC 3324.10 (Chapter 3324, 2022).

Several scholars recommend utilizing local norms rather than national norms: individual students are compared to those locally of the same age as opposed to all students of the same age nationally. Local norms can include differentiation by racial and ethnic groups, economically disadvantaged students and/or by building. Callahan and Azano (2021b) encourage recognition of talent and giftedness in place-based contexts. Rasheed (2019) recommends the utilization of local norms, as does Azano et al. (2017) who support the strategy of utilizing local norms (as opposed to national norms) in school districts to increase the number of students eligible for gifted services. Peters, et al. (2019) encourage the use of local norms to address inequities in identification in rural settings. Selecting appropriate gifted and talented assessment instruments that are culturally sensitive and account for language differences is encouraged by Giessman et al. (2013). Non-verbal assessments such as the Naglieri Non-Verbal Ability Test could be considered (Naglieri and Ford, 2015). Russell and Meikamp (1995) support efforts to identify rural gifted students from underrepresented groups might be improved by using information from parents, teachers, and community members as part of the assessment process. Clark and Zimmerman (2001) recommend local evaluation methods identified by advisory groups to include: (a) nominations by students, parents, teachers, local artists, and peers; (b) portfolios and sketchbooks; (c) projects and work samples; (d) questionnaires; (e) previous grades in art; (f) observation of students; (g) achievement test scores; and (h) written research proposals. Stambaugh and Wood (2021) encourage recognition and fostering of talent in rural gifted youth. Kuehl et al. (2022) promote equitable identification to be implemented in rural settings to increase identification of those “forgotten many.” To be even more equitable and responsive to local needs Ford (2013) recommends building norms.

Ohio's Gifted Identification Process

Identification policies and procedures are typically determined at the district level, but this varies from state to state. In Ohio, identification policies and procedures are determined by state law. Because no two gifted children are alike, it is important to collect information on both the child's performance and potential through a combination of objective (quantifiably measured) and subjective (personally observed) identification instruments in order to identify gifted and talented students.

Districts typically follow a systematic, multi-phased process for identifying gifted students to identify students who need services beyond the general education program: 1) the nomination phase, 2) the selection phase, and 3) the placement phase. In the nomination and selection phase, various identification tools should be used to eliminate bias.

This section provides an overview of legal gifted identification ability areas available in Ohio: superior cognitive ability, specific academic ability, creative thinking ability, and visual or performing arts ability (Chapter 3324.03, 2001). This section will also cover assessments, referrals, and whole-grade screenings.

Gifted Ability Areas

ODE lists the following criteria for gifted screening and identification by ability area and maintains a list of approved assessments for gifted screenings and identification (2021a).

Superior Cognitive Ability. Districts shall identify students as gifted in the area of superior cognitive ability when a student accomplishes any of the following: scores two standard deviations above the mean, minus the standard error of measurement, on an approved intelligence test; performs at or above the 95th percentile on an approved composite battery of a nationally normed achievement test or attains an approved score on an approved nationally normed above-grade level achievement test.

Specific Academic Ability. Districts shall identify students as gifted in the area of specific academic ability when a student performs at or above the 95th percentile in a specific academic ability field on an approved nationally normed achievement test.

Creative Thinking Ability. Districts shall identify students as gifted in the area of creative thinking ability when a student scores one standard deviation above the mean, minus the standard error of measure, on an approved intelligence test and attains either a qualifying score on an approved checklist of creative behaviors or a qualifying score on an approved creativity test.[5]

Visual or Performing Arts Ability. Districts shall identify students as gifted in the area of visual or performing arts ability when a student demonstrates superior ability in a visual or performing arts area through a display of work, an audition, or other performance or exhibition and obtains a qualifying score on an approved checklist of behaviors related to a specific arts area (ODE, 2021b).

The four ability areas defined by the Ohio legislature provide legal clarity on how students shall be identified as gifted for Ohio's city, local, and exempted village school districts. However, Ohio's community schools (public charter) and chartered non-public (private) schools are not required to identify gifted students.

District identification plans must include "assurance of inclusion in screening and assessment procedures for minority and (economically) disadvantaged students, children with disabilities, and students for whom English is a second language" (Chapter 3324.04, 1999). If a student meets the criteria for gifted identification within the previous 24 months, the school district must identify them as gifted in the corresponding category. Once a student is identified as gifted, they remain identified as gifted.

ODE also recognizes twice-exceptional students, students with both an identified area of giftedness and an identified disability that is recognized under the Individuals with Disabilities Education Act (2019b). The Ohio Department of Education specifies the process to create a list of approved assessments for gifted screening and identification from which districts select when developing their gifted identification plans (Chapter 3324.02, 1999; ODE, 2021a).

<u>Assessments</u>

District boards of education shall have a policy for screening and identification that specifies criteria and methods used to screen students for further assessment; multiple sources of assessment data that are used for identification; methods to ensure equal access to screening and further assessment; provisions for students withdrawing, reassessing, or transferring into the district; and methods for resolving

[5] Note that intelligence tests are not designed to identify creativity.

disagreements between parents and the district about identification and placement decisions (Chapter 3324.06, 1999). This policy must be distributed to parents as well (Chapter 3324.06, 1999).

Referrals. Students may be referred for gifted identification evaluation by parents, guardians, teachers, peers, or self-referral. Public school districts are required to evaluate a student within 90 days for an initial gifted evaluation. Districts must also provide two opportunities a year for referred K-12 students to be evaluated for gifted identification in any of the areas of gifted ability (ODE, 2021a).

Whole-Grade Screenings. School districts must use department-approved assessments to conduct whole-grade screenings once during the K-2 grade band and once during the 3-6 grade band, for all students in the areas of superior cognitive ability, specific academic ability reading/writing, specific academic ability mathematics, and creative thinking ability (ODE, 2021a).

Districts are required annually to report the number of students screened for further assessment in kindergarten through 12th grade, the number of students assessed, and the number of students identified as gifted in each of the identification ability areas from Chapter 3324.03 (Chapter 3324.05, 2021). This data will be audited by ODE at least once every three years, with technical support provided to districts out of compliance (Chapter 3324.05, 2021).

3. Provision of Services

Gifted service provision is another component of the gifted education system that is operated by districts, within the structure created by state law, regulation, and policy. As such, it is another component of the gifted education system that could be impacted by district incentives.

National Provision of Services

The provision of services and curriculum in rural gifted education presents evidence of both strengths and challenges. Azano et al. (2017) state, "There are both achievement and opportunity gaps for low-income students when compared to their economically advantaged peers; and, for rural students, these gaps may be even more pronounced" (p. 62). Callahan et al. (2020) describe the achievement and opportunity gaps between low-income students and their more economically advantaged peers as presenting serious challenges for gifted learners. Offering advanced and accelerated classes in mathematics, science, and foreign languages can be particularly difficult, in part because rural districts are less able than others to recruit and retain teachers with specialized preparation. Rural high schools are less likely than those in non-rural districts to offer Advanced Placement courses (Snyder et al., 2006). Schuler (1999) focused on the emotional well-being of rural gifted children and found that perfectionistic tendencies can become unhealthy in gifted learners without supportive interventions by educators and families. Burney and Cross (2006) found that rural high-ability students from low-income families frequently require support to help overcome problems of inadequate self-efficacy, low self-esteem, and self-concept and that students need to develop good study skills to succeed in rigorous courses. Differentiation of instruction helps meet the needs of students with different abilities (Tomlinson, 2017) Howley et al. (2009) described how the size of rural schools could impact the understanding of and support for implementing differentiation in curricular experiences for gifted students.

Secondary Gifted education curriculum researchers VanTassel-Baska and Hubbard (2015) suggest a list of recommendations for rural gifted programming and curriculum: supportive learning environments with peers; access to multicultural materials and resources; a curriculum that emphasizes critical thinking and problem-solving skills; project and problem-based learning; access to a range of educational opportunities; assessment of learning in a broader context; place-based; technology; summer, weekend, and after school programs; academic year specialized programs; collaborative services; mentorships internships and tutorials; and curriculum strategies (including acceleration, structure and scaffolding, independent learning, higher level questions, role models, graphic organizers, and biographies).

The authors recognize that teacher preparation is essential for these strategies to be effective. Assouline et al. (2021b) expand on the concept of acceleration and articulate finding the student's instructional level and providing instruction at that starting point, monitoring instructional pacing needs, and providing acceleration around strength with a continued emphasis on appropriate pacing. Integration with the community and expansion of out-of-school programming is recommended by Olszewski-Kubilius, et al. (2015) and Montgomery (2004) and includes building connections with nearby schools to share resources and build a community; creating a regional network for extracurricular, weekend enrichment; using hybrid learning programs; leveraging “dual enrollment” programs to provide access to college and university resources; collaborating with colleges and universities to create dedicated programs for gifted K-12 students; finding experts in the community and involving them as mentors, resources, and advocates; exploring community festivals, harvests, history celebrations; inviting students to electives, special interest groups, after school/activity clubs; exploring public libraries, historical societies, artists, musicians; examining technology already in place, and possible alternatives; and exploring what other rural schools have done to increase partnerships with community members.

Rural researchers (Azano, 2011; Azano et al., 2019; Gruenewald, 2003) support place-based curricula in rural education as a counter to the perpetuation of standards-based curricula. Gruenewald (2003) affirmed, “A critical pedagogy of place aims to contribute to the production of educational discourses and practices that explicitly examine the place-specific nexus between environment, culture, and education” (p. 10). In this way, curricula connections through place are an inherent part of the learning process, and by collecting community data to identify topics for place-based instruction, teachers are engaged in implementation, which, in turn, can improve instruction.

Ohio’s Provision of Services

While the state of Ohio mandates the creation of district plans for gifted identification and services, there is no legal mandate for school districts to provide services (Chapter 3324, 2022; OERC, 2016) other than implementing a policy around the following three forms of acceleration: whole group acceleration, subject area acceleration, and early high school graduation (Chapter 3324.10, 2007). Districts may adopt a state model policy or develop their own for an early admittance process that provides students with early entrance to kindergarten or first grade; however, early admittance does not equate to a gifted identification (Chapter 3321.01, 2013). Per ODE, districts may only report gifted services to parents if the district has paid for those services and if the services are aligned with the operating standards (ODE,

2018b). A letter must be sent to parents that clearly states their child is not receiving any services and may include other enrichment opportunities the district provides to students (ODE, 2018b).

Ohio's operating standards (2018b) give the following guidance to districts about the quality of gifted education services and clarify gifted educator qualifications.

Quality of Services

The operating standards outline the following gifted education services.

1) Gifted services must include differentiated instruction around "Depth, breadth, complexity, pace, and/or where content is above-grade-level" (ODE, 2018b, p. 5).
2) Gifted education services should occur during the instructional day, with flexibility for internships, mentorships, and higher education coursework and credit flexibility.
3) Gifted education instructional time, class sizes, and caseload ratios shall be equivalent to similar district offerings, with few exceptions.
4) The continuum of service may include, but is not limited to:
    a. A full-time self-contained classroom where the gifted intervention specialist is the teacher of record, and all students are identified as gifted. A maximum of twenty students at one time is permitted in this setting. The department of education, office for exceptional children, shall establish policies and procedures for granting temporary waivers related to this setting;
    b. A single subject self-contained course where the gifted intervention specialist is the teacher of record, and all students are identified as gifted;
    c. Services through co-teaching in a cluster grouping setting where a group of students who are gifted is deliberately placed together in a classroom where one teacher is a gifted intervention specialist with a maximum of twenty students who are gifted at any one time and a maximum caseload of eighty students who are gifted. The teachers shall be provided with regularly scheduled collaborative planning time. Each student served in this setting shall be provided instruction for no less than one core content class period a day or an average of fifteen percent of the school week. The department of education, office for exceptional children, shall establish policies and procedures for granting temporary waivers related to this setting;
    d. A resource room/pull-out where the gifted intervention specialist has a maximum of twenty students who are gifted at any one time and a maximum caseload of eighty students who are gifted. Each student served in this setting shall be provided instruction for no less than one core content class period a day or an average of fifteen percent of the school week. The department of education, office for exceptional children, shall establish policies and procedures for granting temporary waivers related to this setting;
    e. Cluster grouping, where a small group of students who are gifted is deliberately placed together in a classroom. Each student served in this setting shall be provided instruction for no less than one core content class period a day or an average of fifteen percent of the school week;
    f. An honors course;

g. An international baccalaureate course;
h. An advanced placement course;
i. Services through a trained arts instructor;
j. Grade acceleration, early entrance to kindergarten or first grade, subject acceleration, or early graduation from high school per district acceleration policy approved under section 3324.10 of the Revised Code;
k. Dual enrollment opportunities including but not limited to College Credit Plus;
l. In internships and mentorships; and/or
m. Educational options include credit flexibility, advanced online courses and programs, and other options as defined in rules 3301-35-01 and 3301-35-06 of the Administrative Code. (ODE, 2018b, pp. 5-6).

Acceleration

Academic acceleration strategies are important to better allow gifted students to access educational resources at a speed and level that matches their academic ability and rapid learning. A school district may provide gifted students with a variety of accelerated educational services such as whole-grade acceleration, single-subject acceleration, early admission to kindergarten, early high school graduation, and differentiation strategies such as curriculum compaction.

In 2006, the Ohio Board of Education adopted the *Model Student Acceleration Policy for Advanced Learners*, described in Chapter 3324.10 (2007), which includes recommendations for whole-grade acceleration, individual-subject acceleration, early admission to kindergarten, and early high school graduation (ODE, 2006). School districts were required to either adopt this policy or submit another policy for approval by the Ohio Department of Education (Chapter 3324.10, 2007).

Gifted Educator Qualifications

As Ohio school districts consider the provision of services for gifted students, they must also consider how to determine which educators are qualified to specifically work with gifted students outlined in the operating standards (ODE, 2018b). The operating standards clarify the endorsement or licensure requirements for gifted intervention specialists, general education teachers who provide gifted services, and gifted education coordinators (ODE, 2018b). All school personnel assigned to providing gifted services "shall be provided with appropriate space and sufficient time for designing their work, evaluating student progress, conferencing, and planning" and are held accountable to the Ohio educator evaluation system (ODE, 2018b, p. 9).

Gifted Intervention Specialists (GIS). Specialists must hold either a gifted education licensure or endorsement and complete ongoing professional development about gifted education, as determined by the district (ODE, 2018b, p. 7).

General Education Teachers who are Designated to Provide Gifted Services. Teachers designated to provide gifted education services receive specific training and ongoing professional learning about gifted education (ODE, 2018). Designated teachers must also complete 15 clock hours of gifted education professional development each year for the first four years unless they have 24 advanced placement or

international baccalaureate certification hours within the past five years, in which case they only need to complete seven-and-a-half hours of annual gifted education professional development for each of the first four years (ODE, 2018b). Designated teachers must continue to receive ongoing professional development in future years, with "ongoing support in curriculum development and instruction from an educator who holds licensure or endorsement in gifted education" (ODE, 2018b, p. 9).

Coordinators of Gifted Education. Gifted education coordinators are charged with consulting and assisting school personnel to support gifted student identification, placement, services, district strategic planning and school improvement plans, and evaluating gifted education programming for effectiveness "including input from parents of students who are gifted" (ODE, 2018b, p. 9). Coordinators must have at least three years of teaching experience. If they are supervising teachers, they must hold an Ohio administrative license, be licensed, or endorsed in gifted education, and participate in ongoing gifted education professional development (ODE, 2018b). Any district employees, including principals, may also serve as the gifted coordinator if qualified (Chapter 3324.08, 2011).

Provision of Services Challenges and Opportunities

While the challenges of providing services to rural gifted learners are well documented (Azano et al., 2017; Callahan et al., 2020; Howley et al., 2009), many opportunities exist if resources are provided, including through providing a rigorous curriculum for gifted learners, implementing instructional strategies, and offering professional development. A specific focus on the value of place-based curricula is supported along with a curriculum that represents and is relevant to their life experiences (Azano et al., 2017; Gruenewald, 2003). Engaging the community in support of gifted learners may lead to more gifted students choosing to remain in their communities (Matthews, 2020).

4. Written Education Plans (WEPs)

WEPS are implemented by districts as a tool to manage the implementation of services, recognize identification, and progress monitor individual students. Districts implement WEPs within the structure created by state law, regulation, and policy. As a component of the gifted education system implemented by districts, it has the possibility of being impacted by district incentives.

This section includes information on Ohio's WEPs, the national context on WEPs, sometimes named "Advanced Learning Plans" or "Individual Education Plans," and speaks to the challenges and opportunities present in developing, implementing, and monitoring these individual plans within rural systems.

National Written Education Plans

The requirements and practice regarding WEPs for individual students vary from state to state. For example, Colorado requires an Advanced Learning Plan (ALP), a legal document (Colorado Department of Education, 2022, CRS 22-20-R-12.00) that outlines programming for identified gifted students that is used as a guide for educational planning and decision-making. The Exceptional Children's Educational Act [Colorado Department of Education, 2022, CRS Article 20 of Title 22), the overarching Colorado state law for gifted education and special education, states that there will be ALP content and procedures set in Rule for statewide implementation. It requires that goals in the ALP are standards-based. Sections

12.02(2)(f) – 12.02(2)(g)(vi) of the Rules clarify ALP content, procedures, and responsibilities (Colorado Department of Education, 2022). For high school students, the ALP may be blended with an Individual Career and Academic Plan (ICAP) if all contents of the ALP are inclusive in the ICAP, including achievement and affective goals (Colorado Department of Education, 2022).

Ohio's WEPs

Ohio's operating standards for gifted education (2018b) mandate require that gifted services shall be documented with a WEP developed in collaboration with a licensed or endorsed gifted education educator. The WEP outlines a description of services for each gifted student, measurable academic goals; methods to evaluate progress and performance of the goals; a timeline and process for sharing progress with the student and parents, details of staff members' responsibility for ensuring that services are appropriately delivered, clear policies to support gifted students' need to waive assignments and rescheduling of tests when receiving gifted services outside of the general education classroom, and the date for annual WEP review and revision. Copies of the WEP will be shared with parents, the gifted education collaborator, and all educators responsible for providing gifted education services to students. Districts will attempt to receive an annual parent signature on the WEP, but students may not be denied services because of a lack of signature (ODE, 2018b).

WEP Challenges and Opportunities

Challenges for incorporating WEPs include systemic training for gifted specialists and coordinators about how to write a WEP and the need to communicate proactively with parents and families in their native languages about the opportunities that districts provide for students on WEPs.

An opportunity for WEPs could explicitly include parents and older students in the collaboration process to develop the WEP. Another opportunity for the WEP is to provide a clear record of goals, progress, and services received by each gifted student.

5. Professional Learning Opportunities (Professional Development)

Professional learning for gifted educations provided by many components of the education including by teacher preparation institutions, school districts and ESCs. Because school districts provide some professional learning, this component of the gifted education may be impacted by district incentives.

National Research on Educator Professional Development

The literature is clear regarding the value of professional development for educators, including district administrators, building principals, counselors, psychologists, and teachers. Considering the significant link between teacher quality and student achievement, and therefore school improvement (Darling-Hammond, 2010), the need for specific and unique professional development for rural teachers and principals becomes more pronounced. In the largest educational leadership study ever conducted, Louis et al. (2010) found consistent evidence that leadership is second only to classroom instruction as an influence on student learning. Numerous researchers support preparing a cadre of rural teachers, principals, and coaches to provide best practice instruction and rural student support through evidence-based, high-quality professional development (Ebbeler et al., 2017).

Ohio's Professional Development

General education teachers who are designated to provide gifted education services are required by the ODE to complete 15 clock hours of gifted education professional development each year for the first four years unless they have 24 advanced placement or international baccalaureate certification hours within the past five years, in which case they only need to complete seven-and-a-half hours of annual gifted education professional development for each of the first four years (ODE, 2018b). Beginning in the fifth year of employment in such a role, designated teachers should receive continuing professional learning following their fourth year with "ongoing support in curriculum development and instruction from an educator who holds licensure or endorsement in gifted education" (ODE, 2018b, p. 9)."

Ohio school districts offer professional development to trained individuals, including general education teachers, who are designated providers of gifted services. "Trained individual" means a person who by training or experience, is qualified to perform the prescribed activity, e.g., educator, private teacher, higher education faculty member, working professionally in the field of visual or performing arts, or a person trained to administer assessments/checklists to identify gifted ability in creative, visual, or performing arts" (Rule 3301-51-15(A), 2018).

Ohio school districts provide required high-quality professional development for general education teachers who are designated gifted service providers (ODE, 2019a) around topics including differentiation strategies, selection of advanced curriculum, social and emotional needs, and culturally responsive learning environments to recognize and respond to gifted students from traditionally underrepresented populations, the use of data and selection of assessments, and an ability to help develop the WEP (ODE, 2018b).

ODE provides Ohio educators with online access to professional development modules with resources, presentations, and activities to support gifted students that were developed through a Jacob K. Javits US Department of Education grant project (ODE, 2020b). These modules help:

- Build district capacity to deliver high-quality professional development in gifted education to five target groups: administrators, counselors, classroom teachers, parents, and school psychologists.
- Familiarize their districts with the characteristics of gifted and talented students and with strategies for meeting their unique instructional, social, and emotional needs.
- Help their district meet local, state, and federal requirements for ongoing high-quality professional development.
- Familiarize their district with differentiated instruction strategies that can be used to help all students achieve value-added growth (ODE, 2020b).

ODE also provides a collection of instructional resources for teachers working with gifted students, including sample lesson plans, activities, and rubrics; unit and lesson design thinking tools; model curricular resources; information about the universal design for the learning; and a snapshot of interventions and accommodations (ODE, 2022f). ODE demonstrates a commitment to providing all educators who support gifted students with high-quality professional development to help them improve gifted student outcomes.

Currently, licensed teachers can obtain a temporary supplemental teaching endorsement from ODE while working to obtain full gifted education licensure or a gifted education endorsement, which allows the individual to function as a gifted intervention specialist (ODE, 2020c). More research is needed to determine if pre-service educators in Ohio receive any professional learning about gifted education.

Professional Development Challenges and Opportunities

Currently, professional development for teachers and administrators that improves student learning outcomes and educator practice is mainly focused on students who perform at the lowest levels of achievement (Hafenstein et al., 2019). Access to high-quality professional development is limited, particularly using local data to inform instructional decisions (Clarke & Stevens, 2006). The unique needs of gifted and talented students and the recognition of characteristics of giftedness as an at-risk or vulnerable population may be unnoticed and masked by the focus on other underachieving learners. In Ohio, seven categories of students are designated as vulnerable youth: students with disabilities, ELL students, migrant status, students experiencing homelessness, justice-involved youth, students in foster care, and students with parents in the military (ODE, 2022g).

Ehlers and Montgomery (1999) found that too many rural teachers end up "teaching to the middle" — an approach that does not serve gifted children well. By differentiating instruction, however, teachers can provide a more appropriate curriculum. The authors concur that an appropriate curriculum for gifted students differs substantially from the general education curriculum "in content, process, product, and learning environment;" it needs to be "more complex, more abstract, and more varied" (p. 96). Azano et al. (2014) found that teachers working with gifted students in rural settings struggle with limited resources and time challenges. They also report challenges in educators' beliefs around giftedness and the perceptions that gifted students do not need specialized education. Croft (2021) describes multiple challenges related to rural gifted education teachers, including demanding expectations, frequently filling multiple roles, limited pre-service training related to gifted, not living in the local community, needing to travel between schools to serve multiple locations, holding conflicting values or beliefs with the local community related to the value of creativity or educational aspirations, and conflicts with high stakes testing and accountability as opposed to strength-based measures.

Numerous resources exist to frame both content and process of pre-service teacher training and professional learning in gifted education. The National Association for Gifted Children National Standards in Gifted Education, which includes standards for Knowledge and Skill Standards, and Teacher Preparation Standards are recommended as guidance. The World Council for Gifted and Talented Children's Global Principles for Professional Learning in Gifted Education (WCGTC, 2021) offers guidance with a broad perspective applicable to rural settings. Croft (2021) urges professional development to better serve gifted students in rural settings.

Pre-service teacher training and professional learning should include aspects relevant to the population and the context including economically disadvantaged students and rural context. Like Cross and Stewart (1995), Davalos and Griffin (1999) explored the impact of the rural environment on gifted and talented students and their teachers. They identified strengths of rural schools, including a supportive family atmosphere; generally good teacher-to-student ratios; smaller teaching staffs; conditions favoring

the adoption of effective practices; and the value placed on sports, extracurricular activities, peers, and family. Characteristics of gifted learners, including cognitive and affective characteristics, are an essential component of content (Howard, 2017). Building on characteristics, rural educators benefit from an in-depth understanding of gifted identification instruments and processes, including consideration of local norms. Starker (2008) recommends training rural educators about culturally responsive teaching and leadership practices. Azano et al. (2020) recommend additional teacher and asset-based (not deficit-based) training to promote equity of opportunity for all learners. As Azano et al. (2017, 2020) suggest, all professional learning should be considered in the frame of the value of place-based education, focusing on the strengths rural communities bring to the education of young people in these rural settings.

6. Program Evaluation and Accountability

Ongoing program evaluation is required to inform continuous accountability and improvement of gifted education (Callahan, 2018; Neumeister & Burney; 2019; VanTassel-Baska, 2004). Since the implementation of NCLB all states have had school and district accountability systems. Ohio's school report card includes a gifted education indicator which is an incentive for district to reach a certain level of gifted identification and services as well as achievement and growth by gifted students.

National Gifted Program Evaluation and Accountability

All gifted students have a right to a quality education (VanTassel-Baska, 2004). While a comprehensive gifted education system strives to provide a quality education, ongoing program evaluation is required to inform continuous improvement (Callahan, 2018; Neumeister & Burney; 2019; VanTassel-Baska, 2004). VanTassel-Baska (2004) recommends educational systems collect valid and reliable data of student assessment and progress as part of an annual program evaluation to foster stakeholder satisfaction and indicate areas of program success. This data should be collected annually and used to inform the development of gifted education policy and future programs to improve (Feng & VanTassel-Baska, 2004; VanTassel-Baska, 2004).

Neumeister and Burney (2019) provide guidance for gifted education program administrators to design, implement, and report on comprehensive evaluations of gifted education programs. To design a program evaluation, the focus and scope must be determined, stakeholders must be identified and invited to serve on the program evaluation committee, and a timeline of activities established. Next, a data collection and analysis plan is developed and implemented by the program evaluation committee. Finally, a report of the program evaluation findings is constructed and disseminated to highlight areas of both strength and improvement, focusing on "quick wins" (p. 55) and longer-term wins.

Ohio's Program Evaluation and Accountability

Ohio's school accountability system was recently changed in the 2021-22 school year. Some measures including the gifted performance indicator will continue to change over the next several years with increasing performance expectation.

The gifted performance indicator is a group of three elements in the Gap Closing Component of Ohio's School Report Card. The three elements are the Gifted Performance Index, Gifted Progress (Growth), and evaluation of the identification of, and services provided to, students who are gifted.

Gifted Indicator

The rating process has two steps. First, points are awarded for each component of the Gifted Performance Indicator (ODE, 2022e). School districts with fewer than 600 students may not be rated on some components. Points are awarded based on the following elements:

- **Performance element** is based on gifted student achievement on state assessments. Requires 15 assessed students.
- **Progress element** measures the value-added performance of gifted students. Schools or districts must have 15 assessed students.
- **Identification and services element** measures the percentage of students in each grade level who are identified as gifted and the percentage of these identified students that are provided gifted services. Both measures are disaggregated by traditionally underrepresented and economically disadvantaged students as measured by the representation index used by the Department.

The second step determines whether annual goal is met based on whether a school or district is within a certain percentage of the total possible points awarded. This percentage was at 60% for 2021-22 and moved to 80% for 2023-24[6].

Self-Report on Identification and Services

School districts are required to annually submit a self-report survey about identification and services for gifted students (ODE, 2020a).

Waivers for Gifted Education Services

School districts may submit gifted education service waiver applications for:

- Full-time self-contained classroom where the class size exceeds the maximum of 20 students.
- Co-teaching cluster group in which the cluster group of identified students exceeds the maximum of 20 students or the gifted intervention specialist's caseload exceeds the maximum of 80 students.
- Resource room or pull-out setting where the class size exceeds the maximum of 20 students, or the gifted intervention specialist's caseload exceeds the maximum of 80 students (ODE, 2017).

Waivers should include a rationale for the waiver and a description of the implementation plan, including action steps and a timeline.

[6] For more information on the gifted performance indicator see: https://education.ohio.gov/getattachment/Topics/Data/Report-Card-Resources/Resources-and-Technical-Document/Gap-Closing-Component/Gifted-Performance-Indicator/2021-2022-Gifted-Performance-Indicator-Technical-Documentation.pdf.aspx?lang=en-US

Fiscal Accountability

ODE audits district identification plans every three years for noncompliance. ODE will also audit service numbers for the 2021-2022 and 2022-2023 academic school year.

- If districts are noncompliant, ODE shall reduce the gifted education funding received by the district (ODE, 2018b).
- For fiscal years 2022 and 2023, ODE is required to publish district information about:
  - The number of services provided to gifted students,
  - Numbers of licensed or endorsed gifted education specialists and coordinators, and
  - More detailed information about expenditures (Chapter 3324, 2022).

Ohio Department of Education Resources

ODE (ODE, 2017) strives for accountability of the gifted education program by publishing resources for:

- Development of district gifted identification plans;
- District gifted identification policy;
- A tool for data collection for students who are gifted;
- Gifted indicators on Ohio's school report cards to reflect the level of performance, progress, and inputs for gifted students;
- Steps for using the school district self-report on identification and services for students who are gifted to submit in the Compliance Monitoring application, which is accessed through an educator's OH|ID portal login; and gifted expenditure reports.

Using the Literature Review to Identifying Incentives for Ohio

The literature review provided a structure for further data collection by identifying the key components of the gifted education system that are under the purvey of districts and may be impacted by district incentive approaches. These components are:

- Gifted student identification,
- Provision of gifted services by districts or Educational Service Centers (ESCs),
- Written Education Plans (WEPs),
- Professional learning opportunities for gifted education.

The literature review also provides a high-level overview to the state's gifted accountability system which is part of the Ohio's School Report Card which is an incentive for districts to achieve certain levels of gifted identification, service provision, as well as achievement and growth by gifted students.

Chapter 3: Survey Results

The purpose of the survey was to identify successes, challenges, and barriers to implementing best practices around gifted identification and services and possible incentives to help improve gifted education identification and services. The survey also provides information on the prioritization of incentives and is one of the several tools in this project for identifying participants for focus groups and PJ panels.

The study team developed the survey with consultation and review by staff at ODE and a group of Ohio-based stakeholders identified by ODE. The final survey is included in Appendix B.

Survey Participation

ODE sent an invitation to participate in the survey to approximately 1,700 educators, school/district leaders, and ESC personnel who were identified in the Education Management Information System (EMIS) as associated with implementing gifted education programs in rural districts. The survey was administered online and fielded from May 11 through May 26. There were approximately 119 responses, with respondents representing 92 different districts or ESCs. The role most identified by respondents was gifted coordinator (33 percent), followed by superintendent (14 percent) and principal (14 percent). About a quarter of the respondents reported having multiple roles, with the additional role most often being gifted coordinator.

Of the respondents, 81 percent identified the district or ESC where they work. Of those that identified where they worked, 12 percent worked at ESC, and 88 percent worked at districts. Using ODE's typology of rural districts, about 50 percent of respondents that identified their districts worked in districts categorized as rural with high student poverty (Typology 1). The remaining roughly 50 percent work in districts described as rural with average student poverty. ODE identifies 124 districts as rural, high poverty compared to 107 that they identify as rural, average poverty. This analysis focused on the entire sample to describe challenges throughout the state's rural areas and not by subgroups by district typology or role.

Survey Overview

Many of the survey questions focused on identifying barriers and successes within the system for gifted identification and services, in the four key component areas based upon the national literature and Ohio regulatory review, as well as more generally about gifted funding and policy in Ohio. These question areas include:

1. Gifted dentification
2. Provision of gifted services by districts or ESCs
3. Written education plans
4. Professional learning opportunities
5. Gifted funding and policy

A robust series of questions about successes, challenges and barriers related to specific subcomponents of these areas was included in the survey. Subcomponents (expressed as statements that survey participants could agree or disagree with) in each area are shown in table 3.1 below.

Table 3.1: Gifted Education Component Areas and Subcomponent Survey Items

Component Areas and Subcomponents
Gifted Identification
We have easy access to assessments for gifted identification
We receive good information about student educational needs from our assessments
Our assessments are appropriate for our local population
Our assessments for gifted identification are effective tools to identify gifted students
Our whole grade assessments are effective tools to identify gifted students.
We have many gifted students in this community
We find it is satisfying to help gifted students
Families in our district support having their children identified as gifted
We value identifying a diverse pool of gifted students
We work hard to identify students with different talents and gifts
We successfully identify students who are gifted in some academic areas while average in other areas
We successfully identify students who are twice-exceptional
Provision of Gifted Services, by Districts and by ESCs
Many of our classroom teachers want to teach gifted students
We have a shortage of classroom teachers that are qualified to teach gifted students
Our district has an effective gifted education leadership
Gifted services are a high priority to our district leadership
We prioritize serving gifted students
We have adequate space for providing gifted services
Serving gifted students is worth the investment
We work with colleges to provide College Credit Plus (i.e., dual enrollment) for students
We work with local businesses to provide opportunities for gifted students
We have an excellent curriculum for our gifted students
We have excellent opportunities for our gifted students
We have adequate funding to serve gifted students
We provide programming for students who are twice exceptional
Written Education Plans
Our staff write effective goals in WEP
The team of educators helping to develop WEPs changes depending on each student's needs and abilities
Parents are engaged in the WEPs process
WEPs are valuable tools for supporting gifted students
Professional Learning Opportunities
New classroom teachers are well prepared to work with gifted students
We have access to adequate gifted education professional development

Component Areas and Subcomponents
Gifted Funding
We have adequate funding to provide gifted services
Funding uncertainty is a barrier to providing gifted services
We have sustainable funding for gifted education
Our district uses grants to support gifted education
Gifted education is a top priority in our district's budget
Gifted Policy
Ohio's definition of gifted is appropriate
Ohio's gifted standards are easy to implement
Ohio's gifted standards are confusing
Gifted services are not offered because they are not required by the state
Required gifted reporting is overly burdensome

The remainder of this chapter will provide summary information on each component, with full detail on survey results available in Appendix C.

Quantitative data on Challenges, Successes, and Barriers

Table 3.2 provides a summary of whether survey participants felt that a component area represented a success or a challenge in providing gifted education, as well as if it was determined to be a barrier.

The percentage of survey participants indicating they agreed or disagreed with a statement, and the percentage that undedicated it was/as not a barrier, were translated into a numeric value (1-5) and an average is shown across subcomponents in a given component area, as presented in the table below. Based on these average values, no color and lighter green are used to highlight the components of the gifted education system that respondents identified as successful/not a barrier and darker green to indicate components that respondents identified as a challenge/barrier.

Table 3.2: Summary Quantitative Data on Gifted Education Components: Darker is Larger Challenge/Barrier

Components of Gifted Education	1= Strongly Agree is a Success, 5=Strongly Disagree	1=Not a barrier, 5= Great Extent of a Barrier
Gifted Identification	**2.05**	**1.76**
Provision of Gifted Services by Districts	**2.65**	**2.45**
Provision of Service by Educational Service Centers	**2.71**	**2.07**
Written Education Plans (WEP)	**2.72**	**2.01**
Professional Learning Opportunities for Gifted Education	**3.28**	**2.59**
Funding for Gifted Education	**3.48**	**2.94**
Gifted Policy	**2.64**	**2.06**

Gifted identification was identified as a success, particularly access to assessments. The survey had five questions about assessments for gifted identification. Average responses for all of the questions

indicated respondents were more positive about assessments than any other surveyed component of Ohio's gifted education system.

Generally, respondents identified more components as challenges than barriers. Challenges and barriers identified by the survey focused on funding, provision of services, professional learning, and gifted policy. Lack of adequate funding was identified as a key limitation to gifted education. Finally, policy, particularly the lack of a requirement for gifted education service provision, is identified as a barrier.

Qualitative Data on Challenges, Successes, and Barriers

The survey had extensive opportunities for respondents to provide comments and qualitative data on rural gifted education. When commenting on the biggest successes, two themes emerged. First is the ability to challenge students by meeting and serving their gifted abilities. The second theme was observing the success of educators who grow their practices and make the effort to meet student needs. Many described placing students in classes appropriate to their abilities. Several described how the College Credit Plus dual enrollment system has been great for gifted students (ODE, 2022a). Others described successes of the program in terms of providing advanced coursework, accelerating extended curriculum to meet gifted student needs, and serving students who may not have previously had an educational experience that met their needs.

Leaders described successes in growing gifted programming in their district. Some were thankful for the priority placed on gifted education within their district and longstanding programming for gifted students. Leaders also talked about particular examples of exceptional programming within their district, such as supporting students in fourth through sixth grades, Project Lead the Way, or exceptional educators or leaders that help students grow.

There were multiple comments about assessments being a barrier to **identifying** diverse populations and appropriateness of assessments for local populations because the cultural references of the assessments diverged from the lived experiences of gifted students in rural districts. Respondents did not believe the current assessments identified all gifted students, and respondents said currently approved assessments are not appropriate for rural populations with limited access and exposure to the types of thinking being addressed in the assessments.

Survey participants were also asked to identify which of these areas were barriers in their district for **providing gifted services**; they identified the following as barriers:

- A shortage of classroom teachers that are qualified to teach gifted students.
- Being able to partner with local business to provide opportunities (mentoring, internships and out of school experiences) to gifted students.
- Being able to provide excellent curriculum and opportunities for gifted students.
- Adequate funding to serve gifted students.

Respondents' comments identified several causes of the shortage of teachers to provide gifted education services. Some respondents reported gifted education was not a priority for their district.

Staffing or lack of staffing for gifted education services indicate the level of priority for gifted education. When discussing teacher shortages, several commenters said gifted education services could be challenging when the regular classroom teacher is the only provider of these services. In other words, without a dedicated position, providing gifted education services can be a challenge. As was noted earlier, some teachers find the differentiation for gifted students challenging, which is a disincentive to working in gifted education. Another disincentive is the out-of-pocket costs and time required for training to be qualified to teach in gifted education additional without proper funding a respondent stated without additional financial incentives.

While some respondents reported partnerships with local businesses as a strength of their gifted programs, a larger group of survey respondents indicated their school/district lacked opportunities to engage with local businesses due to their rural location and that this was a barrier to providing gifted services

As noted earlier, curriculum was identified as a barrier. Comments about the curriculum mostly emphasized roles of individual teachers in developing or implementing available curriculum for gifted students.

Comments regarding **service provision by ESCs** focused on transportation barriers and service providers facing many demands on their times. Some respondents reported providing services within schools because the ESC was too far away. Several participants also commented that service providers at the ESC were stretched thin.

Several respondents described **WEPs** as a barrier to service provision because of either the time used to write them or lack of coordination between those that write the WEP and those that implement it, while others suggested WEPs are completed for compliance reasons and are not living documents that reflect supports students receive. Many comments on the WEP indicated teachers lack the knowledge to write effective goals and other parts of WEPs

When discussing **professional learning**, the preparation level of new teachers is seen as a barrier to gifted education. There were multiple comments about new classroom teachers that generally described the perception that newly prepared teachers have little or no knowledge of how to support or provide gifted services. Not only do newly prepared teachers need more training on gifted education, but also the characteristics of economically disadvantaged gifted children and of gifted children from isolated communities.

Discussion of challenges around funding uncertainty and sustainability often described district leaders' unwillingness to invest in personnel if they did not believe the investment was sustainable. Finally, several respondents added that funding uncertainty made planning for gifted education and services challenging.

Summary of Recommended Incentives to Improve Gifted Identification and Services

The survey asked about the types of incentives that would best improve several components within the system for gifted identification and service provision. Incentive questions covered the components of the gifted education system that were under district or ESC control:

- Gifted identification
- Provision of gifted services by districts or ESCs
- Written education plans
- Professional learning opportunities

As noted previously, the study team identified a list of 11 possible incentives in consultation with ODE and stakeholders (that is shown in Chapter 1). These incentives can be summarized into three different areas: financial, capacity building and accountability. Financial incentives included reimbursement to districts or ESC as well as incentives to individuals for obtaining a gifted endorsement. Capacity building incentives included training and technical support. Accountability incentives included more informal incentives such as public recognition as well as more formal incentives such as additional points on the accountability report card.

Respondents were asked to identify the single incentive they thought would best help their district best address a given challenge. Table 3.3 summarizes these responses. The percentage in a cell represents the proportion of respondents to that question who think that an incentive in this area would best improve the effectiveness of that component of the gifted education system. Respondents could only select one incentive. For example, 31 percent of respondents think reimbursement beyond the cost of providing that service is the best incentive for improving gifted identification.

Table 3.3: Summary Quantitative Data on Rural Gifted Incentives

	Gifted Identification	Provision of Services by Districts	Provision of Services by ESCs	Written Education Plans	Professional Learning Opportunities
Financial incentives	69%	72%	56%	47%	64%
Capacity building incentives	30%	27%	42%	53%	31%
Accountability incentives	1%	1%	2%	0%	6%
# of Respondents	97	74	45	73	72

For most components of the gifted education system, the majority of respondents identified some sort of financial reimbursement as the best tool to address challenges within a gifted education component. The exception is WEPs where most respondents recommended capacity building incentives instead of financial incentives. Very few people recommended accountability-related incentives, with the largest proportion recommending accountability-related incentives in the professional learning component.

Respondents provided additional comments about the use of incentives to improve gifted programming. Across all the different types of incentives, a common theme was that additional funds would be used to

increase staffing. Staffing shortages as well as need for increased staff capacity could be addressed through increased funding. This increased in staffing could translate to providing new experiences for gifted students to allow them to better preform on assessments, developing new curricular materials to support gifted students and investing in building relationships with local businesses to provide new opportunities for gifted students.

Chapter 4: Focus Group Results

This chapter summarizes the results of focus groups conducted by the study team to gather input from rural Ohio gifted educators.

The study team conducted six 90-minute focus groups with 31 total participants during September 2022. The focus groups were intended to engage rural gifted educators and leaders across the state about the challenges and successes of providing gifted services. The focus groups also discussed how incentives could be used to address those challenges. These educators shared overall context on the provision of gifted education services in rural Ohio districts and schools.

Questions were asked in the following areas:

1. Identification of students for gifted services
2. Provision of services by districts and by ESCs
3. Written education plans
4. Professional learning opportunities
5. Funding

In each of these areas, facilitators asked focus group participants about successes, challenges, and how incentives could be used to address those challenges. The focus group protocol can be found in Appendix D. At the end of the focus group, facilitators asked participants to reflect on the use of incentives to support gifted programming in rural schools.

The study team invited focus group participants from a pool of volunteer rural gifted educators and statewide rural gifted education leaders identified by ODE. The invitees represented different roles in the education process: five regions of the state identified by the Ohio School Boards Association and two types of rural districts identified by ODE. ODE identified two types of rural districts: 1) higher-poverty rural districts (typology 1) and 2) average poverty and smaller student enrollment rural districts (typology 2).[7] The study team used the five regions identified by the Ohio School Boards Association as a tool to ensure regional representation.[8] Information about focus group participants can be found in Appendix E.

The next section of this report describes focus group members' perspectives on successes and challenges for each of the components listed above, and then the use of incentives to address these challenges.

Identification of Students for Gifted Services

Gifted identification in Ohio involves assessing students using state-approved assessments and identifying students whose scores meet or surpass gifted identification thresholds, through either whole

[7] See https://education.ohio.gov/Topics/Data/Frequently-Requested-Data/Typology-of-Ohio-School-Districts.
[8] See https://www.ohioschoolboards.org/osba-regions.

grade screeners or after a student is referred for assessment. Focus group participants first discussed successes and challenges related to identifying gifted students.

Successes

Several focus group participants discussed the value of assessments that took less time to administer and the use of assessments that address several different district needs. For example, reading assessments are especially valued if they can meet the state's K-3 reading diagnostic requirements, support gifted student identification, and support progress monitoring by teachers. Focus group participants reported that employing these multiple-use assessments increased teacher and leader engagement in the assessment process and results. Often these multi-use assessments were administered several times a year as part of progress monitoring, which gave multiple opportunities to assess students who are very close to meeting the identification threshold. Focus group participants indicated this can be particularly helpful for subgroups that are underrepresented in the gifted population and may need extra supports or opportunities to be identified. A focus group participant remarked that state policy around identification was a success in that it recognized that gifted students come from different backgrounds and have different characteristics: gifted students are not always "teacher pleasers."

Challenges

At the same time, focus group participants raised concerns about over-testing and the provision of multiple opportunities for identification. Over-testing concerns may be driven by districts that are doing whole-grade assessments using instruments that do not serve multiple uses (for instance, those that can only be used for gifted identification) particularly since these assessments can take significant time to administer There is also a tension with having multiple opportunities for identification, which panelists felt was best practice for students from underrepresented groups, but also took time. Further, panelists expressed concerns about using assessments to measure ability, as error can lead to students meeting the assessment threshold when they are not gifted. This concern was higher for students that are identified in the lower grades; because gifted identification is a status that students maintain throughout their K-12 education, and early grade mistakes in identification can lead to academic struggles in later grades.

A concern voiced by many focus group participants was whether the current processes can identify gifted students from underrepresented backgrounds, including low-income and ELL students. Many said the assessments used for identification require skills and experiences low-income rural students are not exposed to. For example, they worried that some schools do not teach students skills assessed on some tests, such as vocabulary, analogies, visual and spatial skills, or map skills. Students may not be exposed to these skills because their schools emphasize teaching reading skills over other content areas. Participants suggested some rural students needed additional supports to develop the skills on which the assessments focus. They also suggested schools may need to use different assessments to identify students, which would incur additional costs in training people on administering and interpreting the assessments, as well as purchasing the assessment materials. Participants suggested supports, such as identifying and supporting talent pools of exceptional children who are struggling with assessments.

Another challenge participants identified was implementing the existing gifted rubric for visual and performing arts. Focus group participants indicated it takes significant time to train people to implement the rubric and not many people are trained. One participant noted that while districts are required to identify students, they can choose to not serve those students. Those that choose to not serve students have fewer reasons to put significant efforts into identification.

Provision of Services by Districts

This section describes both successes and challenges in service provision because the successes that our focus group participants identified were also associated with challenges or exceptions to those successes. This is followed by a short section that includes only challenges.

Successes

The recent state policy clarification on the process to become designated providers was often identified as a success by focus group participants. Several participants stated that participation in the designated provider training increased teacher awareness of gifted education and increased their engagement in both the identification and service provision process. A participant argued that teachers who receive this training improve their instructional differentiation, which helps all students (not just gifted students) grow academically in general education classrooms. However, participants also raised a few caveats. First, the ability of teachers to benefit from the training rested on whether the training itself was high quality. Second, full implementation of many of the skills learned in the designated provider training required follow-up, i.e., post-training support. This support includes coaching, or "lunch and learns," in which teachers collaborate and learn about successes and resolve challenges to implementing the training they received. Third, teachers may not implement the gifted services training they received, and gifted coordinators and gifted intervention specialists have few tools to ensure that teachers implement the gifted instructional techniques.

Focus group participants identified the College Credit Plus program, which supports secondary students as they take dual enrollment college courses, as a successful gifted service provision. However, a participant noted that transportation was sometimes a barrier to participation in the College Credit Plus program.

The state's accountability system for gifted service provision was described as both a success and a challenge. Participants identified successes around the multiple measures used in the system and the rewards for identifying students from underrepresented groups. A challenge identified was reaching achievement accountability targets was seen as more difficult than growth targets.

Several participants discussed how supportive district environments were key to successful gifted service provision. Supportive environments include administrators who are knowledgeable about gifted education and support the use of resources to provide gifted services, including implementation of curriculum that is relevant to rural students who can recognize themselves within the material. The knowledge of gifted education can be crucial at the secondary level when course schedules can enhance or limit the use of resources and could include providing more pull-out services, co-teaching, and developing community mentorships for gifted students. The community mentorship program was

described as a significant success. Participants also indicated that this program requires significant resources to support contacting and engaging community members to support gifted students in their areas of interest and giftedness. A supportive district environment can also enhance long-term planning to support student engagement in gifted education throughout their K-12 education.

Several focus group participants identified maintaining engagement, particularly of secondary students, as a challenge because students may choose to not engage in the subject area or advanced coursework that meets the regulatory requirements for gifted service provision. Students may opt-out of College Credit Plus or honors classes in their subject area, and the district is not recognized for providing services to the students.

Challenges

Staffing was the largest challenge in gifted service provision identified across the focus groups. In particular, focus group input was consistent in asserting that the number of staff working in gifted education was not adequate. This staffing challenge includes a lack of coordinators, interventionists, qualified designated providers, and other educators, including substitutes, that are needed to allow general education teachers to attend gifted education training. This staffing challenge is caused by a lack of financial resources to hire teachers and a lack of qualified people in the labor market to fill needed open positions. These staffing challenges impact all parts of the gifted education process, including identification, service provision, provision of professional development, and writing of WEPs. A participant described how working to expand gifted service provision in this context results in reduced services for those students that are currently being served.

A related challenge is whether educators are motivated to provide gifted services. The differentiation in the classroom, compliance with reporting, and WEP requirements can be seen as extra work that some teachers are not able or willing to undertake. Simultaneously, teachers often must invest personal resources into becoming qualified to provide these gifted services. This personal investment can include time and finances to obtain a gifted endorsement that may include a master's degree (which may result in in a salary-scale adjustment), or simply the time to become a designated provider (which does not result in a salary-scale adjustment).

Provision of Services by ESCs

ESCs play an important role in gifted service provision. They serve as contracted service providers to districts. They provide an important source of gifted education skills and knowledge that small or isolated rural districts cannot maintain on their own. Many of the gifted coordinators that participated in the focus groups work at ESCs that support multiple districts on a contract basis, as did school and district administrators and educators who worked with ESCs. These gifted coordinators described the many different roles they play, including coordinating and interpreting assessments, writing WEPs, supporting teachers, providing professional development, and providing gifted instruction. The roles they play depend not only on their qualifications and skills but also upon the services districts request (and can afford). One focus group participant said students in their district would not receive gifted services without the support of the ESC. Another discussed how the increasing complexity of gifted law

and regulations in Ohio increases the need for ESC support to maintain compliance with state expectations.

Successes

Focus group participants who work with ESCs praised the quality of professional development services provided by ESCs, including trainings. One example was the support provided by ESC staff to a calculus teacher who did not have colleagues to collaborate with in their small district.

Challenges

The biggest challenge identified by focus group participants was the lack of financial resources to pay for adequate ESC services. The lack of funding caused ESC staff to feel stretched by the amount of support they were asked to provide. At the same time, district staff in the focus groups often said it would be beneficial for their districts to be able to afford and have access to more ESC services. Several focus group participants discussed the contractual relationship between districts and ESCs. The provision of gifted services by ESCs can include ensuring districts comply with state laws and regulations. However, as the purchaser of the gifted services, some districts may not prioritize gifted compliance over other educational activities. This can lead to ESC shopping by districts to find the ESC whose standards for compliance are the same as the districts. Several participants recognized this challenge but did not describe it as pervasive.

WEPs

Districts providing gifted services are required to annually document the gifted services students receive in a WEP. The WEP is developed in collaboration with teachers with parental approval. Focus group participants felt WEPs were a successful tool to increase parental awareness about gifted education.

Challenges

Most comments about WEPs focused on the amount of effort they take to complete and how they are often not used. A quote from one participant summarizes the perspective provided by many of the focus group participants:

> *"I need to write about 150 WEPs a year, I would like to believe that someone reads them and that they are useful. But after I write them, they end up in a file somewhere and no one reads them but me. It is simply compliance. They are not living documents that are connected to that child and their needs."*

Some participants did offer suggestions for using technology to reduce the WEP-related workload, but most discussed how the time spent writing WEPs took away from time spent with students. A few participants said the intent of WEPs is admirable, but there was minimal support for their use in its current form.

Many of the focus group participants wished the WEP had some enforcement mechanism, requiring the provision of services described in the WEP. Often focus group participants compared the lack of

enforcement of WEP to the regulatory and legal enforcement challenges associated with IEPs for children with disabilities.

Professional Learning Opportunities

Gifted education requires a specialized set of skills to implement effectively. These skills include coordinating, administering, and interpreting multiple assessments, understanding, and applying state regulations, providing differentiated instruction to gifted students, and supporting the social and emotional health of students who are by definition different from the average students in their class. Gifted education in the rural context requires additional skills as students may have limited experiences. Focus group participants identified professional development as the mechanism for building the capacity needed to implement gifted education. This capacity building occurs during teacher preparation, as educators pursue gifted endorsements, through professional development for teachers and administrators, and on-the-job training. Participants stressed that time spent on professional development should be compensated.

Successes

As noted earlier, a general success in professional development has been the newly clarified processes for teachers to become designated gifted education providers by taking 60 hours of approved training over a four-year period. Several focus group participants remarked on how the skills learned in this training improved teachers' ability to instruct all students. It also raised the profile of gifted education and the interest of teachers in providing gifted services.

Focus group participants also discussed local successes in increasing teacher capacity to provide gifted services. This included local incentives for teachers to become endorsed in gifted education, pursue a master's degree in gifted education, or to participate in effective book studies.

Challenges

Participants also described how challenging it can be to participate in gifted training, particularly when there are completing regular trainings that all teachers are expected to complete. Participants supported the offering of gifted training during school hours. Several participants discussed the value of attending the Ohio Association for Gifted Children conference. However, it can be challenging to attend due to the cost and the lack of substitute teachers to cover classrooms while teachers are away.

Many focus group participants remarked on new teachers not being prepared to work with gifted students, with gifted students from economically disadvantaged backgrounds. However, some participants said the amount of gifted training new teachers receive is dependent on where they are prepared. Participants said that new teachers without gifted training are often "overwhelmed" when working with gifted students. Finally, a participant also remarked that principals appear to receive little or no training in gifted education and that this presents a challenge in establishing leadership priorities around gifted education in general.

Funding

State funding for gifted education has recently changed, resulting in a both increasing and decreasing levels of gifted funding for districts. Coupled with changes to the funding formula, gifted funding is now restricted to services and activities in support of gifted students.

Successes and Challenges

Participants identified the recent changes requiring the connection of funding to gifted identification and services as a success. One example was a district's use of funding to support gifted professional development, which led to increased interest in gifted education. At the same time, one respondent said it was challenging to identify an activity to use the funding that could easily show the funds were directly connected to gifted education. One participant stated the funding was not enough for a full time equivalent (FTE) of gifted staffing, which would have been a more effective approach.

While participants whose gifted funding increased were happy, several remarked how the amount of funding was much less than the total gifted education investment districts were making.

Use of Incentives

The final question to focus group participants was on guidance for the use of incentives. The focus groups discussed several different types of incentives, including financial incentives, accountability, and technical assistance. They provided feedback on financial and accountability incentives.

Much of the accountability feedback was focused on the use of academic growth as a key accountability measure as compared to achievement. Several participants said gifted accountability should be based on growth, with one participant adding that current growth targets are challenging to reach. Another participant shared concerns about holding districts accountable for minutes of service provided to gifted students. They worried it was an incentive to provide pull-out services, which they believed may not always be as effective.

When asked about incentives that could be provided to support gifted education in rural settings, focus group participants mainly discussed the potential for financial incentives to support identification and provision of gifted services.

Participants had several ideas about whether incentives should and should not be used to address challenges in identification. First, participants indicated incentives should account for the additional supports that are needed to accurately identify students from underrepresented subgroups. These supports may include the costs of additional assessments and additional supports to prepare students for the materials covered on the assessments. Additional supports include ensuring students are exposed to topics, subject areas, and question types used on the assessments. A participant had a related caution about incentives as a reward for identification and how this could negatively impact districts serving low-income or other underrepresented groups compared to districts that mainly serve populations that are not underrepresented. If a district is serving students that require extra resources to support the identification of underrepresented groups, then rewards for identification require districts to make investments in preparing students and/or purchasing additional assessments. These

investments in gifted identification would be larger than those made by districts whose populations are not underrepresented because they take a larger investment to identify all gifted students. And they may be risky investments, according to focus group participants, as districts learned the appropriate set of supports their student populations need for accurate identification.

The feedback around financial incentives touched on how the funding should be structured and what districts would use the funding for. A large part of the feedback on the structure of financial incentives focused on limiting the spending of funds to ensure they are used on gifted identification and services. One said, “We need less flexible funding.” Many participants worry that without guardrails placed on any gifted financial incentives, the money is spent on other priorities within districts.

The study team also received feedback on the timing of financial incentives. As was mentioned above, participants had reservations about incentives being a reward or reimbursement for providing gifted services. Instead, some participants argued that financial incentives should be provided at the beginning of the school year with limits on how funds could be used. At the same time, a participant argued that districts should also consider rewarding teachers at the end of the year for gifted successes.

When asked how financial incentives would be spent, many focus group participants said incentive funding for rural gifted education should be focused on staffing. One participant indicated that “more money for staff and more gifted training at college” is most needed. Several argued for incentives for teachers to get a master’s degree in gifted education or gifted endorsements. Many discussed how they would use incentives to increase gifted staffing.

Chapter 5: Professional Judgment Panels

This chapter presents the results of the professional judgment (PJ) approach. The PJ approach utilizes educator experience and expertise to specify the resources representative schools and school districts need to meet specific standards and requirements. These resources can then be "costed out" by applying salary and benefit information and the prices of other resources (such as for technology) to determine the level of funding needed at a per-student level. Moreover, the approach selected by the Cupp-Patterson Workgroup to develop the Fair School Funding Plan was a variation on the PJ panel approach (Fleeter, 2019).

The use of this approach was slightly different in this study, as the intention was to identify the cost of providing financial incentives to support gifted education in rural school districts. These financial incentives could include (1) the resources needed for specific activities or components of gifted education or (2) to provide a complete gifted education program, which would be the sum of the separate components.

With that intention in mind, the professional judgment panels were structured to separately identify the resources associated with individual components of a gifted program and related activities.

Key Components and Activities of a Gifted Program

1. Identify and assess students for gifted services, including referred students and whole-grade screening; ensure inclusion for minority and disadvantaged students, special education, and English learners.
2. Provision of services to meet state standards and quality objectives.
    a. Providing gifted services to elementary students
    b. Providing gifted services to secondary students
    c. Providing coordination, management, oversight, and reporting
3. Offer professional learning opportunities to trained individuals, including general education teachers, who provide gifted services.
4. Develop WEPs for students.

Identifying the resources needed for each component allows for a rich discussion of the costs associated with each area and what financial incentives, in addition to capacity building or accountability incentives, might be most appropriate to ensure these gifted program components are provided to students in rural settings.

PJ Panel Design

To identify PJ panelists, the study team sought volunteers and nominations for panelists from survey participants, from volunteers from rural districts, and from ODE. Eleven panelists participated in the PJ panels. Panelists included rural district superintendents, principals, gifted directors, gifted coordinators, gifted intervention specialists, and state and national experts in gifted and rural education. A list of panel participants is included in Appendix F.

The study team hosted two PJ panels in October 2022 to identify the resources needed to provide the specific gifted program components in representative rural district settings. These panels differed from traditional school finance study PJ panels in that the panels were only identifying the resources needed for gifted programs, separate from resources provided for every student in the district. Further, instead of identifying the resources needed to over a gifted program in its entirety, the panelists were asked to identify resources separately by activity or component of gifted education, so that the cost of incentives could be identified separately for each.

The first panel focused on the school and district level resources needed for each activity/component of gifted education in Typology 1 and Typology 2 rural districts. The second panel, a review panel comprised of state and national experts in gifted and rural education, reviewed the work of the first panel and discussed other factors relating to providing incentives for gifted education in rural districts.

In each panel, participants were provided with instructions to guide the PJ group process and a summary of relevant Ohio state expectations (based on policy and administrative code) for gifted education. The state expectation summary and PJ panel instructions can be found in Appendices G and H. *It is important to note that while Ohio does not require districts to provide services to gifted students, the programs developed by the PJ panelists assume that all identified gifted students receive gifted services*.

Rural Gifted Education Program Panel

The Rural Gifted Education Program Panel was tasked with identifying the resources needed for each component in three different representative district sizes: 508 students, 984 students, and 1,865 students, in both Typology 1 and Typology 2 rural districts. These district sizes were selected based on the statewide enrollment data for rural districts in Ohio to represent a small, average, and larger size rural district. In each setting, the panel assumed 10 percent of students would be identified as gifted. The panels also assumed 7 percent of students in Typology 2 districts were economically disadvantaged, and 45 percent of students in Typology 1 districts were economically disadvantaged.

Review Panel

Following the initial panel, a national review panel, comprised of experts in rural and gifted education in Ohio and nationally, reviewed the level of resources identified by the first panel while balancing Ohio's requirements for gifted education with national research and best practices in gifted education.

To make easier comparisons between the districts, the study team presented the personnel FTE identified for each district in per-student ratios. This allowed panelists to quickly see where the staffing ratios were the same among school sites, and where the panel had built in minimum staffing levels, resulting in lower per-student ratios in that setting. The review panel then adjusted the resources identified by the prior panel as needed.

Resources Identified by Professional Judgment Panels

The following summarizes the resources identified by the PJ panels for each of the four key gifted program activities/components: identification of students, provision of services, professional learning opportunities and written education plans. *All resources specified could be provided by a district or an ESC, so are not separately distinguished.*

Component 1: Identify and Assess Students for Gifted Services

To identify and assess students for gifted services, panelists recommended that in an average size rural type 1 district of just under 1,000 students, there would need to be a 0.1 FTE for a coordinator, which equates to 10 percent of a full-time coordinator's time or about a half day per week over the year, handle the grade band testing (75 students per grade, with testing in two grades for a total of 150 students tested); purchasing materials; providing screeners to general education teachers; conducting make-up, individual and small group testing; and re-testing as needed.

In addition to personnel, panelists recommended $35 per tested student for assessment materials, and a touchscreen device for assessment purposes. In rural type 1 settings of the same size, where there is an average of 45 percent of students are economically disadvantaged, the panelists recommended that in addition to the coordinator, there needed to be a 0.5 FTE instructional staff person (either a classroom teacher or a GIS) to work with students and help identify potential gifted learners. Panelists felt strongly that given existing barriers and under identification of students in diverse student groups, that this additional staffing was necessary to support the identification gifted students from these underrepresented groups. Table 5.1 presents the resources needed to identify and assess students for gifted services, in an average size district, either rural typology 1 or 2.

Table 5.1: Resources Needed to Identify and Assess Students, District of 984 Students

	Rural Typology I	Rural Typology 2
Personnel		
Coordinator	0.1	0.1
Instructional staff	0.5	
Other Costs		
Supplies and materials	$35/student	$35/student
Technology	1 tablet	1 tablet

Panelists recommended that these levels of staffing were the minimum needed to identify students for gifted services, and in larger settings these resources would need to be appropriately scaled.

Component 2: Provision of Gifted Services

Panelists separately discussed three aspects of providing services to gifted students: providing services to elementary students, providing services to secondary students, and overall districtwide coordination management, and reporting services needed to provide oversight of gifted services.

Elementary Services. Panelists recommended a 1.0 FTE Gifted Intervention Specialist (GIS) to provide instruction to elementary students. Panelists felt that this staffing level was sufficient to support a variety of delivery models that districts might choose (push-in, pull-out, clustered, differentiation within

the classroom). Panelists recommended student support services specifically for gifted students be provided by a counselor, at a level of 0.1 FTE at the elementary level. Panelists also recommended $300 per student for supplies and materials to ensure schools are meeting ODE guidance about the quality of gifted services, which can include providing service-learning projects, supplemental materials for multiple units of study, guest speakers, and real-life/real world experiences, such as taking students on field trips. Panelists noted that rural districts may have higher transportation costs to visit museums or other places that provide similar experiences, and it can also cost more to bring speakers into the school because of travel time. Panel recommendations were the same for both rural type 1 and type 2 settings.

Secondary Services. The panelists recommendations were the same for secondary instruction, with a 1.0 FTE GIS recommended in both rural type 1 and 2 settings. Panelists recommended a higher counselor FTE (0.3) for student support than at the elementary level, to ensure students have access to advanced or College Credit Plus courses aligned with their plans. The amount recommended for supplies and materials was also higher, or $400 per student to account for additional experiences, such as a career day and taking identified students on college visits and facilitating internships and mentorships.

Coordination, Management and Reporting Services. In addition to elementary and secondary instruction and student support services, panelists recommended a small portion of a school administrator to provide oversight of the gifted program at the building level, with most of the coordination and annual reporting requirements handled by a coordinator (who may be a GIS). Clerical support was recommended to handle mailings, signature pages, and generally keeping files up to date for auditing purposes was provided at 0.1 FTE, or half a day per week. Resource recommendations were the same in both rural type 1 and type 2 settings. Table 5.2 summarizes the elementary, secondary and system resources identified by panelists to provide gifted services.

Table 5.2: Resources Needed to Provide Gifted Services, District of 984 Students

	Rural Typology I	Rural Typology 2
Elementary		
Personnel		
GIS	1.0	1.0
Counselor	0.1	0.1
Other Costs		
Supplies and materials	$300/student	$300/student
Secondary		
Personnel		
GIS	1.0	1.0
Counselor	0.3	0.3
Other Costs		
Supplies and materials	$400/student	$400/student
District		
Personnel		
Coordinator	0.05	0.05
Administrator	0.05	0.05
Clerical	0.1	0.1

Panelists discussed how resources would vary in different school size settings. Panelists felt that a 1.0 FTE GIS should be a minimum in any building to provide gifted services, and that the resources shown in Table 5.2 would scale proportionately in larger settings.

Component 3: Professional Learning Opportunities

Panelists were also asked about the resources that would be needed to provide professional learning opportunities to staff on gifted education, shown below in Table 5.3.

Table 5.3: Resources Needed to Provide Professional Learning Opportunities, District of 984 Students

	Rural Typology I	Rural Typology 2
Personnel		
GIS	0.1	0.1
Instructional coach	1 for every 15 teachers	1 for every 20 teachers
Other Costs		
Supplies and materials	$125/teacher	$100/teacher

Resources identified included a 0.1 FTE GIS, but the primary resource for professional development identified by the panel was through coaching — panelists believe a coach in the building helps to build teacher buy-in and consistently develop support for improving gifted education services and built-in coaching at a ratio of one coach per 20 teachers in rural type 2 settings, and one coach per 15 teachers in rural type 1 settings. Panelists also recommended $100 per general education teacher for professional development in rural type 2 settings— this could be used to bring in speakers or experts on gifted education, send teachers out in a train-the-trainer model, or conduct in-house professional development in which the coach and/or GIS lead professional development and funds are used to provide materials to all teachers in the school. Panelists increased the per-teacher amount from $100 to $125 in the Typology 1 setting, reflecting higher resource needs in the higher poverty setting.

Component 4: Written Education Plans

The final gifted education program component that panelists discussed was to develop written education plans for students. Resources for this purpose are shown in Table 5.4.

Table 5.4: Resources Needed to Develop Written Education Plans, District of 984 Students

	Rural Typology I	Rural Typology 2
Personnel		
GIS	0.05	0.05

Resources identified to develop written education plans were minimal, at about a half day a month of time, or 0.05 FTE in both setting types.

Discussion of Incentives

The national panel also discussed crosscutting issues in rural gifted education and the use of incentives for increasing rural gifted education. In particular, two specific types of incentives surfaced as possibilities during these conversations: financial and capacity building.

Financial Incentives

Panelists overwhelmingly agreed that financial incentives are a need in rural districts for gifted education, especially considering the lack of a requirement for districts to provide gifted services. Education is costlier in general in rural settings compared to suburban and urban settings, and resources must go to required services first and may not leave enough funding to provide robust gifted education services. Panelists also suggested that financial incentives should address the quality of gifted education, not just increasing the number of identified students or the number of students served: this includes the qualifications of the staff identifying and serving students, the quality of assessments used, and a match between means and definitions of identifying gifted students and students' gifted areas.

Capacity Building Incentives

The coaching model and use of certified GISs as recommended by panelists has a focus on quality that panelists believe is essential to successful outcomes and could be an area for capacity building incentives. Panelists also suggested providing rural teachers with access to online higher education gifted certification programs as another potential way to both increase quality and provide value to teacher, as well as address the shortage of GISs in rural areas. Panelists noted that many districts utilize the services of ESCs to provide gifted services, especially in the part-time coordinator role. Potential capacity-building incentives should recognize and support the level of service provided by ESCs, while being carefully designed to respect and value the strengths of rural communities.

Using Results of Professional Judgment Panels to Determine Incentive Ranges

Information from the panels discussions on the resources needed to address specific components of gifted education can be used to identify the range of financial incentives that might be needed, depending on the target objective of the incentive (i.e., to identify students, provide services, etc.). Further, the resources identified by the professional judgment panels also provide insight into what is needed to build the capacity of educators through professional learning opportunities. Table 5.5, below, identifies per gifted student cost estimates based upon the panels' recommendations, which can serve as the basis for the range of incentives that could be provided to districts.

Table 5.5: Professional Judgment Panel Cost Estimates by Key Component

	Rural Typology 1			Rural Typology 2		
Task	**508 Students**	**984 Students**	**1865 Students**	**508 Students**	**984 Students**	**1865 Students**
Gifted identification	$67	$62	$63	$23	$15	$16
Provision of services	$455	$288	$277	$461	$269	$267
WEPs	$9	$4	$3	$9	$4	$3
Professional learning opportunities	$327	$318	$317	$252	$242	$242

Table 5.5 shows the range of per-pupil cost estimates by component. These cost estimates ranged from about $5 a student (for developing WEPs) to $500 a student (for providing gifted services) and were in part dependent on the size of the district and percentage of economically disadvantaged students. The per-pupil costs are higher in smaller districts and in districts serving larger populations of economically disadvantaged students.

Chapter 6: Recommendations for Incentives to Fund Rural Gifted Education

This final section of the report summarizes what has been learned from the study team's four-part approach. We have used this information to develop an incentive system to improve gifted education services in rural Ohio districts. First, this section presents key findings from the study team's analysis of rural gifted education data in Ohio and PJ panels. This is followed by a high-level overview of successes and challenges facing rural gifted education, a discussion of how incentives can be used to address these challenges and concludes with a recommended plan for incentives.

Analysis of ODE Rural Gifted Education Data

We identified two significant challenges through analysis of ODE gifted education data: 1) lower gifted identification rates overall in Typology 1 districts, and 2) lower gifted identification rates of economically disadvantaged and non-white students in rural districts overall. Analysis of expenditure data shows underinvestment in gifted education, particularly in gifted service provision. This indicates there is room to grow in rural gifted education in both identification and service provision.

Summary of PJ Panel findings

The PJ panels identified the resources needed to implement the four key components of gifted education (identification of students, provision of services, WEPs and professional learning opportunities). The PJ process is not intended to be prescriptive — the study team is not suggesting that rural districts should organize their programs in the exact manner the panels designed. Rather, the PJ program model is used to understand the types and levels of resources needed to identify and serve gifted students in rural Ohio districts.

The study team asked panelists to identify the personnel and non-personnel resources needed to implement each of key component of gifted education, so it could apply costs to those resources. This information provided the study team with a sense of the scale of incentives that might be needed to address the barriers rural districts face in implementing gifted education. The review panel sought to ensure that resources identified by the program panel were at appropriate levels and were aligned with best practice research while also meeting Ohio's rules and regulations governing gifted education.

The study team identified cost estimates by key components of gifted education, which can be used to estimate the level of incentives that could be provided to support gifted education in rural Ohio. These cost estimates by component ranged from about $5 a student (for developing WEPs) to $500 a student (for providing gifted services) and were in part dependent on the size of the district and percentage of economically disadvantaged students. The cost estimates were higher on a per student basis in in smaller districts and in districts serving larger populations of economically disadvantaged students.

Common Incentive Types

Throughout this study, the study team considered three types of incentives: accountability, capacity building, and financial. Feedback from the field suggests each has a place in addressing rural gifted education challenges.

Accountability: Changes to the accountability system were implemented in the 2021-22 school year. This system provides incentives for gifted student achievement, growth, identification, and service provision. This system includes incentives for identification and service provision for underrepresented groups. Participants in the data collection process had very little experience with the new system and were not able to provide many insights to the strengths and challenges associated with the new system. While there was limited feedback from the field, the new accountability system does directly incentivize responding to challenges identified in this study of low rates of identification for under-represented populations.

Capacity Building: Throughout the study, the need for additional gifted education capacity was a clearly articulated need. The capacity needs included more educators with gifted endorsements and increasing the number of teachers who are qualified to be designated providers. Throughout every aspect of this study, the issue of staffing shortages has been a key theme. Shortages are impacting the ability of districts to provide and grow gifted services. Study participants discussed how compliance with gifted regulations is becoming more technical and coordinator and directors need to be trained to fully meet the expectations of their position. The focus groups and PJ panels stressed the need to improve educators' ability to serve gifted students through on-going professional development and coaching. However, the limiting factor to much of the capacity building of staff is funding. So, while we will discuss capacity building incentives, the key to building more capacity is financial ability to pay for training including incentives for teachers to receive gifted endorsement.

Financial Incentives: Overall, financial incentives were study participants' preferred form of incentives to help address the challenges of gifted education and participants provided guidance on how to structure incentives to make them more successful. The guidance was:

- **Funding needs to be consistent**: The biggest gifted education challenge facing rural districts is staffing and staff capacity — districts are hesitant to hire people if funding is inconsistent and they cannot continue to pay people in the future. This suggests that incentive structures may include longer-term grants.
- **After-the-fact rewards serve to increase disparities**: Addressing the challenge of under-identification and lack of services for gifted services students requires investments in people and programing. The places that are not able to make these up-front investments will fall further behind if the only way to receive additional gifted funding is after the investments have been made.
- **Funds from financial incentives must be reserved for gifted education.** Participants in this study were very positive about recent changes to gifted financial reporting that *restrict* state gifted funding to be spent on gifted activities. Participants viewed this requirement as increasing

local expenditures on gifted education, and rural gifted educators supported this requirement for any new state gifted funding.

Recommended Plan

These recommendations are based on guidance the study team received throughout our data collection on the use of incentives, the challenges identified, and the PJ Panels' panels work identifying resources needed to provide specific components of gifted services in rural Ohio.

The study team ***recommends an incentive system focused on financial incentives***. Given the feedback that districts need consistent funding to implement change, and that incentives structured as rewards will negatively impact rural districts serving populations that are difficult to identify for gifted education, the study team ***recommends providing financial incentives through a multi-year grant*** mechanism. Under this approach, districts or ESCs would receive five-year grants and would be ***held accountable by ODE for spending the funding on gifted services and for meeting growth targets on their Gifted Performance Indicator*** by the end of the grant period. In their applications districts will set their own growth targets using the Gifted Performance Indicator with support from ODE to ensure these are stretch targets for districts. The grant amount per district could range from about $60,000 to $300,000 per year to provide gifted services based upon estimated costs from the professional judgement panels.

If the grant recipient is unable to make the investments into gifted related activities, or not fully meet all their targets on Gifted Performance Indicator, the grant would not be renewed after the five years. However, ***if districts maintain their investment in gifted education and meet accountability growth targets, then the grant would be ongoing***. This multi-year, grant incentive structure would incentivize rural districts that are committed to this work by encouraging them to feel more confident in making longer term investments in both hiring and staff development around gifted education.

Existing ODE systems could be used to monitor grant implementation. Recipients would need to report gifted expenditures using the Education Management Information System (EMIS). The current School Report Card accountability system would be used to measure whether grants have resulted in meeting the goals set by districts for gifted student performance, growth, identification and/or services.

In grant applications, districts should briefly describe gifted identification and service provision challenges and describe how they will address those challenges over the five-year grant period. They will then describe their growth targets for the grant period based upon the Gifted Performance Indicator. It is expected that most districts will focus their work on staffing and professional learning opportunities to develop the capacity of their staff. Districts that have not been awarded grants should be able to annually apply or reapply. ***The state should provide support to rural districts that apply to ensure they can set appropriate growth targets and that those districts with little grant writing capacity are able to successfully engage in the process***. Districts that do not write successful grants should receive focused technical assistance. ESCs can be a key source of this technical support. ODE should consider training ESC staff in providing this assistance and providing financial support to ESCs for grant writing technical assistance. ODE can monitor ESC engagement in this grant writing technical assistance to ensure all regions of the state have access to support, and the agency may require

additional staff to implement the recommended incentives system and to work with rural districts to support and grow the gifted education capacity of current and future educators in rural areas.

This incentive system responds to the recommendations and challenges identified in the study. The incentive system provides increased, stable funding for districts as they work to build capacity to provide gifted education services. Taken together, this incentive system can serve to effectively address the key challenges serving gifted students in rural Ohio schools and districts.

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Appendix A: Complete Literature Review

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Completed February 28, 2022

Abstract

This literature review explores components of a high-quality gifted education system as described by both the state of Ohio and national literature. After an introduction to rural education and school leadership, a review of gifted education systems is organized around 10 components: 1) defining gifted, 2) gifted identification, 3) provision of services, 4) written education plans, 5) funding for gifted education, 6) program evaluation and accountability, 7) gifted advisory council, 8) professional learning about gifted education, 9) gifted education policy, and 10) innovative gifted service proposals. This literature review ends with recommendations and considerations for improving gifted identification, services, and programming for Ohio's rural gifted students.

Introduction

Rural gifted education represents two fields of study (Rasheed, 2020), creating complexities in definition and in context. Coladarci (2007) observed that the lack of current reviews of the literature serves as an impediment to rural researchers, practitioners, and policymakers. In 2022, Jung et al., examined rural gifted literature from an international perspective, which offers global considerations for rural gifted education. The review provided here offers contemporary research relative to rural contexts, an overview of gifted education systems in both Ohio and across the United States and concludes with recommendations for gifted education in rural Ohio to support positive outcomes for rural gifted students.

Rural Schools in Ohio

What does rural mean? Typically, definitions of rural education are derived from such sources as the US Census Bureau and the National Center for Education Statistics (Gillon, 2017), based on population density and proximity to an urban space. Such definitions overlook rich, thick historical and social descriptions of the essence of rural life (Gillon, 2022). Most of the geospatial space in which we live in the US is considered rural, situated within communities with small populations that are geographically isolated.

Not all members of rural communities share in the relationships, identities, and resources available within geographic boundaries; for example, rural districts in northwest Ohio likely have different needs from rural districts in southwest Ohio. "There are many rural Americas…with rural communities demonstrating wide variation in geography, demographics, economics, politics, and social configurations" (Flora et al., 2018, p. 568). One consistent thread across the continuum of rural contexts is the profoundly important connection of rural inhabitants to the land.

Ohio's Definition of Rural Schools

The Ohio Department of Education (ODE) conducted a typology classification study of school districts in 2013 and identified two forms of rural school districts: Typology 1 rural with small student populations

and high student poverty and Typology 2 rural with very small student populations and average student poverty. Typology 1 and Typology 2 rural school districts have different contexts that must be considered when crafting meaningful policies and incentives to increase equitable gifted education.

Typology 1 Rural – Small Student Population and High Student Poverty

An Ohio school district is classified as Typology 1 rural if there is a small student population with high student poverty. In 2013, Typology 1 rural districts had an average daily membership (ADM) of 1,366, a median income of $29,161, 47% of students in poverty, and 4% of students who identify as cultural minorities. As of 2013, there were 124 school districts classified as Typology 1, serving 170,000 students (ODE, 2021d).

Typology 2 Rural – Very Small Student Population and Average Student Poverty

School districts are classified as Typology 2 rural if there is a very small student population and average student poverty. In 2013, Typology 2 rural had an ADM of 1,032, a median income of $32,486, 36% of students in poverty, and 3% of students who identify as cultural minorities. As of 2013, there are 107 school districts classified as Typology 2, serving 110,000 students (ODE, 2021d).

Typology 1 and Typology 2 rural schools both face similar and distinct strengths and opportunities for the equitable and thorough implementation of gifted education programs, informed by the best practices as defined by the state of Ohio. With small student populations and high community poverty, Typology 1 rural school districts may require extensive financial incentives and professional learning opportunities to afford and best implement gifted programs. With average student populations and average community poverty, Typology 2 rural school districts may require additional financial incentives and increased professional learning opportunities to help educators best serve the gifted students spread across their district and better identify gifted students using the four gifted identification ability areas stipulated by statute (Chapter 3324.03, 2001). Gifted students are present in public school settings throughout various contexts (National Association for Gifted Children [NAGC], 2019; Plucker & Puryear, 2018; Stambaugh & Wood, 2021). Systemic challenges exist in identifying and serving rural gifted students (Mattingly & Schaefer, 2015; Sherman & Sage, 2011; Yaluma & Tyner, 2018), creating an urgency to address the needs of these students from rural areas.

National Rural Context

Cultural and linguistic diversification is increasing across rural America (Fusarelli & Militello, 2012; Pohl, 2017). Seeking to understand each rural community's cultural wealth (Yosso, 2005; Moll et al., 1992; Kiyama & Rios-Aguilar, 2018) of new rural community members supports a shared vision for systemic improvement throughout rural communities. Such change calls for rural school and district leaders to retool their leadership practices to equitably provide culturally responsive leadership.

Demographics

According to a 2019 report from The Rural School and Community Trust, 9.3 million students are enrolled in American rural public schools – nearly one out of every seven students in the country (Showalter et al., 2019). 53% of America's 13,515 school districts are classified as rural (Klar & Huggins,

2020), and one in six of those students lives below the poverty line (see Table 1 to compare Ohio and national rural demographics). Some research has been conducted to examine the beliefs and practices of successful rural educational leaders - specifically those in whose schools traditionally marginalized students demonstrate improving learning outcomes. There are tensions in many rural settings between multi-generational inhabitants of the community and increasingly culturally and linguistically diverse newcomers.

The unemployment rate is higher in rural communities than in their non-rural counterparts, with less employment growth than in non-rural areas (Cromartie, 2018). Median household income is lower in rural counties than in equivalent urban counties (Guzman et al., 2018). In 2019, while the urban poverty rate in the US was 12.9%, the comparable indicator in rural communities was 16.4% (Cromartie, 2018). The poverty rate across the state of Ohio that year was 19% (Chingos & Blagg, 2017). Combined, these factors contribute in negative ways to local rural school funding and influence the likelihood that rural high school graduates will have to leave their rural communities to find employment. Additionally, 42% of remote, low-density, and high-poverty areas across the country have lost population annually since 2012 (Klar & Huggins, 2020).

Successful Rural Schools

Research on schools whose historically marginalized students demonstrate increasingly successful learning outcomes indicates that their principals actively reform the school curriculum to become more culturally responsive (Sleeter, 2012). Teachers who are least receptive to such a significant change as a schoolwide curriculum revision may demonstrate a defensive resistance attitude (Jacobs et al., 2018). Leaders who help teachers shift from an initial defensive resistance stance to a sense of pride and empowerment as they see their efforts result in student success (Balkar & Kalman, 2018) engage them in reculturing process (Hill, 2009; Geijsel et al., 2007) involving meaningful collaboration. As a result, their students' learning outcomes improve, including those who have been historically marginalized.

Eliminating deficit mindsets and supporting diverse students' available funds of knowledge[9] and community cultural wealth[10] (Kiyama & Rios-Aguilar, 2018; Yosso, 2005) are additional requisite leadership responsibilities to guide schools and districts that inclusively welcome all students and families. While some teacher and leadership education programs are beginning to offer some form of diversity curriculum to support culturally or linguistically diverse students and their families, the content focus varies significantly between institutions (King & Butler, 2015). As communities in rural America continue to diversify, it will be particularly critical for rural school and district leadership to become culturally responsive (Khalifa et al., 2018) to meet the changing needs of their students.

Rural School Staffing Shortages

In a 2018 study of rural high school students, Agger et al. found consistent reporting of a strong sense of connectedness, resulting from the social capital developed over years with community members,

[9] A perspective that purposefully builds on the experiences and knowledge of children and their families, particularly those from economically under-resourced communities of color

[10] A framework that focuses on students' assets, including skills from their families, personal experiences, communities of origin, and cultures.

including teachers. The school often serves as the center of community activities (Mette & Stanoch, 2016). Community is a deeply complex construct, however, influencing local school district budgets, hiring, and leadership practices (McHenry-Sorber & Schafft, 2015).

While scholars have written about urban school-community partnerships (Leonard, 2011), Semke and Sheridan (2012) observe that "rural settings present unique conditions that influence the availability and delivery of coordinated family-school services" (p. 23). These conditions can include changing demographics, changes in community and school populations, and eroded tax bases, as well as fewer organizations to partner with and limited resources to do so (Seelig, 2017; Semke & Sheridan, 2012; Witte & Sheridan, 2011).

Limited resources in rural schools are ubiquitous. Educational leaders in rural communities are expected to have students in their schools meet the same standards that every other school has but often with limited resources. Rural districts have historically received less funding per student, generally have few economies of scale than larger districts often have a smaller tax base (Kolbe et al., 2021; Starr & White, 2008; US Department of Education, 2012). These conditions also negatively influence teacher recruitment and professional learning opportunities for teachers and staff (Wieczorek & Manard, 2018). Rural districts frequently experience a mismatch between reforms and local capacity to implement them (Budge, 2010; Gibbs & Howley, 2000; Yettick et al., 2014). This is exacerbated by physical distance and the fact that programs developed for metropolitan sites may not be relevant to rural school needs (Johnson & Strange, 2009). As a result, successful rural educational leaders are left to advocate largely on their own to access professional development to meet the needs of students, their schools, and their communities.

For decades, there has been research evidence that rural schools face nuanced challenges in adequately staffing their classrooms (Biddle & Azano, 2016). In 2020, Goldhaber et al. conducted a rigorous study, examining differences in rural school districts' staffing challenges, including high vacancy rates and emergency credentialed teachers and significantly higher staffing challenges. In some places, teacher and leader recruitment and retention were negatively influenced by the geography of rural districts. Others resulted from low pay scales due to eroding tax bases or significant outmigration of young people in search of economic opportunity not readily available in many rural towns.

Rural areas are more vulnerable to staffing shortages than non-rural areas, largely because they employ fewer staff and have a smaller pool of resources. Many rural districts struggle with finding teacher candidates for their openings. White's research (2019) suggests urgency to transform educator preparation specifically tailored to needs of rural teachers and leaders. Meaningful preparation would include place-based professional experiences in and with rural communities. learning about the range of needs among the residents and rethinking professional learning (including coaching) for rural teachers and leaders once they accept a rural position. The need for high quality early childhood educators, certified math and science teachers, special educators, and teachers for English Language Learners remains high in rural communities across the country (Showalter et al., 2017), resulting in people being hired with emergency certification, without appropriate preparation to provide best practice content instruction to rural students.

There are several bright spots that show innovative approaches to training rural educators. At Purdue University, Woodrow Wilson Foundation support is used to recruit STEM-trained educators into teaching positions in rural areas (*STEM Goes Rural*). The *Math in the Middle Program* at the University of Nebraska-Lincoln addressed rural STEM teacher shortages, recruitment, and retention by preparing math teachers specifically for rural teaching in mathematics. The Science, Engineering, Math and Teaching program at the University of North Dakota prepares rural teachers by building continuing relationships between university faculty and teachers well after they graduate from the program. This networking and access to sustained, meaningful professional development and coaching is showing early signs of success (Showalter et al., 2017).

Leadership

While a principal is ultimately responsible for the success of every student in their school (Louis et al., 2010), there are significant contextual differences between leaders who serve in rural and non-rural settings. Rural educational leaders must work with diverse groups of students, families, and community members. In many states, the highest percentage of principal turnover is in rural districts (Hansen, 2018). There is limited description in the scholarly literature of a rural principal's daily practice, focused through a lens of school improvement (Hesbol et al., 2020). Data from a seven-state study (Salazar, 2007) indicate that rural principals need more professional development to meet changing role expectations, exacerbated by rapidly increasing diversity and poverty. Such training includes culturally responsive leadership behaviors (Khalifa et al., 2016). Pounder et al. (2002) stress that training for school leaders in all contexts must prepare them to address "issues of demographic diversity, poverty, racism, ethnocentrism, language differences… and their intersections within educational policies and practices" (p. 270). The most impactful areas of influence on student learning outcomes identified in Louis et al.'s seminal study (2010) are the principal's focused work to:

- Set direction for the school.
- Develop faculty.
- Redesign the organization.
- Manage the instructional program.

Rural School Leadership Opportunities

Rural educators at the building and district level (sometimes the same person, as in the case of a superintendent-principal) are often called to re-imagine their leadership beliefs and practices to equitably meet the needs of their communities. Leadership preparation and innovative professional development networks can provide a deeper and broader perspective on a continuum of nuanced rural educational contexts.

In their 2009 study of school improvement in a rural high school, Chance and Segura found high levels of trust and a well-developed communication network already established. School leaders can build on this social capital, engaging community members in school improvement and reform efforts. What educational leaders do and believe has a particularly strong impact when aligned with what teachers do collaboratively to improve student learning (Goddard et al., 2007).

Future Research

Despite a relentless national focus on the effect of the achievement gap on urban students, relatively limited research has been conducted on leaders of schools and districts in rural communities and their influence on student learning. 68% of American rural schools report significant achievement gaps (Wang, 2019), but few rural leaders report that they know how to eliminate them. To provide the important data needed to help improve learning outcomes for every rural student, studies must investigate the critical leadership beliefs and practices of those successful educational leaders who improve schools (Louis et al., 2010), including culturally responsive leadership behaviors (Khalifa et al., 2016). While the school reform literature includes numerous studies linking student learning with such strategies as progress monitoring and differentiated instruction (Heck & Hallinger, 2014; Valiandes, 2015), there is a paucity of studies that focus on the leader's practices, specifically in rural schools.

Current Opportunities in Rural Education Innovation

One theory of change is built on the research base supporting the potential of cross district/school collaboration (Muijs, 2015; Ainscow et al., 2006), including engaging in peer formative feedback and leveraging professional social capital (Russell et al., 2015) for system improvement. Rural practice-research partnerships can thrive within a networked improvement community (NIC), supporting the diffusion of their innovation. Within a practice-research partnership model, individuals can collaborate to "see the system" (LeMahieu et al., 2017) that produces current results, engage with evidence in collaborative teams to improve practice, and interact with multiple system levels as they navigate personal practice. Collaboration across and among district and network partners accelerates the formation of social capital (Hargreaves & Fullan, 2013) that encourages the spread of successful innovation from one member to another.

National Rural Gifted Context

Variations exist within, between, and among rural areas and include economic, environmental, demographic, social, cultural, and other differences. For decades, rural gifted education has been of concern within the field and recognized as an area of potential (Aamidor & Spicker, 1995; Jung et al., 2022; Meriweather & Karnes, 1986; Spicker et al., 1993; Yoder, 1985). Just as in rural general education, rural gifted education must be considered in relation to place-based education literature to show complexity within the broad range of rural context (Corbett, 2016). Azano et al. (2017) cautioned of the risk of generalizing rural to all rural places. Multiple definitions and variations of giftedness exist in rural areas and one singular approach does not readily serve to understand the numerous contextual complexities. Regardless, rural gifted students deserve equity in service, programming, curricula, staffing, resources, and research (Rasheed, 2020) and these elements should reflect the community in which the gifted students live. Vander Ark et al. (2020) refer to this concept as the "power of place". Conflict exists as rural students contemplate whether to remain in their rural communities or leave for further academic pursuits (Matthews, 2020; Sherman & Sage, 2011). Howley et al. (2015) discuss the challenges of rural gifted students as they face the decision to leave or stay in their home communities.

Gifted education services in rural districts typically lag behind those in nonrural areas (Plucker & Puryear, 2018; Puryear & Kettler, 2017). Lewis and Boswell (2020) identify three areas of challenges in rural gifted education: limited funding, limited time, and limited resources available for gifted

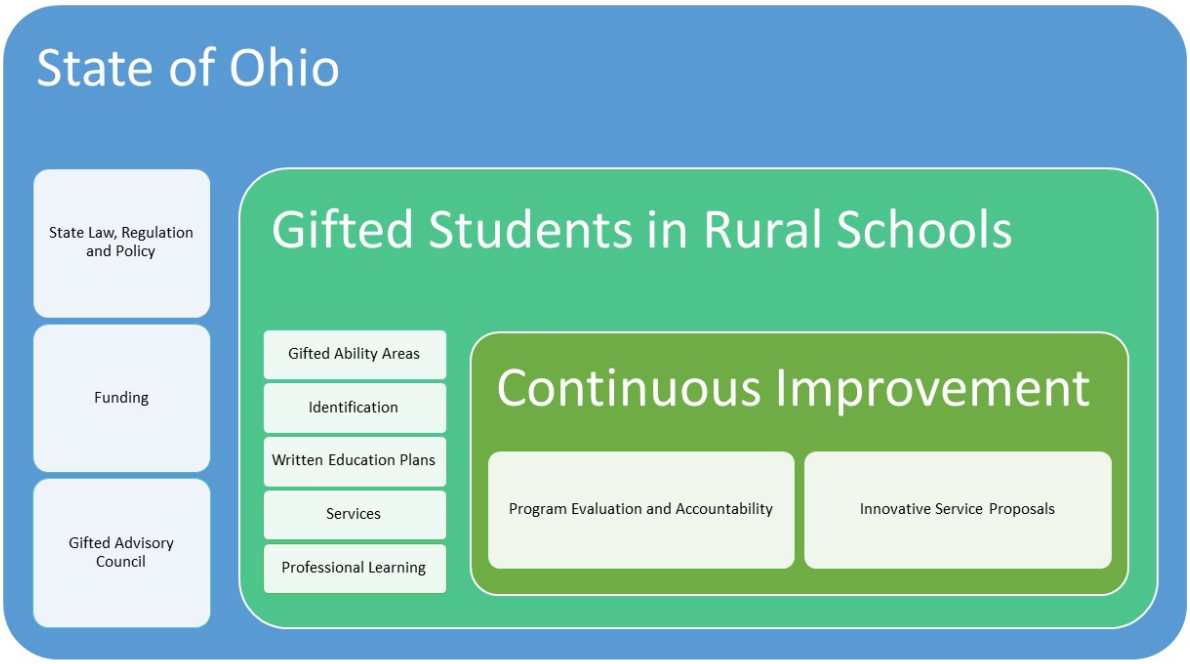
programming. Pendarvis and Wood (2009) found increased numbers of under-identified gifted students in rural areas. These findings were echoed by Hafenstein (2018) who recognized discrepancies in professional development for educators in rural settings. Building on rural gifted education inequities, Kettler et al. (2015) noted shortcomings of equity and access in gifted education for in-school programs and observed "even more significant" inequities in enrichment programs outside of the school day and with those located off-site. While urban and suburban students may have access to extensive extra-curricular programs and community resources such as museums, clubs, athletic centers, music and arts centers, availability of such programs for rural students may be hours away, limiting access and opportunity. They found that rural schools receive far fewer human resources and funding designated for gifted services than non-rural and other economically resourced schools. Yaluma and Tyner (2018) found that a "gifted gap" exists in under-resourced schools, where students do not receive the same level of education as those attending better resourced settings. Stambaugh (2015) encourages recognition of talent in gifted rural students, asserting that the context of rural settings matter. Kettler et al. (2015) also argued that context matters, asserting that the context requires understanding the value of place and community, both elements of rurality.

Respecting the value of place, Azano et al. (2017) support the strategy of integrating local place considerations in multiple aspects. These aspects may include identification, curricula, including academic and social and emotional content, programming, program evaluation, pre-service and professional learning, and reporting and accountability. The literature provides information and insight into each.

Ten Critical Components of a Gifted Education System

The state of Ohio has a complex gifted education system (ODE, 2022c) with a variety of moving parts informed by both Ohio state law (Chapter 3317, 2021; Chapter 3324, 2022) and administrative rules adopted by the Ohio State Board of Education, known as the *Operating Standards for Identifying and Serving Students Who Are Gifted: Administrative Code 3301-51-15* (2018b). The Ohio Department of Education maintains a robust website with policies, supports, and resources for gifted education, several of which are translated into Arabic, Chinese, Russian, Somali, and Spanish. The Department also provides school districts with an implementation guide for the operating standards (ODE, 2018a). This section will focus on ten critical components of gifted education systems as described in the operating standards (2018b) as well as in the national literature. These ten components discussed include: 1) definitions of giftedness; 2) gifted identification processes, 3) the provision of services; 4) written education plans; 5) funding for gifted education; 6) program evaluation and accountability; 7) gifted advisory councils; 8) professional learning about gifted education; 9) gifted education policy; and 10) innovative gifted service proposals (ODE, 2018b). See Figure 1 for a process model organizing these ten components of Ohio's gifted education program. These components will be used to guide and structure recommendations for incentivizing gifted educational equity for students in rural Ohio.

Figure A.1: Ohio's Gifted Education Program



1. Defining Gifted

Defining terms creates a basis for decision-making and shared understanding. This section articulates Ohio's definition of gifted, the national definition of gifted from the National Association for Gifted Children, and challenges and opportunities in defining gifted.

Ohio's Definition of Gifted

In 1999, the state of Ohio developed a definition for gifted: '"Gifted" means students who perform or show potential for performing at remarkably high levels of accomplishment when compared to others of their age, experience, or environment" (Chapter 3324.01, 1999). This definition focuses on gifted students obtained or potential achievement and provides room for identifying students using local or demographic levels of comparison.

National Definitions of Gifted

The National Association for Gifted Children describes the definition of gifted (NAGC, n.d.-c). The current federal definition of gifted students was originally developed in the 1972 Marland Report to Congress and has been modified several times since then. The *Every Student Succeeds Act of 2015* (2015) presents a definition that can be interpreted through either a state or local lens:

"Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities" (*Every Student Succeeds Act of 2015*, p. 1539).

Note that states and districts are not required to use the federal definition, although many states base their definitions on the federal definition.

Definition Challenges and Opportunities

The challenges related to defining gifted begin with a lack of consensus on how to conceptualize or define the gifted and talented (Pfeiffer, 2003). This lack of consensus may be rooted in philosophical approaches to the concept of giftedness, beliefs around what giftedness is, and opinions how whether giftedness creates a duty in the child to serve society at large. The lack of consensus around the definition weakens state and national policy on identification regulations and procedures. Other related issues include the identification process itself and underrepresentation of traditionally marginalized students (Pfeiffer, 2003). The author recommends the development of standards and guidelines articulating best practice that encourages the use of scientifically defensible identification packages that incorporate multiple perspectives and multiple informants.

2. Gifted Identification

Identification of giftedness is a topic of ongoing dialogue and challenge for those in the field, including researchers and practitioners. This section includes Ohio's process of gifted identification, recommendations for the identification process from a national lens, discussion of early identification, and specific considerations of challenges and opportunities in identification of rural gifted learners.

Ohio's Gifted Identification Process

This section provides an overview of legal gifted identification ability areas available in the state of Ohio: superior cognitive ability, specific academic ability, creative thinking ability, and visual or performing arts ability (Chapter 3324.03, 2001). This discussion of identification will also cover assessments, referrals, and whole-grade screenings.

Gifted Ability Areas. The Ohio Department of Education lists the following criteria for gifted screening and identification by ability area and maintains a list of approved assessments for gifted screenings and identification (2021a).

Superior Cognitive Ability**:** Districts shall identify students as gifted in the area of superior cognitive ability when a student accomplishes any of the following: scores two standard deviations above the mean, minus the standard error of measurement, on an approved intelligence test; performs at or above the ninety-fifth percentile on an approved composite battery of a nationally normed achievement test; or attains an approved score on an approved nationally-normed above-grade level achievement test.

Specific Academic Ability: Districts shall identify students as gifted in the area of specific academic ability when a student performs at or above the ninety-fifth percentile in a specific academic ability field on an approved nationally-normed achievement test.

Creative Thinking Ability: Districts shall identify students as gifted in the area of creative thinking ability when a student scores one standard deviation above the mean, minus the standard error of

measure, on an approved intelligence test and attains either a qualifying score on an approved checklist of creative behaviors or a qualifying score on an approved creativity test.

Visual or Performing Arts Ability: Districts shall identify students as gifted in the area of visual or performing arts ability when a student demonstrates superior ability in a visual or performing arts area through a display of work, an audition, or other performance or exhibition and also obtains a qualifying score on an approved checklist of behaviors related to a specific arts area (ODE, 2021b).

The four ability areas defined by the Ohio legislature provide legal clarity on how students shall be identified as gifted for Ohio's city, local, and exempted village school districts. However, Ohio's community public charter schools and private schools are not required to identify students who are gifted.

District identification plans must include "assurance of inclusion in screening and assessment procedures for minority and disadvantaged students, children with disabilities, and students for whom English is a second language" (Chapter 3324.04, 1999). If a student meets the criteria for gifted identification within the previous 24 months, the school district must identify them as gifted in the corresponding category. Once a student is identified as gifted, they remain identified as gifted.

The Ohio Department of Education also recognizes twice-exceptional students, students with both an identified area of giftedness and an identified disability that is recognized under the *Individuals with Disabilities Education Act* (2019b). The Ohio Department of Education specifies the process to create a list of approved assessments for gifted screening and identification from which districts select when developing their gifted identification plans (Chapter 3324.02, 1999; ODE, 2021a).

Assessments. District boards of education shall have a policy for screening and identification that specifies criteria and methods used to screen students for further assessment; multiple sources of assessment data that are used for identification; methods to ensure equal access to screening and further assessment; provisions for students withdrawing, reassessing, or transferring into the district; and methods for resolving disagreements between parents and the district about identification and placement decisions (Chapter 3324.06, 1999). This policy must be distributed to parents as well (Chapter 3324.06, 1999).

Referrals**.** Students may be referred for gifted identification evaluation by parents, guardians, teachers, peers, or the student may self-refer. Public school districts are required to evaluate a student within 90 days for initial gifted identification. Districts must also provide two opportunities a year for referred K-12 students to be evaluated for gifted identification in any of the areas of gifted ability (ODE, 2021a).

Whole-Grade Screenings. School districts must use Department-approved assessments to conduct whole-grade screenings once during the K-2 grade band and once during the 3-6 grade band, for all students in the areas of superior cognitive ability, specific academic ability reading/writing, specific academic ability mathematics, and creative thinking ability (ODE, 2021a).

Districts are required annually to report the number of students who have been screened for further assessment in kindergarten through 12th grade, the number of students assessed, and the number of students identified as gifted in each of the identification ability areas from Chapter 3324.03 (Chapter 3324.05, 2021). This data will be audited by the Ohio Department of Education at least once every three years with technical support provided to districts out of compliance (Chapter 3324.05, 2021).

National Gifted Identification

The National Association for Gifted Children addresses identification including issues for consideration and an overall description (NAGC, n.d.-a). Gifted learners exhibit different characteristics, traits, and ways to express their giftedness. NAGC (n.d.-a) suggests various issues that must be considered for identification:

- Giftedness is dynamic, not static. Identification opportunities need to be provided over time, with multiple opportunities to demonstrate gifts and talents. One test at a specific point in time should not dictate whether someone is identified as gifted.
- Giftedness is represented through all racial, ethnic, income levels, and exceptionality groups. Underrepresentation is widely spread. It is estimated that African American, Hispanic American, and Native American students are underrepresented by at least 50% in programs for the gifted.
- Giftedness may be exhibited within a specific interest or category—and even a specific interest within that category. Professionals must seek ways to gather examples across various domains and contexts.
- Early identification in school improves the likelihood that gifts will be developed into talents.

Identification Process. Identification policies and procedures are typically determined at the district level, but this varies state to state. In Ohio, identification policies and procedures are determined by state law. Because no two gifted children are alike, it is important to collect information on both the child's performance and potential through a combination of objective (quantifiably measured) and subjective (personally observed) identification instruments in order to identify gifted and talented students.

Districts typically follow a systematic, multi-phased process for identifying gifted students to identify students who need services beyond the general education program: 1) the nomination phase; 2) the selection phase; and the 3) placement phase. In the nomination and selection phase, various identification tools should be used to eliminate bias.

Early Identification. Early identification of giftedness is important so young children's potential will be recognized and nurtured. Story (1991, para. 2) describes young gifted children that, "make themselves known by their observable behaviors at an early age. These behaviors include using a large vocabulary and creating metaphors and analogies, demonstrating a long attention span, beginning reading at an early age, exhibiting curiosity, sharing a sense of humor with others, learning rapidly and easily, attending to detail, and displaying a good memory. These children may also have superior physical coordination and at the same time become easily frustrated by their lack of fine motor coordination.

They often have many mature, in-depth interests, a strong sense of moral values, and highly developed imaginations which allow them to create stories and songs. The children may be unusually sensitive to changes in their environments, have a heightened awareness of their own differences, and make mental connections between the past and the present. They can be also sensitive to other children's needs and feelings and are often effective and efficient problem solvers in both social and academic settings." In the public education realm, early identification of giftedness is often considered as early entrance to kindergarten while some states include early access regulations for early entrance to kindergarten. In Ohio, a student could qualify for early admittance to kindergarten, then may need further gifted identification.

A national perspective on early identification was provided by the National Association for Gifted Children (2015) reporting that early access to kindergarten was a strategy often underutilized despite ample evidence of effectiveness. Early access to kindergarten is considered an effective strategy in supporting young gifted learners. Reinert (2017) examined the limitations of school districts' adoption of early access processes and found that school districts were reluctant to adopt early access policy, even when policies are provided for consideration. Recommendations included increasing professional learning to address barriers toward adoption and increased funding options. Manning-Freeman (2017) found that open communication among stakeholders, as well as following clear process guidelines and decision making based on a body of evidence both contributed to adoption of an early access policy. In Ohio, public school districts (city, local, and exempted village) are required to provide for early entrance evaluations under ORC 3321.01 and ORC 3324.10.

Identification Challenges and Opportunities

Identification of rural gifted students presents multiple challenges. Funding restrictions provide limitations of testing and assessment (Rasheed, 2020). Card and Giuliano (2016) offer the consideration of universal screening actually limiting students, particularly minorities and economically underserved students, as screening instruments may not be normed on these specific populations. Combining national norms with limited population numbers creates another challenge, as very low percentages prompt under-representations. Ohio's state identification law requires the use of national norms, specifically for superior cognitive ability, creative thinking ability, and specific academic ability. This requirement limits local settings with smaller populations and impacts the ability of local schools and districts to recognize local talent and potential (Hernández-Torrano, 2018; Mattingly & Schaefer, 2015). Plucker et al. (1996) examined the biases that gifted children face related to the perception that it is easy for them to navigate school and career.

These biases become more complicated in rural communities that may be unfamiliar with families who are culturally, linguistically different than most of the community. In many rural communities, a community-based expectation of compliance and adherence to local social expectations creates even more challenges for the gifted learner and may manifest in anxiety, concern about fitting in, worry about leaving home and community and increased feelings of vulnerability (Schuler, 1999). Hébert and Beardsley (2001) acknowledged the lack of gifted services in rural settings. Creating even more challenges, University of Kansas (1995) researchers stated, "When gifted children are subject to social norms that severely limit their options, their giftedness does not dissipate; it is often redirected through

unacceptable social behaviors" (p. 29). Abell and Lennex (1999) revealed problems facing many poor rural gifted children, including the fact that they are not always identified as gifted. Their study indicates that poor gifted children come to school developmentally delayed in comparison to their more affluent peers.

Few classroom teachers in primary schools have had any training in the identification of gifted children, which leads most to rely on their own values. They reported that teachers who are untrained in identifying the gifted "most often identify 'teacher-pleasers' as students capable of and needing their encouragement and instruction to excel" (p. 11). As a result, many of those who are identified as "gifted" children are actually "bright average children from educationally enriched backgrounds…They are not truly gifted, and students who do not meet this stereotype are often overlooked" (p. 12).

Gifted girls are often overlooked in identification of the gifted in rural schools, as are students from underrepresented demographic groups (Lawrence, 2009). Ford (2015) discussed the challenges of identifying rural Black and Hispanic students, frequently living in poverty. Hafenstein et al. (2019) assert that children with exceptional potential, especially from underrepresented populations, are not yet recognized for appropriately advanced services. If a student is not identified, targeted programming and talent development will not occur, services will not be provided, growth will not be demonstrated, and students will not achieve at the level of their potential. This challenge of under-identification is even more significant in economically under-resourced students (Hodges & Gentry, 2021), and those who are culturally and linguistically diverse who may identify themselves as Hispanic, English language learners, and Native American students (Brice & Brice, 2004; Gentry et al., 2014).

While challenges for identifying gifted rural learners are extensive, there are a number of evidence-based strategies for addressing these challenges. Callahan and Azano (2021a) encourage recognition of talent and giftedness in place-based contexts, such as problem-solving abilities manifesting in the ways a child deals with extraordinary home responsibilities or the ability to code switch from dialect to standard language patterns. Several scholars recommend utilizing local norms rather than national norms; individual students are compared to those locally of the same age, ethnic group and even school as opposed to being compared to all students of the same age nationally. Rasheed (2020) recommends utilization of local norms, referrals by multiple constituents, and alternative assessments as strategies to potentially mitigate underrepresentation issues. Azano et al. (2017) supports the strategy of utilizing local norms (as opposed to national norms) in school districts to increase the number of students eligible for gifted services.

Peters et al. (2019) encourage use of local norms to address inequities in identification in rural settings. Selecting appropriate gifted and talented assessment instruments that are culturally sensitive and account for language differences is encouraged by Russell and Meikamp (1995). They suggest that efforts to identify rural gifted students from underrepresented groups might be improved by using information from parents, teachers, and community members as part of the assessment process. Clark and Zimmerman (2001) recommend local evaluation methods identified by advisory groups to include (a) nominations by students, parents, teachers, local artists, and peers; (b) portfolios and sketchbooks; (c) projects and work samples; (d) questionnaires; (e) previous grades in art; (f) observation of students;

(g) achievement test scores; and (h) written research proposals. Consideration for portfolio identification, including multiple representations of student work demonstrating strength, is recommended specifically with populations who identify as Native or Indigenous; Gentry et al. (2014) examines the lessons learned from the literature regarding gifted Native American students and offer future directions. Brice and Brice (2004) offer recommendations for identifying Hispanic gifted children. Stambaugh and Wood (2021) encourage recognition and fostering of talent in rural gifted youth. Kuehl et al. (2022) promote equitable identification implemented in rural settings to increase identification of those many overlooked students. Implementing these recommendations requires personnel with professional training in gifted education that can align research-based recommendations with local context and capacity.

3. Provision of Services

Overall consideration of gifted education programming includes alignment of identification with services. Services provided include a variety of content and delivery options delivered by educators with expertise in gifted education. This section articulates Ohio's provision of services, including quality of services, acceleration, gifted educator qualifications, the Ohio Education Research Center feasibility study for gifted community schools, and the national context regarding provision of services including curricular considerations. The section closes with challenges and opportunities related to provision of services and curriculum.

Ohio's Provision of Services

While the state of Ohio mandates the creation of district plans for gifted identification and services, there specifically is no legal mandate for school districts to provide services (Chapter 3324, 2022; OERC, 2016) other than implementing policy around the following three forms of acceleration: whole group acceleration, subject area acceleration, and early high school graduation (Chapter 3324.10, 2007). Districts may adopt a state model policy or develop their own for an early admittance process that provides students with early entrance to kindergarten or first grade; however, early admittance does not equate to a gifted identification (Chapter 3321.01, 2013). Ohio students may complete a separate early admittance process to gain early entrance to kindergarten, however early admittance does not equate to a gifted identification which requires additional assessment (Chapter 3321.01, 2013). Per the ADE, districts may only report gifted services to parents if the district has paid for those services, and if the services are aligned with the operating standards (ODE, 2018b). A letter must be sent to parents that clearly states their child is not receiving any services and may also include other enrichment opportunities the district provides to students (ODE, 2018b).

Ohio's operating standards (2018b) give the following guidance to districts about the quality of gifted education services and clarify gifted educator qualifications.

Quality of Services. The operating standards outline the following gifted education services.

1) Gifted services must include differentiated instruction around "Depth, breadth, complexity, pace, and/or where content is above-grade level" (ODE, 2018b, p. 5).

2) In general, gifted education services should occur during the instructional day, with flexibility for internships, mentorships, and higher education coursework and credit flexibility.

3) Gifted education instructional time, class sizes, and caseload ratios shall be equivalent to similar district offerings, with few exceptions.

4) The continuum of service may include, but is not limited to:

    a. A full-time self-contained classroom where the gifted intervention specialist is the teacher of record and all students are identified as gifted. A maximum of twenty students at one time is permitted in this setting. The department of education, office for exceptional children, shall establish policies and procedures for granting temporary waivers related to this setting;

    b. A single subject self-contained course where the gifted intervention specialist is the teacher of record and all students are identified as gifted;

    c. Services through co-teaching in a cluster grouping setting where a group of students who are gifted is deliberately placed together in a classroom where one teacher is a gifted intervention specialist with a maximum of twenty students who are gifted at any one time and a maximum caseload of eighty students who are gifted. The teachers shall be provided with regularly scheduled collaborative planning time. Each student served in this setting shall be provided instruction for no less than one core content class period a day or an average of fifteen per cent of the school week. The department of education, office for exceptional children, shall establish policies and procedures for granting temporary waivers related to this setting;

    d. A resource room/pull-out where the gifted intervention specialist has a maximum of twenty students who are gifted at any one time and a maximum caseload of eighty students who are gifted. Each student served in this setting shall be provided instruction for no less than one core content class period a day or an average of fifteen per cent of the school week. The department of education, office for exceptional children, shall establish policies and procedures for granting temporary waivers related to this setting;

    e. Cluster grouping where a small group of students who are gifted is deliberately placed together in a classroom. Each student served in this setting shall be provided instruction for no less than one core content class period a day or an average of fifteen per cent of the school week;

    f. An honors course;

    g. An international baccalaureate course;

    h. An advanced placement course;

    i. Services through a trained arts instructor;

    j. Grade acceleration, early entrance to kindergarten or first grade, subject acceleration, or early graduation from high school per district acceleration policy approved under section 3324.10 of the Revised Code;

k. Dual enrollment opportunities including but not limited to college credit plus;

l. In internships and mentorships; and/or

m. Educational options including credit flexibility, advanced online courses and programs and other options as defined in rules 3301-35-01 and 3301-35-06 of the Administrative Code. (ODE, 2018b, pp. 5-6).

Acceleration

Academic acceleration strategies are important to better allow gifted students to access educational resources at a speed and level that matches their academic ability and rapid learning. A school district may provide gifted students with variety of accelerated educational services such as whole-grade acceleration, single-subject acceleration, early admission to kindergarten, early high school graduation, and differentiation strategies such as curriculum compaction.

In 2006, the Ohio Board of Education adopted the *Model Student Acceleration Policy for Advanced Learners*, described in Chapter 3324.10 (2007), that includes recommendations for whole-grade acceleration, individual-subject acceleration, early admission to kindergarten, and early high school graduation (ODE, 2006). School districts were required to either adopt this policy or submit another policy for approval by the ODE (Chapter 3324.10, 2007).

Gifted Educator Qualifications. As Ohio school districts consider the provision of services for gifted students, they must also consider how to determine which educators are qualified to specifically work with gifted students which is outlined in the operating standards (ODE, 2018b). The operating standards give clarity around the endorsement or licensure requirements for gifted intervention specialists, general education teachers who provide gifted services, and coordinators of gifted education (ODE, 2018b). All school personnel assigned to providing gifted services "shall be provided with appropriate space and sufficient time for designing their work, evaluating student progress, conferencing, and planning" and are held accountable to the Ohio educator evaluation system (ODE, 2018b, p. 9).

Gifted Intervention Specialists**.** Specialists must hold either a gifted education licensure or endorsement and complete ongoing professional development about gifted education, as determined by the district (ODE, 2018b, p. 7).

General Education Teachers who are Designated to Provide Gifted Services**.** Teachers who are designated to provide gifted education services receive specific training and ongoing professional learning about gifted education (ODE, 2018). Designated teachers must also complete fifteen clock hours of gifted education professional development each year for the first four years, unless they have 24 advanced placement or international baccalaureate certification hours within the past five years, in which case they only need to complete seven-and-a-half hours of annual gifted education professional development for each of the first four years (ODE, 2018b). Designated teachers must continue to receive ongoing professional development in future years too and should "receive ongoing support in curriculum development and instruction from an educator who holds licensure or endorsement in gifted education" (ODE, 2018b, p. 9).

Coordinators of Gifted Education. Gifted education coordinators are charged with consulting and assisting school personnel to support gifted student identification, placement, services, district strategic planning and school improvement plans, and evaluating gifted education programming for effectiveness "including input from parents of students who are gifted" (ODE, 2018b, p. 9).

Coordinators must have at least three years of teaching experience. If they are supervising teachers, they must hold an Ohio administrative license; be licensed or endorsed in gifted education; and participate in ongoing gifted education professional development (ODE, 2018b). Any district employees, including principals, may also serve as the gifted coordinator if qualified (Chapter 3324.08, 2011).

Future Increases in Information. While it is important that gifted students be supported by gifted education experts, the state of Ohio does not currently publish information about the number of licensed or endorsed educators of the gifted.

For fiscal years 2022 and 2023, ODE is required to publish each district's gifted education services provided in three grade bands (kindergarten-third grade, fourth through eighth grade, and ninth through twelfth grade) and the "number of licensed gifted intervention specialists and coordinators employed or contracted by each district" (Chapter 3324.05(B)(2), 2021).

The state of Ohio explored the feasibility of implementing community schools for gifted students in each of the sixteen educational service regions of Ohio. ODE called for a study to determine the interest of various stakeholders utilizing community schools.

Ohio Educational Research Center Feasibility Study for Gifted Community Schools

In 2016, the Ohio Educational Research Center (OERC) conducted a feasibility study about the establishment of community schools to support gifted students in each of Ohio's 16 regional Educational Research Service Systems. OERC interviewed parents and other key stakeholders including teachers, administrators, gifted students, gifted graduates, and staff members from educational and research institutions. They also conducted a site visit of an existing community school for the gifted and a data analysis of gifted identification rates in the state of Ohio, finding that gifted identification ranged between 9% and 20% across the state (OERC, 2016).

OERC asserted that an ideal community school would have an enrollment of 125-150 students and examined the density of gifted students per square mile across the regions. Some regions only have one gifted student per square mile, while one region had 42 gifted students per square mile (p. 12). This research highlights the importance of considering the adequate funding of gifted programming in sparsely populated rural regions.

Of 577 parents surveyed, 71% indicated interest in having their gifted child attend a hypothetical tuition-free, public community school serving gifted students in their region. 82% of the interested parents also indicated their willingness and ability to drive their child to the community school, even if located outside their immediate geographic area (OERC, 2016). Parents would participate in a community school for "challenging/engaging curriculum, individualized instruction, teachers trained to work with gifted and twice-exceptional students, failure of current system to meet gifted student needs, ability for

student to be with similar students, proximity, [and] appropriate social and emotional supports" (p. 18). Themes that would limit enrollment by parents included "distance, transportation, location (safe area, building), disconnection from child's own community and peers, lack of diversity–children need to learn to work with all types of people in the real world, teacher training/retention, lack of opportunities for extra-curricular activities, [and] program quality/concern about community school" (p. 18). These themes highlight aspects of gifted programming that are important to families as they determine the feasibility of providing equitable gifted education in rural Ohio.

As of 2016, only 21% of surveyed parents expressed willingness to enroll their gifted child in an online program with in-person classes one day every week or two due to the lack of socialization and lack of supervision (OERC, 2016). This perspective may have changed after three years of disrupted learning during the coronavirus pandemic.

OERC also examined the count of teachers with gifted intervention specialist credentials as of 2014-2015 in each of the 16 regions (p. 25). The count of teachers per region ranged from 23 to 407. This brings up a potential concern about the paucity of gifted education teachers to teach all the gifted students in a sparsely populated rural region of Ohio. In general, while the 2016 OERC feasibility study provides details around aspects of gifted education that are important to educators and school systems, it did not directly examine rural Ohio school districts.

National Provision of Services

Provision of services and curriculum in rural gifted education presents evidence of both strengths and challenges. Azano et al. (2017) states, "There are both achievement and opportunity gaps for low-income students when compared to their economically advantaged peers; and, for rural students, these gaps may be even more pronounced" (p. 62). Callahan et al. (2020) describe the achievement and opportunity gaps between low-income students and their more economically advantaged peers as presenting serious challenges for gifted learners. Offering advanced and accelerated classes in mathematics, science, and foreign languages can be particularly difficult, in part because rural districts are less able than others to recruit and retain teachers with specialized preparation. Rural high schools are less likely than those in non-rural districts to offer Advanced Placement courses (Snyder et al., 2006). Schuler (1999) focused on the emotional well-being of rural gifted children and found that perfectionistic tendencies can become unhealthy in gifted learners without supportive interventions by educators and families. Burney and Cross (2006) found that rural high ability students from low-income families frequently require support to help overcome problems of inadequate self-efficacy, low self-esteem and self-concept, and that students need to develop good study skills in order to be successful in rigorous courses. Howley et al. (2009) described how the size of rural schools can impact the understanding of and support for implementing differentiation in curricular experiences for gifted students.

Gifted education scholar VanTassel-Baska (2009) suggests recommendations for rural gifted programming and curriculum which include: supportive learning environments with peers; access to multicultural materials and resources; curriculum that emphasizes critical thinking and problem-solving skills; project and problem-based learning; access to a range of educational opportunities; assessment of

learning in a wider context; place-based; technology; summer, weekend, and after school programs; academic year specialized programs; collaborative services; mentorships internships and tutorials; curriculum strategies, including acceleration, structure and scaffolding, independent learning, higher level questions, role models, graphic organizers, biographies. For these strategies to be effective, the authors of this study recognize that appropriate teacher preparation is essential. Assouline et al. (2021a) expands on the concept of acceleration; finding the student's instructional level and providing instruction at that starting point, monitoring instructional pacing needs, and providing acceleration in the area of strength with a continued emphasis on appropriate pacing. Integration with the community and expansion of out-of-school programming is recommended by Montgomery (2004) and includes building connections with nearby schools to share resources and create a community; creating regional network for extracurricular, weekend enrichment, and hybrid learning programs; leveraging "dual enrollment" programs to provide access to college and university resources; collaborating with colleges and universities to create dedicated programs for gifted K-12 students; finding experts in the community and involving them as mentors, resources, and advocates; exploring community festivals, harvests, and history celebrations; inviting students to electives, special interest groups, and after school/activity clubs; exploring public libraries, historical societies, artists, and musicians; examining technology already in place and possible alternatives; exploring what other rural schools have done to increase partnerships with community members.

As a counter to the perpetuation of standards-based curricula, rural researchers Azano et al., 2014 support place-based curricula in rural schools. Gruenewald (2003) affirmed, "A critical pedagogy of place aims to contribute to the production of educational discourses and practices that explicitly examine the place-specific nexus between environment, culture, and education" (p. 10). In this way, curricular connections through place are an inherent part of the learning process. By collecting community data from which to identify topics for place-based instruction, teachers are engaged in implementation which, in turn, can improve instruction.

Provision of Services Challenges and Opportunities

While the challenges of providing services to rural gifted learners are well documented (Azano et al., 2017; Callahan et al. 2020; Howley et al., 2009), many opportunities exist. Curriculum for gifted learners and instructional strategies for gifted learning require resources to be implemented. Resources are also required for the related area of professional learning. A specific focus on the value of place-based curricula is supported (Azano et al., 2017; Gruenewald, 2003). Engaging the community in support of gifted learners may lead to more gifted students choosing to remain in their communities (Matthews, 2020).

4. Written Education Plans

Written education plans are a tool to manage the implementation of services, recognize identification, and progress monitor individual students. This section includes information on Ohio's written education plans, the national context on written education plans, sometimes named "Advanced Learning Plans" or "Individual Education Plans" and speaks to the challenges and opportunities present in developing, implementing, and monitoring these individual plans within rural systems.

Ohio's Written Education Plans

Ohio's operating standards for gifted education (2018b) mandate that gifted services shall be documented with a written education plan (WEP) that is developed in collaboration with a licensed or endorsed gifted education educator. The WEP outlines a description of services for each gifted student, including: goals; methods to evaluate progress and performance of the goals; timeline and process for sharing progress with the student and parents; which staff members will be responsible for ensuring that services are appropriately delivered; clear policies to support gifted students' need to waive assignments and rescheduling of test when receiving gifted services outside of the general education classroom; and the date for annual WEP review and revision. Copies of the WEP will be shared with parents, the gifted education collaborator, and all educators who are responsible for providing gifted education services to students. Districts will attempt to receive an annual parent signature on the WEP, but students may not be denied any services because of a lack of signature (ODE, 2018b).

National Written Education Plans

The requirements and practice regarding written education plans for individual students varies from state to state. For example, Colorado requires an Advanced Learning Plan (ALP), a legal document [22-20-R-12.00, Colorado Revised Statutes] that outlines programming for identified gifted students that is used as a guide for educational planning and decision-making. The Exceptional Children's Educational Act [Article 20 of Title 22, Colorado Revised Statutes], the overarching Colorado state law for gifted education and special education states that there will be ALP content and procedures set in Rule for statewide implementation; and requires that goals in the ALP are standards-based. Sections 12.02(2)(f) – 12.02(2)(g)(vi) of the Rules clarify ALP content, procedures, and responsibilities. For high school students, the ALP may be blended with an Individual Career and Academic Plan (ICAP) if all contents of the ALP are inclusive in the ICAP, including achievement and affective goals" (Colorado Department of Education, 2022).

Written Education Plan Challenges and Opportunities

Challenges for incorporating written education plans (WEP) include systemic training for gifted specialists and coordinators about how to write a WEP and the need to communicate proactively with parents and families in their native languages about the opportunities provided by districts for students on WEPs.

An opportunity for written education plans could explicitly include parents and older students in the collaboration process to develop the WEP. Another opportunity for the WEP is to provide a clear record of goals, progress, and services received by each gifted student.

5. Funding for Gifted Education

Funding for gifted education, specifically for services for gifted students in rural settings, should be considered within the context of funding rural education. This section addresses Ohio's funding of gifted education, national funding of rural education, incentives and overall funding challenges and opportunities.

Ohio's Gifted Education Funding and Financial Reporting

Funding for Ohio's gifted education programs is regulated by the calculation of gifted funding units (Chapter 3317.051, 2021), using formulas for state operating funds to school districts, schools, and scholarships (Chapter 3317.22, 2021).

The Ohio operating standards (ODE, 2018b), provides additional guidance for funding requirements for school districts.

1) Districts must report expenditures on gifted education, organized in the categories of special instruction and services for academically gifted; gifted identification; gifted support services, unspecified; coordination services; and training services (ODE, 2022d).
2) The Department will annually publish districts' gifted education expenditure reports on their website. Gifted expenditure reports are currently available for years 2014-2021 (ODE, 2022d).
3) The funding section also specifies qualifications for gifted coordinators and intervention specialists to help determine where gifted funding is allocated throughout Ohio's educational service centers.
    a. Gifted coordinators must have gifted licensure and, if assigned to supervise staff, must have administrative licensure;
    b. Gifted intervention specialists must have gifted licensure; and
    c. Units for gifted intervention specialists may be allocated where qualified gifted coordinator services are available (ODE, 2018b, p. 11).

National Research on Rural Gifted Education Finance

Like urban districts, rural districts have higher poverty rates and lower funding revenue than their suburban equivalents. There is significant variation among rural districts, however (Johnson et al., 2014) as well as between rural and non-rural districts. Federal legislators tend to treat schools the same, regardless of their context. Understanding various rural environments is critical in order to design responsive financial policy for rural school districts. And while all school districts, regardless of location, are impacted by issues such as poverty and mobility, rural districts are inherently characterized by higher concentrations of such challenges, exacerbated by geographic barriers to deliver high-quality programs that have been shown to improve student learning outcomes (Johnson & Zoellner, 2016).

Challenges in funding rural gifted education are ubiquitous throughout the information in the scholarly literature. Kettler et al. (2015) conducted a study of over 1,000 school districts, examining expenditures for gifted education and the allocation of faculty for gifted education. Their findings revealed that rural schools, small schools, and schools with larger economically under-resourced populations allocated proportionally less fiscal and human resources to gifted education services. The authors suggest that their data indicates that locale, school size, and economic resources were the strongest predictors of variance in funding and staffing gifted education programs. Callahan et al. (2014) indicated that the attitudes and beliefs of rural educators and leaders are an integral part of gifted programming and the concomitant allocation of resources to support such programming. In their 2021 study, Hodges and

Ottwein found that rural public districts allocated 50% fewer funds toward gifted education programming compared to suburban districts after accounting for minimum spending floors. General economic conditions in rural areas influence resource availability, specifically related to the tax base for public education funding. Lack of economic resources influences the culture, funding for educational programming, and teacher compensation. Rural teachers are paid less than their counterparts in other districts (Institue of Education Sciences. (2020).). In some states, for rural districts to receive state reimbursement for providing services, a district must employ a teacher credentialed in that specific area. Limited numbers of appropriately credentialed teachers work in rural settings. Such policy making bodies as school boards may not fully understand the value in educating gifted learners.

Fiscal Influence of Rural Contextual Characteristics. Contextual characteristics influence educational costs in rural schools. While there are exceptions, the most frequently cited strengths of rural schools are their small size and their deep connection to the community (Johnson & Zoellner, 2016). In fact, intentionally designing smaller schools has been used as a reform strategy in urban and large suburban school districts. Making purposeful connections between the curriculum and the students' experiences in both the local and broader community has been associated with positive, rural school learning outcomes, particularly for students who have been traditionally underserved (Schneider & Atkin, 2000; Glenn, 2000). Such strengths can become damaging, however, when policies are developed that fail to consider differences in rural school contexts. For example, small schools face staffing challenges and fiscal inefficiencies. The main policy movement in small rural districts has been consolidation (Howley et al., 2011), the process with which two or more school districts combine in order to accomplish fiscal efficiency. One or more of the consolidating districts close and are bussed, often at great distances, to attend the remaining district schools.

There are significant challenges that require equitable and adequate (Odden et al., 2010) resource levels across rural school districts, that can be addressed by fiscal policies that are responsive to nuanced rural communities and the variations of their needs. Imazeki and Reschovsky (2003) assert that there are as many (or more) differences between rural schools and districts as there are between rural schools and their non-rural counterparts.

Achievement gaps among students from diverse cultural, linguistic, and socioeconomic backgrounds can be addressed by appropriately certified educational support staff to reduce them – educators who are seldom available in rural school districts (e.g., counselor, school psychologist, school nurse, special educator, gifted coordinator, English Language Learners teacher, reading specialist, physical education, art and music teachers, instructional coach). The COVID pandemic has exposed significant mental health issues for both students and staff. Because many of these positions are not available to rural schools, the trauma experienced by members of the internal and external school community amplifies their need. The absence of full-service staffing perpetuates an achievement gap on learning outcomes across sociodemographic groups (Johnson & Zoellner, 2016). Student support services such as district special education screening by a licensed school psychologist is difficult to justify to total school boards when the district has such a relatively small number of students, particularly as viewed within a per-pupil funding model. The COVID-19 pandemic reinforced the urgent need to have a school nurse in each school, if not district, instead of having the ESC allocate one school nurse to a district for one day every

two weeks. Smaller districts often address this challenge through shared professional services through an Educational Service Center. However, the shared services model has challenges associated with lack of economies of scale, transportation costs including time spent on the road and un-even allocation of time between districts. Larger, non-rural districts are better served by policy language supported by greater revenue to fund programs to meet the need of relatively low-incidence students.

Populations of students with specific needs, such as English learners, can be clustered in rural communities (Johnson & Strange, 2009), creating significant differences of student need, both within and among rural districts.

Policy context influencing educational costs in rural schools. State and federal accountability policies impact rural schools by creating the need to develop processes and systems (including additional employees) related to data management and analysis. Unlike the specialized staff in urban and suburban school districts dedicated to these roles, many rural district offices employ only a superintendent and a bookkeeper (Hesbol, 2005; Fox & Van Sant, 2011).

Funding mechanisms in rural schools that may impact gifted education in Ohio. Typically, state, and federal funding strategies tend to treat rural and non-rural school districts the same way. Local revenue relies heavily on local real estate and personal property taxes. The value of such a tax base has wide variation across communities. Developed real estate has a higher value and therefore a more ample tax base than undeveloped real estate, and personal property is more concentrated where population is concentrated. The greater the role played by local funding, the more inequitable the funding levels are (Johnson & Zoellner, 2016). State funding is intended to relieve such disparities by providing more funding to districts with a smaller tax base.

Federal funds are tied to particular needs, intended to supplement, rather than supplant other funding sources. Federal funding has added more competitive grants. Few rural districts have employees equipped to prepare competitive grants, so this shift resulted in more federal funding going to non-rural districts with larger enrollments (Strange et al., 2012).

Funding Challenges and Opportunities

With limited financial resources, including limited corporate funding from local companies and a limited tax base, dedicated funding to educating rural gifted learners, especially by those with professional training in gifted education, is often a challenge not easily addressed. Rasheed (2020) found that locale was the most influential factor in determining funding for gifted education programs and services. Hernández-Toranno (2018) examined the urban-rural education gap and described the limited resources available as determined by tax-base, leading to lower educator salaries, less tangible support for additional programming, and challenges related to accessing resources available in more urban areas.

While funding challenges exist, some researchers suggest modifying the definitions of rural to address funding inequities (Kettler et al., 2016) including consideration of school size. Some states provide grant money for gifted programming. In Colorado's *Exceptional Children's Educational Act*, schools must submit a gifted program proposal that includes plans for programming and instruction, evaluation and accountability, personnel needs, and budget. Colorado has found that incentivizing and enabling more

gifted education offerings is helpful to low-wealth school districts (Ed Build, n.d.). Schafft and Biddle (2014) assert that the key to creating education policy that works for rural schools is to capitalize on the expanded role that rural schools play in their towns. Policies that strengthen rural schools, such as those that encourage new teachers to return to rural communities to work in their schools by providing them with paid increased training and certification can impact rural school district recruitment, as well as other structures that influence the community.

6. Program Evaluation and Accountability

Program effectiveness and related initiatives can be determined through program evaluation and accountability measures. This section examines Ohio's program evaluation and accountability, the national context regarding program evaluation and accountability including data reporting, program evaluation and accountability strategies and closes with a review of program evaluation and accountability challenges and opportunities.

Ohio's Program Evaluation and Accountability

ODE strives for accountability of the gifted education program by publishing resources for development of district gifted identification plans; district gifted identification policy; a tool for data collection for students who are gifted; gifted indicators on Ohio's school report cards to reflect the level of performance, progress, and inputs for gifted students; steps for using the school district self-report on identification and services for students who are gifted to submit in the Compliance Monitoring application, which is accessed through an educator's OH|ID portal login; and gifted expenditure reports (ODE, 2017).

Gifted Indicator[11]. The Gifted Indicator (ODE, 2017) reports performance and progress of gifted students determined by points assigned to percentages of gifted students identified and served in academics, or the arts and percentages of gifted students identified and served who are economically disadvantaged or minorities. School districts with fewer than 600 students may not be rated on some components. Schools and districts are rated on two goals. The rating process has two steps. First points are awarded based on the following elements:

- **Performance element** is based on gifted student achievement on state assessments. Requires 15 assessed students.
- **Progress element** measures the value-added performance of gifted students. Schools or districts must have 15 assessed students.
- **Identification and services element** measures the percentage of students in each grade level who are identified as gifted and the percentage of these identified students that are provided gifted services. Both measures are disaggregated by traditionally underrepresented and economically disadvantaged students as measured by the representation index used by the Department.

[11] The Gifted Indicator (ODE, 2017) was revised as the Gifted Performance Indicator in August 2022 (ODE, 2022e).

The second step determines whether annual goal is met based on whether a school or district is within a certain percentage of the total possible points awarded. This percentage was at 60% for 2021-22 and moved to 80% for 2023-24[12].

Self-Report on Identification and Services. ODE requires school districts to annually submit a self-report survey about identification and services for gifted students (ODE, 2020a). This historical data for both Typology 1 and Typology 2 rural school districts will provide important information to inform the identification of barriers, as well as best practices currently in place (ODE, 2017).

Waivers for Gifted Education Services. The Department provides the following guidance for districts hoping to waive gifted education services:

School districts may submit gifted education service waiver applications for the following settings and scenarios:

- Full-time self-contained classroom where the class size exceeds the maximum of 20 students.
- Co-teaching cluster group where the cluster group of identified students exceeds the maximum of 20 students or the gifted intervention specialist's caseload exceeds the maximum of 80 students.
- Resource room or pull-out setting where the class size exceeds the maximum of 20 students or the gifted intervention specialist's caseload exceeds the maximum of 80 students.

Waivers should include a rationale for the waiver and a description of the implementation plan, including action steps and timeline, to bring services into full compliance (ODE, 2018c).

Fiscal Accountability. While ODE audits district identification plans every three years for noncompliance, for the 2022-2023 academic year specifically, the Department will also audit service numbers. If districts are noncompliant, the Department shall reduce the gifted education funding received by the district (ODE, 2018b).

More information about gifted education statistics from Ohio's rural school districts can provide a better understanding of which practices are/not in place in schools across rural Ohio. Advanced reports including data report cards for districts exist, but it was challenging to find published data on rural gifted identification and programming. For fiscal years 2022 and 2023, the Department is required to publish district information about the number of services provided to gifted students, numbers of licensed or endorsed gifted education specialists and coordinators, and more detailed information about expenditures (Chapter 3324, 2022). This information will help paint a more detailed picture of the state of Ohio's gifted education programs and services.

[12] For more information on the gifted performance indicator see: https://education.ohio.gov/getattachment/Topics/Data/Report-Card-Resources/Resources-and-Technical-Document/Gap-Closing-Component/Gifted-Performance-Indicator/2021-2022-Gifted-Performance-Indicator-Technical-Documentation.pdf.aspx?lang=en-US

National Gifted Program Evaluation and Accountability

All gifted students have a right to a quality education (VanTassel-Baska, 2004). While a comprehensive gifted education system strives to provide a quality education, ongoing program evaluation is required to inform continuous improvement (Callahan, 2018; Neumeister & Burney; 2019; VanTassel-Baska, 2004).

VanTassel-Baska (2004) recommends educational systems collect valid and reliable data of student assessment and progress as part of an annual program evaluation to foster stakeholder satisfaction and indicate areas of program success. This data should be collected annually and used to inform the development of gifted education policy and future programs to improve (Feng & VanTassel-Baska, 2004; VanTassel-Baska, 2004).

Callahan (2018) asserts gifted students' services should examine the quality of the implementation processes and outcomes, and the "why" behind the results. Callahan outlines five steps in the program evaluation process. The first step is developing descriptions of, and outcomes for, all program components. Programs relate specifically to services for gifted and talented students and components include the resources, activities, and outcomes that compose the functional activities in programs. The second step in Callahan's recommended program evaluation process is to identify stakeholders who are impacted by the evaluation and outcomes. Formally and informally involving stakeholders in the evaluation process leads to valuable information regarding additional areas needed for evaluation. The third step is to focus on the most important areas of concern and the most significant evaluation questions. The fourth step is a data collection process which involves the selection of valid instruments, a clear definition of what is being measured, data gathered from best sources, and the collection of applicable qualitative and quantitative data. The fifth and final step of the program evaluation process is to analyze and report evaluation findings.

Neumeister and Burney (2019) provide guidance for gifted education program administrators to design, implement, and report on comprehensive evaluations of gifted education programs. To design a program evaluation, the focus and scope must be determined, stakeholders must be identified and invited to serve on the program evaluation committee, and a timeline of activities established. Next, a data collection and analysis plan is developed and implemented by the program evaluation committee. Finally, a report of the program evaluation findings is constructed and disseminated to highlight areas of both strength and improvement, focusing on "quick wins" (p. 55) and longer-term wins.

Program Evaluation and Accountability Challenges and Opportunities

Challenges for program evaluation and accountability include a lack of focus on program evaluation of gifted education programs by educational leaders and clarity of purpose for program evaluators, struggles with data collection tools and techniques, and lack of capacity. Opportunities for program development and accountability include the focused and aligned use of technology to support and manage large-scale data collection, and policy that explicitly requires comprehensive program evaluation and accountability around each district's gifted education program.

7. Gifted Advisory Council

Gifted advisory councils exist in the field of gifted education at numerous levels. This section focuses on state advisory councils including Ohio's Gifted Advisory Council, the national context for gifted advisory councils, and closes with challenges and opportunities related to gifted advisory councils.

Ohio's Gifted Advisory Council

The Ohio Department of Education's operating standards specify the superintendent's establishment of a Gifted Advisory Council (GAC) consisting of a variety of stakeholders from "diverse regions of the state, including parents, general and gifted educators, administrators, and others as determined by the superintendent" (ODE, 2018b, p. 12). GAC members serve two-year terms with no term limit, and they meet at least three times a year (ODE, 2022b). GAC members are reimbursed for travel expenses, but not reimbursed for any job release time (ODE, 2022b).

The GAC is charged with helping the Department develop and update an approved plan for gifted education, providing advice on policy recommendations, and perform as advisors for the development of criteria to renew innovative gifted service proposals (ODE, 2018b) and criteria to identify and recognize schools, districts, and other educational providers who demonstrate an "exemplary ability to serve students who are gifted" (ODE, 2018b, p. 12).

National Gifted Advisory Councils

More information is needed to provide an in-depth national analysis of state level advisory councils for gifted education.

Gifted Advisory Council Challenges and Opportunities

Gifted advisory councils can provide perspective to governing boards, including state boards of education. Conflict within these boards can occur over different agendas and priorities of members. Given population constraints, challenges may occur securing representation. Opportunities can arise from multiple perspectives and improvement can occur. Establishing a Rural Gifted Advisory Council or Subcommittee may provide valuable insights about rural nuances.

8. Professional Learning About Gifted Education

The literature is extensive regarding the need for professional learning about gifted education by educators in all roles, from pre-service teachers to administrators and counselors. This section examines Ohio's professional learning about gifted education, the national context regarding professional learning about gifted education including pre-service teacher professional learning, in-service teacher professional learning, administrator and leader professional learning and mental health professionals' professional learning. The section closes with challenges and opportunities related to professional learning about gifted education.

Ohio's Professional Learning

Ohio school districts offer professional development to trained individuals, including general education teachers, who are designated providers of gifted services. "Trained individual" means a person who by training or experience is qualified to perform the prescribed activity, e.g., educator, private teacher,

higher education faculty member, working professional in the field of visual or performing arts or a person trained to administer assessments/checklists to identify gifted ability in creative, visual or performing arts" (Rule 3301-51-15(A), 2018).

Currently licensed teachers can obtain a temporary supplemental teaching endorsement from ODE, while working to obtain full gifted education licensure or a gifted education endorsement, which allows the individual to function as a gifted intervention specialist (ODE, 2020c). More research is needed to determine if pre-service educators in Ohio receive any professional learning about gifted education.

Ohio school districts provide required high quality professional development for general education teachers who are designated gifted service providers (ODE, 2019a) around topics including differentiation strategies, selection of advanced curriculum, social and emotional needs, and culturally responsive learning environments to recognize and respond to gifted students from traditionally underrepresented populations, the use of data and selection of assessments, and an ability to help develop the written education plan (WEP) (ODE, 2018b).

The Ohio Department of Education provides Ohio educators with online access to professional development modules with resources, presentations, and activities to support gifted students that were developed through a Jacob K. Javits US Department of Education grant project (ODE, 2020b). These modules help:

- "Build district capacity to deliver high-quality professional development in gifted education to five target groups: administrators, counselors, classroom teachers, parents and school psychologists;
- Familiarize their districts with the characteristics of gifted and talented students and with strategies for meeting their unique instructional, social and emotional needs;
- Help their district meet local, state and federal requirements for ongoing high quality professional development;
- Familiarize their district with differentiated instruction strategies that can be used to help all students achieve value-added growth" (ODE, 2020b).

The Department also provides a collection of instructional resources for teachers working with gifted students, including sample lesson plans, activities, and rubrics; unit and lesson design thinking tools; model curricular resources; information about the universal design for the learning; and a snapshot of interventions and accommodations (ODE, 2022f). The Department demonstrates a commitment to providing all educators who support gifted students with high quality professional development to help them improve gifted student outcomes.

National Research on Educator Professional Learning

The literature is clear regarding the value of professional learning for educators, including district administrators, building principals, counselors, psychologists, and teachers. Considering the significant link between teacher quality and student achievement, and therefore school improvement (Darling-Hammond, 2010), the need for specific and unique professional development not only for rural

teachers, but for rural principals becomes more pronounced. In the largest educational leadership study ever conducted, Louis et al. (2010) found consistent evidence that leadership is second only to classroom instruction as an influence on student learning. Numerous researchers support preparing a cadre of rural teachers, principals, and coaches to provide best practice instruction and rural student support through evidence-based, high quality professional development (Ebbeler et al., 2017).

Professional Learning Challenges and Opportunities

Currently, professional development for teachers and administrators that improves student learning outcomes and educator practice is mainly focused on students who perform at the lowest levels of achievement (Hafenstein et al., 2019). Access to high-quality professional development, particularly using local data to inform instructional decisions, is limited (Clarke & Stevens, 2006). The unique needs of gifted and talented students, and the recognition of characteristics of giftedness as an at-risk or vulnerable population may be unnoticed and masked by the focus on other underachieving learners. In Ohio, seven categories of students are designated as vulnerable youth: students with disabilities, English learners, migrant status, students experiencing homelessness, justice-involved youth, students in foster care, and students with parents in the military (ODE, 2022g).

Ehlers and Montgomery (1999) found that too many rural teachers end up "teaching to the middle" - an approach that does not serve gifted children well. By differentiating instruction, however, teachers can provide a more appropriate curriculum. The authors concur that appropriate curriculum for gifted students differs substantially from the general education curriculum "in content, process, product, and learning environment;" it needs to be "more complex, more abstract, and more varied" (p. 96). Azano et al. (2014) found that teachers working with gifted students in rural settings struggle with limited resources and time challenges. They also report challenges among educators' beliefs around giftedness and the perceptions that gifted students do not need specialized education. Croft (2021) describes multiple challenges related to rural gifted education teachers including demanding expectations, frequently filling multiple roles, limited preservice training related to gifted, not living in the local community, needing to travel between schools to serve multiple locations, holding conflicting values or beliefs with the local community related to the value of creativity or educational aspirations, and conflicts with high stakes testing and accountability as opposed to strength-based measures.

Numerous resources exist to frame both content and process of pre-service teacher training and professional learning in gifted education. The National Association for Gifted Children Professional Learning Standards (n.d.-b) are recommended as guidance. The World Council for Gifted and Talented Children's Global Principles for Professional Learning in Gifted Education (WCGTC, 2021) offer guidance with a broad perspective that is also applicable to rural settings. Croft (2021) urges professional development to better serve gifted students in rural settings.

Pre-service teacher training and professional learning should include aspects relevant to the population and the context. Like Cross and Stewart (1995), Davalos and Griffin (1999) explored the impact of the rural environment on gifted and talented students and their teachers. They identified strengths of rural schools, including supportive family atmosphere; generally good teacher-to-student ratios; smaller teaching staffs; conditions favoring the adoption of effective practices; and the value placed on sports,

extracurricular activities, peers, and family. Characteristics of gifted learners, including cognitive and affective characteristics, are an essential component of content (Howard, 2017). Building on characteristics, rural educators benefit from an in-depth understanding of gifted identification instruments and processes, including consideration of local norms. Starker (2008) recommends training rural educators about culturally responsive teaching and leadership practices. Azano et al. (2020) recommend additional teacher training and asset-based (not deficit-based) training to promote equity of opportunity for all learners. As Azano et al. (2017, 2020) suggest, all professional learning should be considered in the frame of the value of place-based education, focusing on the strengths rural communities bring to the education of young people living in these rural settings.

9. Gifted Education Statute, Regulation and Policy

Policy impacts what occurs or does not occur in practice, and the importance of policy is clear. Gifted education policy varies widely, and that variance is reflective of the administrative and governance structures of states and districts within them. State level control and local control structures create both challenges and opportunity. This section examines gifted education policy, beginning with Ohio's gifted education statute, code and policy, expanding to national considerations for gifted education policy and closes with challenges and opportunities present in gifted education policy.

Ohio's Gifted Education Statute, Regulation and Policy

Ohio's existing gifted education policy is informed by Ohio Revised Code 3324 (Chapter 3324, 2022), and Ohio Department of Education's Ohio Administrative Code 3301-51-15 which provides the *Operating Standards for Identifying and Serving Students Who Are Gifted* (Rule 3301-51-15, 2018b). Ohio Revised Code, Chapter 3324 – Gifted Students (2022) is comprised of the following 11 sections that guide boards of education in developing gifted education plans for identification, services, acceleration, and compliance with reporting requirements.

- Gifted student definitions (Chapter 3324.01, 1999)
- Assessment instruments for screening and identifying gifted students (Chapter 3324.02, 1999)
- School districts to identify gifted students (Chapter 3324.03, 2001)
- Adoption of district plan for identifying gifted students (Chapter 3324.04, 1999)
- Annual gifted student screening and service reports (Chapter 3324.05, 2021)
- Adoption and distribution district policy statement (Chapter 3324.06, 1999)
- District plan for service of gifted students (Chapter 3324.07, 2018)
- District gifted education coordinator (Chapter 3324.08, 2011)
- Publication of expenditures (Chapter 3324.09, 2021)
- Model student acceleration policy (Chapter 3324.10, 2007)
- Rules regarding reports of services to gifted students (Chapter 3324.11, 2014)

Operating standards for identifying and serving students who are gifted are clearly outlined in the Ohio Administrative Code (Rule 3301-51-15, 2018). This rule was last revised in 2018, and is currently in the initial drafting stage for the next scheduled review of 2023 (Rule 3301-51-15, 2018). These operating standards (2018b) provide additional guidance on the following sections that have been previously explored in this literature review: a) definitions; b) general; c) identification; d) provision of services; e) written education plan; f) funding; g) accountability; h) innovative gifted proposals; and i) gifted advisory council.

While Ohio's statute around gifted education is robust, the law clearly leaves room for districts to submit gifted education plans (Chapter 3324.04, 1999) while not explicitly mandating school districts to implement services for all students (Chapter 3324.07(C), 2018).

Recent rules require more detailed reporting for fiscal years 2022-2023, specifically around services provided to gifted students, the number of licensed gifted education specialists and coordinators, and increased detail around gifted funding and expenditures (Chapter 3324.05, 2021; Chapter 3324.09, 2021).

National Gifted Education Policy

The literature includes articles on gifted education policy in the early 2000's through 2012. Since that time, there has been a dearth of information in the literature related to gifted education policy. Analysis of policy from that time period revealed emerging modifications in gifted identification techniques and assessment instruments. These modifications may represent evidence that the field recognized the need for continuous improvement and that scholarly research produced effectively is implemented in practice. Present in this analysis is also the acknowledgement of state-based decisions related to education and the implementation of policy. In fact, there is reference to US gifted education policy as a patchwork quilt (VanTassel-Baska, 2009).

McClain and Pfeiffer (2012) analyzed state level policy in gifted education and recognized that definitions vary, even in terms of language used, including gifted and talented, high ability, exceptional, and gifted. Definitions themselves vary regarding included elements, specifically high achievement, creativity, artistic talent, leadership and motivation. As definitions vary in the national context, so do screening and identification procedures. The researchers found that 32% of states mandate the inclusion of IQ tests and 34% of states mandate the inclusion of achievement tests, illustrating an overall focus on demonstrated achievement. Other instruments were represented at varying levels including nominations, creativity measures, teacher rating scales, performance measures and behavioral checklists. At the time, single score cutoffs were implemented in decision-making regarding inclusion of students in gifted programs, a practice which is no longer recommended (NAGC, n.d.-a). Another practice utilized in the past was averaging scores through a matrix process; again, this practice is no longer recommended (NAGC, n.d.-a). Some states recognized twice-exceptional students, including those who have gifts and a comorbid disability (Pfeiffer, 2003). In Ohio, state law requires a single score for identification in superior cognitive ability and specific academic ability and two qualifying scores for creative and visual performing arts ability (Chapter 3324.03, 2001).

Definitions of giftedness continue to be a source of disagreement and misunderstanding. McClain and Pfeiffer (2012) state that differences and inconsistencies continue to exist across states. This is reflective of the way in which education policy is structured. However, the authors strongly encourage, at minimum, the consideration of a multi-part conception of giftedness which includes a high level of intelligence, outstanding achievement and/or the potential to excel. The authors acknowledge the following conceptions regarding giftedness:

- IQ matters, and measures of intellectual ability are good predictors of later academic success and outstanding performance in one or more academic domains.
- However, IQ alone only partially explains a student's ultimate long-term academic and real-world success. Other factors such as domain-specific skills, high motivation, passion for a subject matter, commitment, persistence, self-confidence, and opportunity are important contributing factors if one hopes to attain adult excellence or eminence in a field.
- The promotion of talent among students identified as gifted is a long-term, developmental process.

Assessment should be continuous, given that talent development is an ongoing process and that not every child identified as gifted at an early age follows the same developmental trajectory.

Moving from state level policy to local level policy, the issues identified are exacerbated as variance between and among districts may be even greater than variance among states. McBee et al. (2012) found that ongoing underrepresentation of traditionally marginalized groups in gifted education was evident, even among districts with policies specifically designed to ameliorate disproportional representation. Brown et al. (2006) recommended that gifted education policy should be integrated into school reform efforts and be aligned with the National Association for Gifted Children program standards.

Gifted Education Policy Challenges and Opportunities

Gifted education policy can serve to benefit students and families. Policy can create structures and motivation to provide structures for continuous improvement. Policy adoption can create challenges in both content and process, especially in consideration of multiple stakeholders. Opportunity within gifted education policy is assuring alignment with identification and services, service implementation and evaluation, and professional learning in gifted education for all educators.

10. Innovation

The field of gifted education may be considered a natural setting for innovation; however, innovation is an important consideration in serving gifted learners in varied settings.

National Innovation in Gifted Education

The Jacob K. Javits Gifted and Talented Students Education Act was first passed by Congress in 1988 as part of the Elementary and Secondary Education Act (US Department of Education, 2019). It is the only federal program that specifically addresses the needs of gifted and talented children in American schools. The program is described on www.education.gov:

The purpose of this program is to carry out a coordinated program of evidence-based research, demonstration projects, innovative strategies, and similar activities designed to build and enhance the ability of elementary schools and secondary schools nationwide to identify gifted and talented students and meet their special educational needs. The major emphasis of the program is on serving students traditionally underrepresented in gifted and talented programs, particularly economically under-resourced, emerging bilinguals, and disabled students to help reduce the persistent and significant gap in achievement among groups of students at the highest levels of achievement.

Grants are awarded under two priorities. Priority One supports initiatives to develop and scale up models serving students who are underrepresented in gifted and talented programs. Priority Two supports state and local efforts to improve services for gifted and talented students. Programs and projects assisted under this program may include any of the following:

- Conducting evidence-based research on methods and techniques for identifying and teaching gifted and talented students and for using gifted and talented programs and methods to identify and provide the opportunity for all students to be served, particularly low-income and at-risk students.
- Establishing and operating programs and projects for identifying and serving gifted and talented students, including innovative methods and strategies (such as summer programs, mentoring programs, peer tutoring programs, service-learning programs, and cooperative learning programs involving business, industry and education) for identifying and educating students who may not be served by traditional gifted and talented programs.
- Providing technical assistance and disseminating information, which may include how gifted and talented programs and methods may be adapted for use by all students, particularly low-income and at-risk students (U.S. Department of Education, 2019).

Summary and Recommendations

The literature regarding gifted education in rural Ohio was examined to better understand the national rural context, Ohio's definition of rural schools, and the critical components of a Gifted Education System. These components included: 1) defining gifted; 2) gifted identification; 3) provision of services; 4) written education plans; 5) funding for gifted education; 6) program evaluation and accountability; 7) gifted advisory councils; 8) professional learning about gifted education; 9) gifted education policy; and 10) innovative gifted service proposals. Each of the components was analyzed from multiple perspectives, including Ohio's stated content, the national context, various subcategories as applicable, and challenges and opportunities. The state of Ohio demonstrates multiple elements in support of gifted learners and implements numerous systems to deliver gifted education.

Recommendations

From a comprehensive review of the related literature, the following topics are recommended for further study during this project. This research may result in improvement for the gifted education programming in rural Ohio settings.

Consider the Value of Place

Place-based education is relevant to rural settings and should be considered in both decision-making and implementation of practice. Allen and Roberts (2019) examined space and place in two early college programs in Ohio and found that the value of place, the literal rural setting, supported participants' success. Experiences relevant to the place in which students live create meaning and purpose in the educational endeavor (Vander Ark et al., 2020). Ohio's two types of rural schools, Typology 1 rural (small student population and high student poverty) and Typology 2 rural (very small student population and average student poverty), create an opportunity to closely consider nuanced rural contexts, and to implement practice relevant to particular rural settings. Hafenstein (2018) discussed rural gifted students' experiences with both strengths and challenges of place.

Availably of Data on Identification Representation

More detailed information is needed to determine the proportionality of identified gifted students from populations frequently underrepresented in gifted programs. Ohio's overall identification rate is in alignment with national recommendations and is recognized for paying attention to identifying gifted learners. More data are needed to describe whether those identified as gifted are proportional to local population demographics.

Increased Service to Gifted Learners

Ohio state regulations indicate that identification is mandated, however, service to gifted learners is not. Mechanisms for increasing providing of service including developing a better understanding of barriers to service and addressing those barriers may be valuable.

Identify Program Improvements

Identify needed tools, procedures, and policies to improve alignment among identification, service, program evaluation and continuous improvement monitoring. As the purpose of identification is service, creating systems to describe the quality of service and implement systems of continuous improvement may be needed. Understanding the need for tools, procedures, and policies to help providers and policy makers determine effectiveness in meeting performance growth goals and create systems to monitor continuous improvement.

Leadership Matters

The literature is replete with information regarding the value of leadership in schools and education overall. Identify challenges and opportunities for professional learning about gifted education for leaders and possibly reward leaders demonstrating best practices in gifted education services and programming. Principals can be incentivized to earn gifted specialist or coordinator endorsements. Ohio may wish to consider adding a gifted education director-level endorsement.

Professional Learning

High quality professional learning about gifted education is important at all levels throughout an educator's career. What are the opportunities to assure that professional learning about gifted education is present in pre-service teacher training, as well as available, and rewarded to educators in practice including teachers, counselors, school psychologists, principals, superintendents, and others?

What are the information needs of boards of education? How do districts ensure professional learning is high-quality and reflective of the most current content and strategies from the field of gifted education?

Community and Family Engagement

The state of Ohio should continuously improve educators, families, and community engagement as partners in educating gifted learners. Opportunities for shared collaborations and engagement are foundational to improving systematic outcomes for gifted learners in rural Ohio.

Improvements to Policy

What are the opportunities to improve consistency between state policy and local policy? Differences in policy can create confusion, complexity, and implementation challenges. Examine policy from the state view and from a local lens to look for meaningful alignment and consistency.

Innovative Gifted Service Proposals

Opportunities may exist to implement a system of rural innovative gifted service proposals to support rural students and address the place-based impacts they experience. These opportunities might include criteria for evaluating proposals include elements related to the evaluation of effectiveness and sustainability, with specific relevance to different types of rural settings.

Further examination of the literature and of field practices may reveal additional recommendations for consideration.

Important Considerations for Rural Ohio

The state of Ohio recognizes two forms of rural school districts. Typology 1 rural schools have small student populations and high student poverty while Typology 2 rural schools have very small student populations and average student poverty. Recommendations for each type of rural school district must be thoughtful about their specific needs and challenges. For example, Typology 1 rural schools may need more financial support in a high poverty community while Typology 2 rural schools may need more combined services for regions with very small student populations.

In order to create recommendations for incentivizing gifted education in rural Ohio, more information is needed through focus groups and surveys to better understand the specific rural context - their systemic barriers and best practices of the implementation of equitable gifted education programs. Surveys should incorporate deeper questions about the use of gifted identification ability areas; professional learning of educators and ongoing opportunities about both Ohio's gifted identification ability areas and best practices for rural services and programming; and financial investments in and barriers for equitable gifted services. Focus groups might incorporate questions about lived experiences with professional learning, and contextualized experiences with any barriers to implementation of rural gifted education. With deeper understanding of the specific barriers to equitable gifted education in rural Ohio, informed by the cost of incentivizing best practices, the state of Ohio will be well positioned to allocate resources to improve rural gifted education programming and help students meet Ohio's *One Goal.*

Appendix B: Survey Tool

1. Introduction

1a. Thank you for participating in this survey of rural Ohio gifted education leaders. This survey should take about 20 minutes to complete. No preparation or additional materials are required to complete the survey.

This survey is a component of a study authorized by SB310 which was passed in December of 2020 authorizing multiple education finance-related studies. This survey is being conducted by Augenblick, Palaich and Associates (APA Consulting). The results of this survey will be confidential. APA Consulting will not share any individual level responses with the state or any other parties.

The goal of this study is to identify the barriers and best practices in gifted education including the identification process, service provision, and the written education plan process. This study will also identify possible incentives to support districts in gifted identification and service provision, and describe a plan for implementing those incentives, including the costs associated with those incentives.

This survey will also be used to identify people interested in providing perspectives about success and challenges in rural gifted education through focus groups to occur in the fall.

1b. Where do you work?

1c. What is your role?

- [ ] Assistant Principal
- [ ] Assistant Superintendent
- [ ] Coordinator-Gifted and Talented
- [ ] Director-Gifted and Talented
- [ ] Intervention Specialist-Gifted and Talented
- [ ] Principal
- [ ] Representative-Gifted and Talented
- [ ] Signer-Gifted and Talented
- [ ] Superintendent
- [ ] Supervisor-Gifted and Talented
- [ ] Other

1a. Instructions

If you serve multiple districts, please answer the survey questions from the perspective of the district where you primarily work.

2. Gifted Identification

	Indicate your level of agreement with the following statements about your district's gifted identification process:						To what extent is this a barrier to gifted identification in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
2a. We have easy access to assessments for gifted identification	○	○	○	○	○	○		
2b. We receive good information about student educational needs from our assessments	○	○	○	○	○	○		
2c. Our assessments are appropriate for our local population	○	○	○	○	○	○		
2d. Our assessments for gifted identification are effective tools to identify gifted students	○	○	○	○	○	○		
2e. Our whole grade assessments are effective tools to identify gifted students.	○	○	○	○	○	○		

Other Processes for Gifted Identification

	Indicate your level of agreement with the following statements about your district's gifted identification process:						To what extent is this a barrier to gifted identification in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
2f. We have many gifted students in this community	○	○	○	○	○	○		
2g. We find it is satisfying to help gifted students	○	○	○	○	○	○		
2h. Families in our district support having their children identified as gifted	○	○	○	○	○	○		
2i. We value identifying a diverse pool of gifted students	○	○	○	○	○	○		
2j. We work hard to identify students with different talents and gifts	○	○	○	○	○	○		
2k. We successfully identify students who are gifted in some academic areas while average in other areas	○	○	○	○	○	○		
2l. We successfully identify students who are twice-exceptional	○	○	○	○	○	○		

Other Processes for Gifted Identification

	Indicate your level of agreement with the following statements about your district's gifted identification process:						Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know	
2m. We believe when a child misbehaves it can be a sign of giftedness	○	○	○	○	○	○	

Reimbursement Beyond Cost: The state pays the full cost of gifted identification and services, plus an additional amount as an incentive.
Full Reimbursement: The state pays the full cost of gifted identification and services.
Partial Reimbursement: The state pays a portion of costs of gifted identification and services.
Educational Service Center (ESC) Reimbursement: Additional funding to ESCs for gifted support based on the number students in their region that are identified as gifted.
Resource Staff (gifted coordinator, assessment experts, professional development leaders, etc.): The state provides staff to provide technical and/or administrative support to a district's gifted identification and services.
Technical Support: The state helps with gifted processes such as assessments, identification, writing WEPs, gifted instruction, and/or reporting requirements.
Professional Development: The state provides professional development to district staff to support gifted identification and services.
Additional Report Card Points: The state provides additional points on the accountability report card for meeting certain identification or service provision benchmarks.

Incentives for Gifted Identification

	Types of incentives	Tell us more about incentives for gifted identification
2o. Which type of incentives would BEST improve the effectiveness of your district's identification process?		

2p. Anything else related to gifted identification?

3. Provision of Gifted Services

3. Provision of Gifted Services

	Indicate your level of agreement with the following statements about your district's provision of services:						To what extent is this a barrier to the provision of gifted services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
3a. Many of our classroom teachers want to teach gifted students	○	○	○	○	○	○		
3b. We have a shortage of classroom teachers that are qualified to teach gifted students	○	○	○	○	○	○		
3c. Our district has an effective gifted education leadership	○	○	○	○	○	○		
3d. Gifted services are a high priority to our district leadership	○	○	○	○	○	○		
3e. We prioritize serving gifted students	○	○	○	○	○	○		
3f. We have adequate space for providing gifted services	○	○	○	○	○	○		
3g. Serving gifted students is worth the investment	○	○	○	○	○	○		

	Indicate your level of agreement with the following statements about your district's provision of services:						To what extent is this a barrier to the provision of gifted services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
3h. We work with colleges to provide College Credit Plus (i.e., dual enrollment) for students	○	○	○	○	○	○		
3i. We work with local businesses to provide opportunities (e.g., mentoring, internships, out of school experiences, etc.) for gifted students	○	○	○	○	○	○		
3j. We have an excellent curriculum for our gifted students	○	○	○	○	○	○		
3k. We have excellent opportunities for our gifted students	○	○	○	○	○	○		
3l. We have adequate funding to serve gifted students	○	○	○	○	○	○		

Provision of services

	Indicate your level of agreement with the following statements about your district's provision of services:						Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know	
3m. We provide programming for students who are twice-exceptional	○	○	○	○	○	○	

3n. Incentive Definitions

Reimbursement Beyond Cost: The state pays the full cost of gifted identification and services, plus an additional amount as an incentive.
Full Reimbursement: The state pays the full cost of gifted identification and services.
Partial Reimbursement: The state pays a portion of costs of gifted identification and services.
ESC Reimbursement: Additional funding to ESCs for gifted support based on the number students in their region that are identified as gifted.
Recognition of Success: The state recognizes districts, schools and/or teachers for effective gifted identification and services.
Resource Staff (gifted coordinator, assessment experts, professional development leaders, etc.): The state provides staff to provide technical and/or administrative support to a district's gifted identification and services.
Technical Support: The state helps with gifted processes such as assessments, identification, writing WEPs, gifted instruction, and/or reporting requirements.
Gifted Endorsement Financial Incentives: The state pays districts for every educator on staff with a gifted endorsement.
Gifted Endorsement Report Card Points: Districts receive additional points on their report card for having more educators with gifted endorsements.
Professional Development: The state provides professional development to district staff to support gifted identification and services.
Additional Report Card Points: The state provides additional points on the accountability report card for meeting certain identification or service provision benchmarks.

	Types of incentives	Tell us more about incentives for provision of gifted services
3o. Which type of incentives would BEST improve the effectiveness of your district's provision of services?		

3p. Anything else related to provision of gifted and talented services?

3q. Do you work in, or does your district receive gifted services from, an Educational Service Center? *(Required)*

- Yes
- No

4. Provision of Service by Educational Service Centers

4. Provision of Service by Educational Service Centers

	Indicate your level of agreement with the following statements about your district's access to ESC resources and/or services:						To what extent is this a barrier to the provision of gifted services in your ESC?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
4a. Transportation to access gifted services is not a burden								
4b. We have access to quality online resources for gifted students								
4c. Our ESC provides appropriate gifted services for our students								

4d. Incentive Definitions

Reimbursement Beyond Cost: The state pays the full cost of gifted identification and services, plus an additional amount as an incentive.
Full Reimbursement: The state pays the full cost of gifted identification and services.
Partial Reimbursement: The state pays a portion of costs of gifted identification and services.
ESC Reimbursement: Additional funding to ESCs for gifted support based on the number students in their region that are identified as gifted.
Recognition of Success: The state recognizes districts, schools and/or teachers for effective gifted identification and services.
Resource Staff (gifted coordinator, assessment experts, professional development leaders, etc.): The state provides staff to provide technical and/or administrative support to a district's gifted identification and services.
Technical Support: The state helps with gifted processes such as assessments, identification, writing WEPs, gifted instruction, and/or reporting requirements.
Gifted Endorsement Financial Incentives: The state pays districts for every educator on staff with a gifted endorsement.
Gifted Endorsement Report Card Points: Districts receive additional points on their report card for having more educators with gifted endorsements.
Professional Development: The state provides professional development to district staff to support gifted identification and services.

Additional Report Card Points: The state provides additional points on the accountability report card for meeting certain identification or service provision benchmarks.

Incentives for provision of services for Educational Service Centers

	Types of incentives	Tell us more about incentives for ESC gifted services
4e. Which type of incentives would BEST improve the effectiveness of your district's service center?		

4f. Anything else related to gifted and talented services at Educational Service Centers?

5. Written Education Plans (WEP)

5. Written Education Plans (WEP)

	Indicate your level of agreement with the following statements about your district's Written Education Plans:						To what extent is this a barrier to gifted identification and services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
5a. Our staff write effective goals in Written Education Plans	○	○	○	○	○	○		
5b. The team of educators helping to develop written education plans changes depending on each student's needs and abilities	○	○	○	○	○	○		
5c. Parents are engaged in the Written Education Plans process	○	○	○	○	○	○		
5d. Written education plans are valuable tools for supporting gifted students	○	○	○	○	○	○		
	○	○	○	○	○	○		

5e. Incentive Definitions

Reimbursement Beyond Cost: The state pays the full cost of gifted identification and services, plus an additional amount as an incentive.
Full Reimbursement: The state pays the full cost of gifted identification and services.
Partial Reimbursement: The state pays a portion of costs of gifted identification and services.
ESC Reimbursement: Additional funding to ESCs for gifted support based on the number students in their region that are identified as gifted.
Resource Staff (gifted coordinator, assessment experts, professional development leaders, etc.): The state provides staff to provide technical and/or administrative support to a district's gifted identification and services.
Technical Support: The state helps with gifted processes such as assessments, identification, writing WEPs, gifted instruction, and/or reporting requirements.
Professional Development: The state provides professional development to district staff to support gifted identification and services.

Incentives for Written Education Plans

	Types of incentives	Tell us more about incentives for WEPs
5f. Which type of incentives would BEST improve the effectiveness of your school's Written Education Plans?		

5g. Anything else related to Written Education Plans?

6. Funding for Gifted Education

6. Funding for Gifted Education

	Indicate your level of agreement with the following statements about your district's funding:						To what extent is this a barrier to gifted identification and services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
6a. We have adequate funding to provide gifted services	○	○	○	○	○	○		
6b. Funding uncertainty is a barrier to providing gifted services	○	○	○	○	○	○		
6c. We have sustainable funding for gifted education	○	○	○	○	○	○		
6d. Our district uses grants to support gifted education	○	○	○	○	○	○		
6e. Gifted education is a top priority in our district's budget	○	○	○	○	○	○		

6f. Anything else related to funding?

7. Professional Learning in Gifted Education

7. Professional Learning in Gifted Education

	Indicate your level of agreement with the following statements about your district's gifted education professional learning opportunities:						To what extent is this a barrier to gifted identification and services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
7a. New classroom teachers are well prepared to work with gifted students	○	○	○	○	○	○		

	Indicate your level of agreement with the following statements about your district's gifted education professional learning opportunities:						To what extent is this a barrier to gifted identification and services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
7b. We have access to adequate gifted education professional development	○	○	○	○	○	○		

7c. Incentive Definitions

Reimbursement Beyond Cost: The state pays the full cost of gifted identification and services, plus an additional amount as an incentive.
Full Reimbursement: The state pays the full cost of gifted identification and services.
Partial Reimbursement: The state pays a portion of costs of gifted identification and services.
ESC Reimbursement: Additional funding to ESCs for gifted support based on the number students in their region that are identified as gifted.
Recognition of Success: The state recognizes districts, schools and/or teachers for effective gifted identification and services.
Resource Staff (gifted coordinator, assessment experts, professional development leaders, etc.): The state provides staff to provide technical and/or administrative support to a district's gifted identification and services.
Gifted Endorsement Financial Incentives: The state pays districts for every educator on staff with a gifted endorsement.
Gifted Endorsement Report Card Points: Districts receive additional points on their report card for having more educators with gifted endorsements.
Professional Development: The state provides professional development to district staff to support gifted identification and services.

Incentives for professional learning

	Types of incentives	Tell us more about incentives for gifted professional learning
7d. Which type of incentives would BEST improve the effectiveness of your district's professional learning opportunities?		

7e. Anything else related to professional learning?

8. Gifted Policy

8. Gifted Policy

	Indicate your level of agreement with the following statements about Ohio's gifted policy:						To what extent is this a barrier to gifted identification and services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
8a. Ohio's definition of gifted is appropriate	○	○	○	○	○	○		

	Indicate your level of agreement with the following statements about Ohio's gifted policy:						To what extent is this a barrier to gifted identification and services in your district?	Tell us more about how this is a success or barrier for gifted identification and service provision
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I don't know		
8b. Ohio's gifted standards are easy to implement	○	○	○	○	○	○		
8c. Ohio's gifted standards are confusing	○	○	○	○	○	○		
8d. Gifted services are not offered because they are not required by the state	○	○	○	○	○	○		
8e. Required gifted reporting is overly burdensome	○	○	○	○	○	○		

8f. Anything else related to gifted policy?

9. Sharing

9b. What are the biggest successes serving gifted students in your district?

9c. What are the biggest challenges serving gifted students in your district?

9a. I would be interested in providing additional information about gifted education successes or barriers in my district by participating in a focus group or interview.

- ○ Yes
- ○ No

9a2. If you are interested in providing additional information, please provide us with your email address.

Appendix C: Additional Survey Results

Many of the survey questions focused on identifying barriers and successes within the system for gifted identification and services. The components of the system for gifted identification and service provision are identified and described in this project's literature and regulatory review. These components are:

1. Assessments for gifted identification
2. Context and perspectives on gifted identification
3. Provision of gifted services by districts and by ESCs
4. Written Education Plans (WEPs)
5. Gifted funding
6. Professional learning on gifted education
7. Gifted policy
8. Gifted accountability

Note that responses to questions about provision of services by an ESC were limited to people who reported either working in an ESC or receiving services from an ESC.

The survey had a set of questions about related sub-components for each component. Questions asked whether a district faces challenges or is successful in implementing each sub-component component and whether that component is viewed as a barrier to gifted identification and service provision. Respondents could also provide comments on each sub-component. As the accountability system has recently changed, and districts need to gain experience with the new system, no questions were included about accountability system.

Respondents were selected from five-point scales to describe the level of challenges and successes, and barriers for each sub-component. For challenges and successes, respondents were asked about their level of agreement, from strongly agree to strongly disagree to a statement about a sub-component of their gifted education system. For example, respondents were asked about their level of agreement with the statement, "We have easy access to assessments for gifted identification." Agreement with the statement was assigned a value of 1, so that a lower mean for a sub-component indicates that the sub-component is a success. If a question was phrased as a challenge, e.g. "We have a shortage of classroom teachers who are qualified to teach gifted students," the scale was flipped so that strong disagreement with the statement was assigned a score of 1. In other words, lower scores indicate success, and higher scores indicate challenges.

For each question on success and challenges, we report the mean score and the proportion of people who agreed and disagreed, to provide more information on the distribution of responses. These mean scores ranged from a low of 1.42 to a high of 3.91. Questions with a mean score lower than 2.0 are identified as a successful sub-component of the gifted system, and those with a score higher than 2.5 are highlighted as a challenging sub-component.

The questions about barriers refer to the statements and ask if that sub-component of the gifted education system was a barrier. For example, after the statement, "We prioritize serving gifted students," respondents were asked the extent to which this prioritization of gifted services was a barrier

to the provision of gifted services in their district. Respondents chose from a five-level scale ranging from "A great extent" to "Not at all," with responses indicating a low barrier given a lower score. The mean scores ranged from a low of 1.45 to a high of 3.48. Questions with a score lower than 2.5 are highlighted as a sub-component that is not a barrier within the gifted system. Those with a score higher than 2.5 are highlighted as a sub-component that is a barrier to a successful gifted system.

Gifted Identification

Assessments

Assessments for gifted identification are a central part of the gifted identification process. Overall, respondent perspectives on assessments for gifted identification were positive. Respondents were more positive about the assessment component than any other component of the gifted identification and service provision system. Within this component, access to assessments is a particular success. No component was identified as a challenge since the over average of this section was 2.0

Perspectives on who is Identified as Gifted

This section has seven questions focused on the context of gifted identification and service provision, including educator and family perspectives on who is identified for gifted education.

Table B.1: Successes and Challenges within the Context and Perspectives on Gifted Identification Component

Survey Questions	Mean Agree Scale	Respondents	Agree or Strongly Agree	Neither Agree nor Disagree	Disagree or Strongly Disagree
2f. We have many gifted students in this community	2.92*	93	40%	29%	30%
2g. We find it is satisfying to help gifted students	1.72	93	85%	14%	1%
2h. Families in our district support having their children identified as gifted	1.88	93	81%	16%	3%
2i. We value identifying a diverse pool of gifted students	1.89	92	76%	20%	4%
2j. We work hard to identify students with different talents and gifts	2.20	93	65%	24%	12%
2k. We successfully identify students who are gifted in some academic areas while average in other areas	1.70	93	95%	5%	0%
2l. We successfully identify students who are twice exceptional	2.40	93	66%	15%	19%
Average	2.10	93	72%	18%	72%

The average for the context and perspectives gifted identification component was 2.10, slightly higher than the assessments component. This indicates that context and perspectives are viewed as slightly more of a barrier than the assessments used for identification.

Respondent comments identified multiple barriers to gifted education identification and service provision. As noted earlier, this includes students from higher poverty who do not have the experiences needed to provide reliable assessment scores or to meet teacher expectations for "giftedness." Related challenges were identification of students from diverse backgrounds with the currently available assessments. Other barriers include the additional workload of, differentiating instruction for gifted students, and identifying and serving students who are gifted in the arts. Additionally, some respondents said parents welcomed having their students identified as gifted while other comments described cultural hesitancy to label children as different.

Provision of Gifted Services

This section uses 12 questions to describe the provision of gifted services. There is a separate section with a focus on services provided by ESCs. The questions address many different sub-components of gifted education service provision, including teachers, leadership, classroom space, partnerships, curriculum, and funding.

This section also has the first question with a negative stem. Most questions in this survey ask for levels of agreement about positive statements about the gifted education system in rural Ohio. Question 3b in this section makes a negative statement: "We have a shortage of classroom teachers that are qualified to teach gifted students." A flipped scale is used where the statement is negative about the sub-component of the assessment system. For this question, we report the flipped scale was lower, i.e., lower scores indicate disagreement with the statement.

Table B.2: Successes and Challenges Within the Provision of Gifted Services Component

Survey Questions	Mean Agree Scale	Flipped Agree Scale	Respondents	Agree or Strongly Agree	Neither Agree or Disagree	Disagree or Strongly Disagree
3a. Many of our classroom teachers want to teach gifted students	2.61*		90	48%	41%	11%
3b. We have a shortage of classroom teachers that are qualified to teach gifted students		3.49*	88	58%	16%	26%
3c. Our district has an effective gifted education leadership	2.49		90	58%	22%	20%
3d. Gifted services are a high priority to our district leadership	2.67*		89	45%	35%	20%
3e. We prioritize serving gifted students	2.66*		89	48%	33%	19%
3f. We have adequate space for providing gifted services	2.63*		88	55%	17%	28%
3g. Serving gifted students is worth the investment	1.59		90	89%	9%	2%
3h. We work with colleges to provide College Credit Plus (i.e., dual enrollment) for students	1.42		90	98%	1%	1%
3i. We work with local businesses to provide opportunities (e.g., mentoring, internships, out-of-school experiences, etc.) for gifted students	3.11*		79	35%	25%	
3j. We have an excellent curriculum for our gifted students	2.94*		90	34%	36%	30%
3k. We have excellent opportunities for our gifted students	2.73*		90	47%	28%	26%
3l. We have adequate funding to serve gifted students	3.57*		84	17%	26%	57%
3m. We provide programming for students who are twice exceptional	2.56*		88	55%	25%	20%
Average	2.65*		88	53%	53%	24%

* Indicates a challenge

Table B.2 shows the results of questions about successes and challenges within the provision of gifted services. These successes include the importance of serving gifted students (3g) and working with

colleges with the College Credit Plus program (3h). However, within this component, there are many challenges identified, particularly with the teacher workforce (3a and 3b), prioritization of gifted education (3d and 3e), space for the provision of gifted education (3f), collaboration with business (3i), opportunities for gifted students (3k), curriculum (3j), opportunities for gifted students (3k), funding (3l), and service provision for twice-exceptional students (3m).

Survey participants were also asked to identify which of these areas were barriers in their district for providing gifted services; they identified the following as barriers:

- A shortage of classroom teachers that are qualified to teach gifted students.
- Being able to partner with local business to provide opportunities (mentoring, internships and out of school experiences) to gifted students.
- Being able to provide excellent curriculum and opportunities for gifted students.
- Adequate funding to serve gifted students.

While some respondents reported partnerships with local businesses as a strength of their gifted programs, a larger group of survey respondents indicated their school/district lacked opportunities to engage with local businesses due to their rural location and that this was a barrier to providing gifted services

As noted earlier, curriculum was identified as a barrier. Comments about the curriculum mostly emphasized roles of individual teachers in developing or implementing available curriculum for gifted students. Several respondents described working to improve their district's gifted curriculum resources.

The barriers around curriculum, recruitment and staffing, and services provided could be addressed through incentives around professional development to create staffing, curriculum development and the incentives to districts to provide services to the districts.

ESC Service Provision

About two-thirds of people who responded to the question said they work in or receive services from ESCs. Those people were then asked about three sub-components that were specific to ESC service provision, as shown in Table B.3 Respondents identified all three sub-components as a challenge in providing services to gifted students in some rural districts: transportation, quality online resources, and appropriate services.

Table B.3: Successes and Challenges Within the ESC Service Provision Component

Survey Questions	Mean Agree Scale	Respondents	Agree or Strongly Agree	Neither Agree or Disagree	Disagree or Strongly Disagree
4a. Transportation to access gifted services is not a burden	2.67*	52	48%	27%	25%
4b. We have access to quality online resources for gifted students	2.73*	52	50%	23%	27%
4c. Our ESC provides appropriate gifted services for our students	2.72*	53	51%	21%	28%
Average	2.71	52	50%	23%	27%

* Indicates a challenge

None of the ESC Service Provision sub-component measures were identified as barriers. There were several themes in the comments related to transportation. Some districts reported providing services within schools because the ESC was too far away. Most respondents to the question of online services say they have not utilized these services for gifted education. Reasons for not utilizing online resources included lack of funding, the poor quality of online services, and lack of access to online services.

In their final comments about service provision by the ESC, several people emphasized the quality of professional development and support from ESCs. However, several also commented that service providers at the ESC were stretched thin. A comment from an ESC employee said a key limit on ESC services is the level of service requested and paid for by districts.

WEPs

WEPs are required by Ohio's operating standards for gifted services. They are developed in collaboration with a licensed or endorsed gifted education educator, shared with parents, and describe services for each gifted student. The survey asked about four sub-components of gifted education service provision.

Table B.4 summarizes the quantitative data on success and challenges related to WEPs. Overall, based on the average of 2.72, this entire component is identified as a challenge. Particular concerns were the benefit of the WEPs (5d) and parental engagement (5c). It is important to note that 40 percent of respondents disagree with the statement that parents are engaged in the WEP process. Respondents did not identify any of the sub-components of the WEP process as barriers.

Table B.4: Successes and Challenges Within the WEP Component

Survey Questions	Mean Agree Scale	Respondents	Agree or Strongly Agree	Neither Agree or Disagree	Disagree or Strongly Disagree
5a. Our staff write effective goals in WEP	2.43	88	61%	24%	15%
5b. The team of educators helping to develop WEPs changes depending on each student's needs and abilities	2.57*	880	58%	20%	22%
5c. Parents are engaged in the WEPs process	3.16*	88	28%	32%	40%
5d. WEPs are valuable tools for supporting gifted students	2.72*	88	55%	24%	22%
Average	2.72*	88	47%	25%	47%

* Indicates a challenge

It is important none of the WEP components were identified as a barrier.

Several respondents described WEPs as a barrier to service provision because of either the time used to write them or lack of coordination between those that write the WEP and those that implement it, while others suggested WEPs are completed for compliance reasons and are not living documents that reflect supports students receive. Many comments on the WEP indicated teachers lack the knowledge to write effective goals and other parts of WEPs. Several asked for the state to provide sample text, such as goals and measures.

There were several themes in the comments about parental engagement in the WEP process. Many commentators said it was very hard to engage parents or have them come to meetings even though most parents do sign and return WEPs when asked.

The perspectives on the potential benefits of WEPs as a tool were diverse. Many said that they were not followed, were completed for compliance reasons, and were not a good use of time. Several added that WEPs are not used because there are few accountability mechanisms for gifted service provision. A minority of respondents said they were an important tool. Some said WEPs were valuable but said that the staff is a much more important part of gifted education service provision.

Gifted Education Professional Learning Opportunities

The survey included a short, two-question section on educator professional learning. These questions are shown in Table B.5 along with the results of questions about challenges or successes within these elements. Both questions have high scores, indicating that educator professional learning is a challenge for gifted education services. A particular challenge is the preparation of new teachers: 76 percent of respondents disagreed with the statement, "New classroom teachers are well prepared to work with gifted students.

Table B.5: Successes and Challenges Educator Professional Learning Component

Survey Questions	Mean Agree Scale	Respondents	Agree or Strongly Agree	Neither Agree nor Disagree	Disagree or Strongly Disagree
7a. New classroom teachers are well prepared to work with gifted students	3.91*	86	9%	15%	76%
7b. We have access to adequate gifted education professional development	2.65*	88	58%	15%	27%
Average	3.28	87	34%	15%	51%

* Indicates a challenge

As seen with challenges and successes, the preparation level of new teachers is seen as a barrier to gifted education. There were multiple comments about new classroom teachers that generally described the perception that newly prepared teachers have little or no knowledge of how to support or provide gifted services.

Comments about access to professional development generally fell into two groups. One group reported that there were multiple gifted education professional development opportunities from ESCs and coordinators. The other group of comments focused on the limitations to these professional development opportunities, noting that professional development does not substitute for a gifted endorsement, that remote communities have less access to professional development, that rural communities often rely on locally developed professional development, and that some districts have other topics that are a higher priority for professional development than gifted education.

Gifted Funding, Policy, and Accountability

Funding for Gifted Education

Survey respondents addressed the level of barriers and challenges related to funding for gifted education through five questions, as shown in Table B.6[13]. Overall, respondents identified as the largest barrier to gifted identification and service provision, with an average score of 3.48. Every sub-component within funding was identified as a challenge. Note that this section has one negatively phrased prompt (6b) with a flipped scale.

[13] This survey was conducted during the first year of implementation of a new funding formula that included changes to how gifted funding amounts were calculated. Many of survey respondents do not have overall district budget oversight.

Table B.6: Successes and Challenges the Gifted Education Funding Component

Survey Questions	Mean Agree Scale	Mean Flipped Scale	Respondents	Agree or Strongly Agree	Neither Agree nor Disagree	Disagree or Strongly Disagree
6a. We have adequate funding to provide gifted services	3.58*		85	18%	25%	58%
6b. Funding uncertainty is a barrier to providing gifted services		3.44*	84	61%	17%	23%
6c. We have sustainable funding for gifted education	3.44*		81	21%	22%	57%
6d. Our district uses grants to support gifted education	3.56*		72	19%	29%	51%
6e. Gifted education is a top priority in our district's budget	3.40*		84	19%	31%	50%
Average	3.48*		81	28%	25%	48%

* Indicates a challenge

Every sub-component under funding is identified as a barrier except for the use of grants to fund gifted education (6d).

Discussion of challenges around funding uncertainty and sustainability often described district leaders' unwillingness to invest in personnel if they did not believe the investment was sustainable. Some said funding was sustainable for now, but the future is uncertain. Finally, several respondents added that funding uncertainty made planning for gifted education and services challenging.

Comments showed the level of priority placed to gifted education varied by district. In some districts, gifted education is a high priority while in other places it is a low priority. One respondent said elementary gifted education was a priority while secondary gifted education was a lower priority.

Comments also describe how districts would use new funding for gifted education. Many said the primary investment would be additional staff. Others discussed additional experiences for students, including supporting after-school experiences for students from low-income families.

Gifted Policy

The gifted policy section covers a wide range of state requirements for gifted programming. The summary results of challenges and successes are described in Table B.7. This section has three questions with a negatively phrased prompt, and the flipped mean scores are reported.

Overall, the policy is identified as a challenge, with an overall average of 2.64. The largest challenge is reporting burden (8e) followed by the ease of implementing the gifted standards (8b).

Table B.7: Successes and Challenges of the Gifted Education Policy Component

Prompt	Mean Agree Scale	Mean Flipped Scale	Respondents	Agree or Strongly Agree	Neither Agree or Disagree	Disagree or Strongly Disagree
8a. Ohio's definition of gifted is appropriate	2.25		85	75%	15%	9%
8b. Ohio's gifted standards are easy to implement	2.70*		84	51%	30%	19%
8c. Ohio's gifted standards are confusing		2.67*	84	18%	37%	45%
8d. Gifted services are not offered because they are not required by the state		2.48	86	23%	16%	60%
8e. Required gifted reporting is overly burdensome		3.09*	86	37%	28%	35%
Average	2.64*		85	41%	25%	34%

Although responses regarding many components of policy met the threshold for qualification as a challenge, only one of the policy components met the barrier threshold, which was the lack of a requirement for provision of gifted services (8d). Note that the participation rate in this section was relatively low, with an average of 23, compared to other sections on barriers. This appears to be because of survey fatigue, as barrier question participation declined throughout the survey.

The comments about Ohio's gifted education policies were limited and touched on multiple topics. At a high level, a key issue is knowledge of gifted education that is needed for effective engagement in the definition of gifted and gifted standards. Generally, respondents did not regard the definition as a challenge. Instead, negative comments focused on the process for identification: the dependence on assessments for identification raised concerns about not identifying all gifted and talented students. Several commentators also had concerns about the policy that once a student is identified as gifted, they remain identified as such throughout their K-12 education. A responded added detail on this concern: some children identified in the early grades struggle to meet gifted expectations in later grades.

Incentives

Table B.8 summarizes the responses regarding the incentives that could best improve each of the gifted education components described in the table. The percentage in a cell represents the proportion of respondents to that question who think that incentive would best improve the effectiveness of that component of the gifted education system. Respondents could only select one incentive. For example, 31 percent of respondents think reimbursement beyond the cost of providing that service is the best incentive for improving gifted identification. An "x" in a table cell indicates that incentive was not a response option for that component.

Table B.8: Incentive Prioritization for Gifted Identification and Service Provision

	Gifted Identification	District Provision of services	ESC Service Provision	Written Education Plans	Professional Learning Opportunities
Reimbursement beyond cost	31%	31%	13%	22%	28%
Full reimbursement	29%	23%	24%	21%	18%
Partial reimbursement	4%	1%	0%	4%	4%
ESC Reimbursement	5%	5%	13%	x	1%
Gifted endorsement financial incentives	x	11%	4%	x	13%
Resource staff (gifted coordinator, assessment experts, prof. dev., etc.)	20%	20%	38%	23%	13%
Technical support	4%	1%	4%	7%	x
Professional development	6%	5%	0%	23%	18%
Recognition of success	x	1%	2%	x	4%
Gifted endorsement report card points	x	0%	0%	x	1%
Additional Report Card points	1%	0%	0%	x	x
# of Respondents	97	74	45	73	72

For most components of the gifted education system, the majority of respondents identified some sort of financial reimbursement as appropriate. The most recommended financial incentives were either reimbursement beyond cost or full reimbursement. The exception is WEPs wherein which the majority of respondents recommended capacity building incentives instead of financial incentives. The most recommended capacity building incentive was resource staff, although resource staff was tied with professional development under WEPs. Very few people recommended accountability-related incentives, with the largest proportion recommending accountability-related incentives in the professional learning component.

Appendix D: Focus Group Protocol

Thank you for participating in this focus group of rural Ohio gifted leaders. This focus group is one of the studies authorized by Ohio Senate Bill 310 passed in December of 2020. This study is being conducted by Augenblick, Palaich and Associates (APA Consulting).

We would like to record this conversation to help make ensure accuracy in our data collection. However, the results will be confidential. APA Consulting will not identify any individuals in our results or share any individual-level responses with the state or any other parties.

The goal of the study is to identify the barriers and best practices in gifted education including the identification process, service provision, and program evaluation and improvement. It will also identify possible incentives to support districts in gifted identification and service provision and describe a plan for implementing those incentives, including the costs associated with those incentives.

We have three different categories of incentives:

- Financial incentives which include reimbursement for certain activities. This reimbursement could include paying more than full cost, paying the full cost of an activity or possibly partial reimbursement. Financial incentives could include reimbursement to teachers for the cost of an activity such as pursuing a gifted endorsement.
- Accountability incentives which range from recognition to additional points on the state's accountability framework. It is important to note that the state recently revised its accountability framework for gifted education.
- Capacity building is training, support, and technical assistance including exemplar materials. This capacity building could be provided by the state, by Education Service Centers or from contractors.

Gifted Identification

1. Tell me about your gifted identification processes.
2. Tell me about your gifted identification instruments.
    a. Are they easily obtainable?
    b. Are they effective for all populations?
3. What are the greatest challenges in assessing students' giftedness?
    a. How could financial, accountability or capacity building incentives be used to address these challenges:

Provision of Gifted Services

4. What are the greatest successes in providing gifted services?
5. What are the greatest challenges in providing gifted services, e.g., staffing, curriculum, etc?
    a. How could financial, accountability or capacity building incentives be used to address these challenges?

Provision of Service by Educational Service Centers

6. Do your ESCs have adequate resources to provide gifted services?

    a. Transportation?
    b. Staffing
    c. Online resources?
7. What are the greatest successes in supporting gifted education by ESCs? Including service provision, providing space, providing staffing, providing professional development, coordination, or other supports to gifted education.
8. What are the greatest challenges in providing gifted services by ESCs?
    a. How could financial, accountability or capacity building incentives be used to address these challenges?

Written Education Plans (WEP)

9. Tell me about your Written Education Plans.
    a. How could the value of WEPs for supporting gifted students be improved
10. What are the greatest successes with WEPs?
11. What are the greatest challenges with WEPs?
    a. How could financial, accountability or capacity building incentives be used to address these challenges?

Funding for Gifted Education

12. Are there successes in gifted funding?
13. What are the greatest challenges with gifted education funding?
    a. How would additional funding be used to support gifted education?
    b. How should the funding be provided to improve gifted education?
    c. How could financial, accountability or capacity building incentives be used to address these challenges?

Professional Learning in Gifted Education

14. Tell me about new to the profession teachers, what are their strengths and challenges when it comes to gifted student identification and services?
15. What are the greatest successes with gifted professional development?
16. What are the greatest challenges with gifted professional development?
    a. How could financial, accountability or capacity building incentives be used address these challenges?

Incentives

17. We have asked sites about the use of incentives to address challenges in rural Ohio gifted education. One of the incentives we ask about is "Reimbursement beyond cost" which we defined as "The state pays the full cost of gifted identification and services, plus an additional amount as an incentive." We need to think through how to cost this out and wonder how this additional funding would be used to support gifted education in rural Ohio districts.

Appendix E: Detail on Focus Group Participants

Each region had at least 16 percent representation, with higher representation from the Southwest region. There was also a participant from a statewide organization and a participant from an ESC that served districts in more than one region.

Table E.1: Focus Group Regional Representation

Region	Representation in Focus Groups
Central	19%
Northeast	16%
Northwest	16%
Southeast	16%
Southwest	26%
Multiple regions	3%
Statewide expert	3%

Table E.2 shows the relative representation of the different types of districts. The plurality of participants came from rural district Typology 1. Typology 1 districts serve the majority of students in rural Ohio districts, according to 2021 enrollment data. Many of the participants served in ESCs. These ESC personnel serve multiple districts, including both types of rural districts as well as non-rural districts.

Table E.2: Focus Group District Typology Representation

District Typology	Representation in Focus Groups
1 Rural - high student poverty and small student population	45%
2 Rural - average student poverty and very small student population	23%
ESC: Multiple types	29%
Statewide expert	3%

Table E.3 shows the different job roles represented in the focus groups. Note that many participants serve in multiple roles, particularly the gifted coordinators who also served as gifted instructors. The largest percentage of participants were gifted coordinators, followed by school administrators, who were generally principals or assistant principals. The third largest group were district administrators, including superintendents.

Table E.3: Focus Group Job Role Representation

Job Role	Representation in Focus Groups
District administrators	16%
Gifted coordinators	55%
School administrators	26%
State	3%

Appendix F: Professional Judgment Panel Participants

Participant	School District/Organization
Beth Hiscox	Lisbon Exempted Village Schools
Michele Roberts	Madison-Champaign ESC
Linda Lenzi	Jefferson County ESC
Denise Toler	Gallia Local County Schools
Aaron Moran	Versallies Exempted Village School District
Neal Kasner	Greenview Local School District
Brad Romano	New London Local Schools
Jaclyn Rausch	Trumbell County ESC
Eric Calvert	Northwestern University
Joy Lawson Davis	Gifted Unlimited, LLC
Laurie Croft	University of Iowa

Appendix G: Instructions to Professional Judgment Panel Participants

INSTRUCTIONS TO OHIO RURAL GIFTED EDUCATION – ELEMENTARY AND SECONDARY PROFESSIONAL JUDGMENT PANEL MEMBERS

Augenblick, Palaich and Associates
Denver, Colorado

October 2022

The work you are doing today is part of a cost study being conducted on behalf of the Ohio Department of Education. It relies on your professional experience to identify the resources needed to serve Ohio's rural gifted education students. Below you will find several instructions to help you in this process. It is important to remember that you are not being tasked to build your "Dream Program." Instead, you are being asked to identify the resources needed to meet the specific standards and requirements that the state expects students, schools, and districts to fulfill. You should allocate resources as efficiently as possible without sacrificing quality.

1. You are a member of a panel that is being asked to design how programs and services will be delivered in *representative school settings*. These panels are being used to identify the resources that are needed to meet the needs of rural gifted education students in Ohio. We are looking to understand the resources needed across various delivery methods that are most effective for rural gifted education students in different school settings.
2. Three school-level professional judgment panels are being convened to address how to serve Ohio's rural gifted education students in: (1) elementary and secondary schools and (2) final review panel. Each panel will discuss representative schools for that grade configuration of varying need and gifted student population. The final review panel will be held to review the work of the school level panel and address district level resource needs.
3. Today, you will be serving on the *elementary and secondary school panel* to collaboratively identify the resources needed to successfully serve Ohio's rural gifted education students in representative elementary schools.
4. You will be provided a short summary of state expectations; it is not meant to be exhaustive of all requirements that the state requires schools and districts to fulfill, but instead should be considered a refresher or reminder.
5. In designing the resources needed for gifted education students, we need you to provide some very specific information so that we can calculate the cost of the resources that are needed to fulfill the indicated requirements or objectives. The fact that we need that information should not constrain you in any way in designing the program of the representative school(s). Your job is to create a set of programs, curriculums, or services designed to serve gifted students in such a way that the indicated requirements/objectives can be fulfilled. Use your experience and expertise to organize personnel, supplies and materials, and technology in an efficient way you feel confident will produce the desired outcomes.

6. For this process, the following statements are true about the representative school(s) and the conditions in which they exist:

Teachers: You should assume that you can attract and retain qualified personnel and that you can employ people on a part-time basis if needed (based on tenths of a full-time equivalent person).

Facilities: You should assume that the representative school has sufficient space and the technology infrastructure to meet the requirements of the program you design.

Revenues: You should not be concerned about where revenues will come from to pay for the program you design. Do not worry about federal or state requirements that may be associated with certain types of funding. You should not think about whatever revenues might be available in the school or district in which you now work or about any of the revenue constraints that might exist on those revenues.

Programs: You may create new programs or services that do not presently exist that you believe address the challenges that arise in serving gifted students. You should assume that such programs or services are in place and that no additional time is needed for them to produce the results you expect of them. For example, if you create after-school programs or pre-school programs to serve some students, you should assume that such programs will achieve their intended results, possibly reducing the need for other programs or services that might have otherwise been needed.

Appendix H: Summary of Ohio Policies Related to Gifted Education for PJ Panel

This summary was drafted in September 2022 and provided PJ Participants:

While there is no legal mandate for districts to provide services (Chapter 3324, 2022; OERC, 2016) other than implementing policy around the following three forms of acceleration: whole group, subject area, and early high school graduation (Chapter 3324.10, 2007), the state does set forth expectations and requirements related to gifted services when offered. These requirements are related to 1) the identification process, 2) the provision of services, 3) professional development, and 4) written education plans (WEPs).

Ohio's Gifted Identification Process

The Ohio Department of Education lists the following criteria and approved assessments for gifted screening and identification by ability area (2021a).

- ***Superior Cognitive Ability*.** When a student scores two standard deviations above the mean, minus the standard error, on an approved test; performs at or above the 95th percentile on an approved achievement test; or attains an approved score on an approved achievement test.
- ***Specific Academic Ability*.** When a student performs at or above the 95th percentile in a specific academic ability field on an approved achievement test.
- ***Creative Thinking Ability*.** When a student scores one standard deviation above the mean, minus the standard error, on an approved test and attains either qualifying score on an approved checklist of creative behaviors or creativity test.
- ***Visual or Performing Arts Ability*.** When a student demonstrates superior ability in a visual or performing arts area through a display of work, an audition, or other performance or exhibition and obtains a qualifying score on an approved checklist of behaviors (ODE, 2021b).

District identification plans must include assurance of inclusion in screening and assessment procedures for minority and disadvantaged students, SPED, and EL students (Chapter 3324.04, 1999). If a student meets the criteria for gifted identification the student will remain gifted. ODE also recognize students with both an identified area of giftedness and an identified disability that is recognized under IDEA (2019b).

Assessments

Districts shall have a policy that specifies criteria and methods used to screen for further assessment; multiple sources of assessment data; methods to ensure equal access to screening; provisions for students withdrawing, reassessing, or transferring into the district; and methods for resolving disagreements between parents and the district (Chapter 3324.06, 1999).

Referrals

Students may be referred for gifted identification evaluation by parents, guardians, teachers, peers, or themselves and are required to be evaluated within 90 days. Districts must also provide two opportunities a year for all referred students to be evaluated (ODE, 2021a).

Whole-Grade Screenings

District must use Department-approved assessments to conduct whole-grade screenings once during the K-2 and once in 3-6 (ODE, 2021a). Districts are required annually to report the number of students screened for further assessment, assessed, and identified as gifted in each of the identification ability areas (Chapter 3324.05, 2021). ODE audits these at least once every three years with support provided to districts out of compliance (Chapter 3324.05, 2021).

Provision of Services

Districts may only report gifted services to parents if the district has paid for those services and they align with standards (ODE, 2018b). If a district is not providing services, a letter must be sent to parents that states their child is not receiving any services and include other enrichment opportunities (ODE, 2018b).

Quality of Services

To be aligned with the standards set forth by ODE (2018b), gifted services:

- Must include differentiated instruction around "Depth, breadth, complexity, pace, and/or where content is above-grade level" (ODE, 2018b, p. 5).
- Should occur during the instructional day, with flexibility for internships, mentorships, etc.
- Shall have instructional time, class sizes, and caseload ratios equivalent to similar districts.

Further, the continuum of gifted services may include, but is not limited to:

1. A full-time or a single subject self-contained classroom with a gifted intervention specialist and all gifted students (max 20).
2. Services through co-teaching in a cluster setting with a group of gifted students (max 20) with a gifted intervention specialist (max caseload of 80). Each student shall have no less than a core content class period a day (15% of school week).
3. A resource room/pull-out where the gifted intervention specialist has a max of 20 gifted students at any one time and a max caseload of 80 students who are gifted. Each student shall have no less than a core content class period a day (15% of school week).
4. Honors course; international baccalaureate course; or advanced placement course.
5. Services through a trained art instructor.
6. Grade acceleration, early entrance to kindergarten or 1ST grade, subject acceleration, or early graduation from high school per district acceleration policy.

7. Dual enrollment opportunities including but not limited to college credit plus; and/or Internships and mentorships.

Acceleration

School districts are encouraged either adopt this policy or submit another policy for approval by ODE on whole-grade acceleration, individual-subject acceleration, early admission to kindergarten, and early high school graduation (Chapter 3324.10, 2007).

Gifted Educator Qualifications

All personnel assigned to providing gifted services "shall be provided with appropriate space and time for designing their work, evaluating student progress, conferencing, and planning" and are held accountable to the educator evaluation system (ODE, 2018b, p. 9).

- ***Gifted Intervention Specialists*.** Must hold either a gifted education licensure or endorsement and complete ongoing professional development about gifted education, as determined by the district (ODE, 2018b, p. 7).
- ***General Education Teachers who Provide Gifted Services.*** Receive training and ongoing learning about gifted education (ODE, 2018). Designated teachers must also complete 15 hours of gifted education PD each year for the first four years, unless they have 24 AP or IB certification hours within the past five years, in which case only 7.5 annual gifted education PD is needed the first four years (ODE, 2018b). Designated teachers must continue to "receive ongoing support in curriculum development and instruction from an educator who holds licensure or endorsement in gifted education" (ODE, 2018b, p. 9).
- ***Coordinators of Gifted Education.*** Charged with consulting and assisting school personnel to support gifted student identification, placement, services, district strategic planning and school improvement plans, and evaluating gifted education programming for effectiveness (ODE, 2018b, p. 9). Coordinators must have at least three years of teaching experience. If they are supervising teachers, they must hold an Ohio administrative license; be licensed or endorsed in gifted education; and participate in ongoing gifted education PD (ODE, 2018b).

Professional Development

To be aligned with state standards, districts that offer gifted services are required to offer PD to trained individuals (qualified to perform the prescribed activity), including general education teachers, who provide gifted services (Rule 3301-51-15(A), 2018). ODE provides educators with online access to PD modules with resources, presentations, and activities to support gifted students that were developed through a Jacob K. Javits US Department of Education grant project (ODE, 2020b). The Department also provides a collection of instructional resources for teachers working with gifted students (ODE, 2022f).

Written Education Plans (WEP)

Ohio's operating standards (2018b) mandate that gifted services shall be documented with a WEP that is developed in collaboration with a licensed or endorsed gifted education educator. It outlines a description of services for each gifted student. Copies are shared with parents, the gifted education

collaborator, and all educators providing gifted education services to students. Districts will attempt to receive an annual parent signature (ODE, 2018b).

Program Evaluation and Accountability

There are important components of Ohio's program evaluation and accountability:

- ***Gifted Indicator*** used three components performance, progress, and inputs for gifted students determined by points assigned to percentages of gifted students identified and served in academics or the arts and percentages of gifted students identified and served who are economically disadvantaged or underrepresented students (ODE, 2017, 2022e). At or below 600 FTE may not be rated on some components.
    - **Performance** of gifted students requires 15 assessed students and a score that is 95% of the highest performing 2% of districts. Each of the next three years, the goal will change from 95% this year, to 96.5% next year and finally 97.5%. This year, the score needed was 114.5. Reaching this score required the large majority of gifted students (about 75%) score in the advanced or higher in their area of giftedness.
    - **Progress** of gifted students requires 15 assessed students and three stars or more, which is expected growth.
    - **Identification** rates overall and for underrepresented groups as gifted in academic subjects as well as arts/creativity and provision of services, need 60% of their available points, which will move to 80% in two years. Essentially need to identify 10% of students and provide 80% with services, with a representation index for economically disadvantaged, and underrepresented groups at .8.
- ***Self-Report on Identification and Services*** are required annually (ODE, 2020a).
- ***Waivers for Gifted Education Services*** may be submitted for max class size and max caseloads.
- ***Fiscal Accountability*** ODE audits district identification plans and service numbers every three years. If districts are noncompliant, the gifted education funding received by the district will be reduced (ODE, 2018b). For FY 2022 and 2023, the Department is required to publish district information about the number of services provided to gifted students, number of licensed or endorsed gifted education specialists and coordinators, and more detailed expenditure data (Chapter 3324, 2022).