Arlington Public Schools

Gifted Services Program Evaluation Report

Prepared by the Office of Planning and Evaluation

Response from the Gifted Services Office

June 2017

This page intentionally left blank.

Table of Contents

List of Tables

List of Figures

List of Appendices

Appendices are available at www.apsva.us/evaluationreports.

SECTION 1: BACKGROUND

The evaluation of the Gifted Services program began in 2014-15 with the development of an evaluation design. A planning committee met regularly throughout the year to develop the evaluation questions that would guide data collection for this report. Committee members included staff from Planning and Evaluation, the Gifted Services Office, other central offices, and schools; as well as community members. Data collection for the evaluation occurred during the 2015-16 school year and the fall of 2016. This evaluation employed various methodologies to collect data with which to examine the success of the APS Gifted Services program. In particular, this report addresses the following three components outlined in Arlington Public Schools (APS) policy and procedures (45-3) for accountability and evaluation:

1. A description of the department, program, or service
2. Evaluation questions that ask:
    a. How effectively was the Gifted Services program implemented?
    b. What were the outcomes?
3. Recommendations

The executive summary and appendices are located online at www.apsva.us/evaluationreports.

Gifted Services Program Description - *Prepared by the Gifted Services Office*

Program Overview

Giftedness, intelligence, and talent are fluid concepts and may look different in different contexts and cultures. Even within schools you will find a range of beliefs about the word "gifted," which has become a term with multiple meanings and much nuance.

Gifted children may develop asynchronously: their minds are often ahead of their physical growth, and specific cognitive and social-emotional functions can develop unevenly. Some gifted children with exceptional aptitude may not demonstrate outstanding levels of achievement due to environmental circumstances such as limited opportunities to learn as a result of poverty, discrimination, or cultural barriers; due to physical or learning disabilities; or due to motivational or emotional problems. This dichotomy between potential for and demonstrated achievement has implications for schools as they design programs and services for gifted students.

There are children who demonstrate high performance, or who have the potential to do so, and we have a responsibility to provide optimal educational experiences develop talents in as many children as possible, for the benefit of the individual and the community. Gifted Services identifies learners within the school population who demonstrate or have the potential to demonstrate exceptional aptitude and talent in specific academic areas (English, mathematics, science or social studies) in grades K-12 and/or visual and performing arts (vocal or instrumental) in grades 3 – 12.
These students have needs that necessitate systematic, continuous services through appropriately differentiated curricula responsive to the individual student's learning readiness and interest. We seek to identify and serve the diverse population of Arlington Public Schools (APS) by providing services to children of all socioeconomic, language, and unique cognitive and artistic needs through the use of multiple criteria that will identify students' individual characteristics, unique learning styles, and

affective needs. It is our belief that each student's educational needs must be addressed as an integral part of the school day.

Goals and Objectives

The Gifted Services Office operates within the Department of Instruction (DOI) to meet APS Strategic Plan goals. The current strategic plan runs through 2016-17 and focuses on five important goal areas:

Goal 1: Ensure that Every Student is Challenged and Engaged

Goal 2: Eliminate Achievement Gaps

Goal 3: Recruit, Retain and Develop High-Quality Staff

Goal 4: Provide Optimal Learning Environments

Goal 5: Meet the Needs of the Whole Child

The goals of the Gifted Services Office are to

- work with school administrators, specialists, and teachers to provide appropriate daily differentiated services based on ongoing assessment data to meet students' learning needs
- work with APS central office to collaborate on curricular resources to add depth and complexity to the general education curriculum
- provide ongoing professional development opportunities to school administrators, specialists, teachers, and other professional educators who work with gifted learners on the following topics:
    - characteristics, behaviors and socio-emotional needs of diverse gifted children across all cultural and racial/ethnic subgroups
    - screening and identification process
    - research-based best practices in curricular resources written for gifted learners
    - finding and nurturing students from historically underrepresented populations to include twice exceptional (2e) (special education/gifted), ESOL/HILT, and students from poverty
- encourage involvement of parents and the community at large in the educational program of gifted students through the Gifted Services Advisory Committee and yearly parent information sessions
- identify students in Grades K–12 in Specific Academic Aptitude(s) and to identify students in Grades 3–12 in Visual/Performing Arts Aptitude across all cultural and ethnic groups

Attributes of Success

Through successful implementation, the Gifted Services office will accomplish the following:

- daily opportunities for differentiation for gifted students within the cluster classroom through collaboration between resource teachers for the gifted (RTGs) and classroom teachers to plan comprehensive ways to add depth and complexity to the general education curriculum
- daily opportunities for all learners to be exposed to critical and creative thinking strategies infused in daily lessons through collaboration between RTGs and classroom teachers

- increased number of staff trained in curricular resources written for gifted learners so that they can deliver comprehensive differentiated curriculum and instruction for gifted students and other students who are ready for an additional challenge
- high levels of achievement related to students' area of giftedness through advanced courses, including Advanced Placement, International Baccalaureate, and Dual Enrollment courses
- increase in the identification of students for Gifted Services across the APS population and the closure of the gap in underrepresented groups with the integration of the Young Scholars Model in Title 1 schools
- Increase in support and understanding for Twice Exceptional (2e) learners
    - continued updates to webpage created by Twice Exceptional Committee[1]
    - continued collaboration between RTGs for the gifted and special education teachers (i.e., 504 and IEP support, transition planning for 5th and 8th graders)
    - continued professional development focusing on needs and accommodations for twice exceptional (2e) learners (i.e., Festival of the Mind, creation of presentation for consistent messaging for school based trainings)
- Increase in support and understanding of ESOL/HILT gifted learners
    - Continued professional development for ESOL/HILT teachers on screening process for gifted services and critical and creative strategies for challenging learners
- Collaboration, planning, and implementation of Young Scholars Innovation Academy, Summer Laurate, and Superintendent Seminar
- Increase in number and diversity of applicants to Summer Residential Governor's School, Summer Laureate, and Superintendent's Seminar
- Increase in active participation by citizens in the Gifted Services Advisory Committee to include representation from all APS communities to continue to promote collaboration with the Gifted Services Office
- Increase in communication to parents about Gifted Services through ongoing updates to website, social media, and parent information sessions at school sites

Program Attributes

APS recognizes that students of high ability and potential need learning opportunities to help them develop skills and talents that will enhance the quality of their own lives and make significant contributions to society. Gifted students need opportunities to think abstractly, work at various rates and levels of complexity, and pursue tasks independently and collaboratively. In addition, gifted students need opportunities to learn with their intellectual peers, as well as opportunities to develop their socio-emotional well-being. In a personalized learning environment, student academic readiness, interests, and learning preferences are considered to make learning more efficient and effective.

Daily differentiation in the general education classroom through cluster grouping (minimum 5 – 8) and collaboration is the Gifted Services model used in APS to serve gifted learners. The Cluster Grouping Model is a research-based approach of intentionally grouping students according to their strengths and

[1] www.apsva.us/gifted-services/twice-exceptional

needs in a mixed ability classroom with a teacher who has the background and understanding of gifted learners and knows how to plan and implement strategies and/or resources written for gifted learners on a daily basis. The grouping size of at least 5 – 8 is important as it provides a group of students for which planning will be intentional and ongoing for at least a year of growth. This model is proven to improve teaching, learning, and achievement in all students, especially in schools with strong collaborative learning teams.

Since the general education teacher is responsible for providing this daily service with support of the RTG, coaching and collaboration is used at all levels as a way to expand teachers' understanding of giftedness and potential while building capacity to infuse critical and creative thinking lessons and curricular resources written for gifted/advanced learners and for all learners.

APS is committed to providing services that meet the academic, artistic, and socio-emotional needs of gifted learners. Services in the academic and fine arts areas are provided in various settings through

- daily differentiation of instruction to add depth and complexity to the general education curriculum in academic areas (English, mathematics, science and social studies)
- collaboration with the Arts Education Office to support differentiation of instruction to the general education visual arts and vocal/instrumental music curriculum
- modeling culturally responsive teaching through the Young Scholars Model as a way to find and nurture historically underrepresented students for gifted services
- collaboration with the Minority Achievement Office and the Minority Achievement Coordinators at elementary, middle, and high school to support gifted learners from historically underrepresented populations
- collaboration with the Arlington Tiered System of Support (ATSS) Office to identify and train teachers on research-based extensions for gifted learners
- collaboration with Counseling Services to provide support for socio-emotional needs of gifted learners
- collaboration with the Department of Special Education and Student Services to provide support for twice exceptional (2e) learners
- collaboration with the ESOL/HILT Office to provide support for ESOL/HILT gifted learners
- intensified/advanced course offerings in the academic area of mathematics in middle school
- intensified/advanced course offerings in the academic and visual/performing arts areas in high school to include Advanced Placement, International Baccalaureate and/or Dual Enrollment courses
- continued leadership and support to the following initiatives at each high school:
    - H-B Woodlawn Secondary: JuneTime and Senior Project
    - Washington-Lee High School: IB Creativity Action Service (CAS) Coordinator

    - Wakefield High School: Cohort, United Minority Girls and Senior Project
    - Yorktown High School: SOAR, AP Scholars
- independent study at the high school level
- mentorships through P.R.I.M.E. at the high school level
- continued leadership and support for other opportunities for extensions and enrichment beyond the school day and in the summer through Young Scholars Innovation Academy (Title 1 schools), Summer Laureate, Summer Residential Governor's School, and Superintendent's Seminar

Screening Process

APS identifies students as gifted in two areas:

- Specific Academic Aptitude (K-12): students with aptitudes in the selected academic areas of English, mathematics, science, and social studies
- Visual/Performing Arts Aptitude(Grades 3-12): students with aptitudes in visual art and in vocal and/or instrumental music

Referral forms are available on the Gifted Services web page and at each school. The referral form has been translated in the five most prevalent languages in APS: Amharic, Arabic, Bengali, Mongolian and Spanish. Other languages will be translated upon request.

At the elementary, middle, and high school levels, screening of students for specific academic area and visual and performing arts (vocal and instrumental music) is held annually using a case study approach focusing on student strengths.

One of two paths at the elementary level initiates the referral and screening process:

- Parents, guardians, school staff, community members, peers, self, or others may refer a student for gifted services
- Students become part of the automatic screening pool based on a benchmark score on the Naglieri Nonverbal Ability Test (NNAT) and/or on any one subtest of the Cognitive Abilities Test (CogAT)

In addition to the mass screening with the NNAT and the CogAT, the resource teacher for the gifted (RTG) meets with each collaborative learning team in the school and reviews the Teacher Screening Form as a point of discussion for possible students to refer.

In the middle and high school, parents, guardians, school staff, community members, peers, self, or others may refer a student for gifted services. As in elementary school, the RTGs at middle and high schools use the Teacher Screening Form when meeting with teachers and teams to elicit possible referrals.
Within 90 days of receiving a referral, each school convenes a local school committee to determine a need for gifted services. The team includes at least three people representing the following staff

members: an administrator, the resource teacher for the gifted (RTG) and/or Young Scholars Coach, grade-level classroom teacher(s), and other specialists as appropriate, such as a special education teacher or a ESOL/HILT teacher.

The local school committee reviews multiple sources of student data for a holistic approach to screening:

- Nationally Normed Ability Testing
    - Naglieri Nonverbal Ability Test (NNAT) administered to all 2nd graders in the fall)
    - Cognitive Abilities Test (CogAT))administered to all 4th graders students in the fall
- Achievement Testing (when available)
- Gifted Behavior Commentary (GBC) - completed by local school screening committee
- Parent Information Form
- Work samples

Two Title 1 schools have incorporated a Young Scholars (YS) model into the screening process. At these schools, all K-2 students are screened using the Young Scholars Behavior Continuum. Young Scholars are students from historically underrepresented populations who may lack access to gifted services, advocates for their advanced academic potential, and/or affirmation of their strengths. The RTGs work with school staff to find and nurture Young Scholars with the ultimate goal of having equal representation among racial/ethnic groups receiving gifted services.

When a child is referred by a parent, teacher or self, a school team completes a Gifted Behavior Commentary (GBC) form to document the consistency of gifted behaviors observed. Led by the RTG, this school team should include the classroom teacher, an administrator, the counselor, and other specialists as appropriate such as the ESOL/HILT and special education teacher. The school team reviews the multiple criteria to determine eligibility for gifted services. If a child is found ineligible, parents may appeal the decision.

There are two levels of appeals for parents if the committee finds their child ineligible.

- The first level of appeal is with the school principal. Parents may submit new information to the principal for review. If the principal upholds the committee decision, parents may request the second level of appeal.
- The second level of appeal is at the county level. If the school principal upholds the committee's decision in the first level of appeal, parents can send an appeal letter to the Supervisor for Gifted Services who will convene an appeal committee of professionals who did not serve on the original screening committee to make a final decision.

At the central office level, an oversight committee will review school based decisions and may overturn ineligibility decisions if inconsistencies are found in the screening process.

Students who are newly enrolled in Arlington Public Schools may be screened for gifted services by submitting academic records to the principal and/or the resource teacher for the gifted. The RTG, in

collaboration with the supervisor of gifted services and the principal, will make a determination of eligibility. If the student is not eligible, he/she may be referred during the next screening window.

Screening Procedures VPA Grades 3-12: Visual Arts, Instrumental and Vocal Music

Beginning in grade 3, all students are considered each year for gifted services in visual arts and/or performing arts in the areas of vocal and/or instrumental music. Using multiple criteria, students are considered through a holistic case study approach with a focus on student strengths.

At the elementary, middle, and high school levels, screening students for visual arts and performing arts is done annually at the local school. The screening process is initiated by a referral from one of the following: art teachers, music teachers, other school staff, parents, guardians, community members, peers, self, or others who may have knowledge or expertise in the specific area.

When a student is referred by a parent, teacher or self, a local school committee completes a Visual/Performing Arts (VPA) Gifted Behavior Commentary (GBC) form to document the consistency of gifted behaviors observed. Led by the RTG, this school team should include an administrator, the art or music teacher, the counselor, and other specialists as appropriate such as the ESOL/HILT and/or the special education teacher who knows the child. The school team reviews the multiple criteria to determine eligibility for gifted services. If a child is found ineligible, parents may appeal the decision.

There are two levels of appeals for parents if the committee finds their child ineligible.

- The first level of appeal is with the school principal. Parents may submit new information to the principal for review. If the principal upholds the committee decision, parents may request the second level of appeal.
- The second level of appeal is at the county level. If the school principal upholds the committee's decision in the first level of appeal, parents can send an appeal letter to the Supervisor for Gifted Services who will convene an appeal committee of professionals who did not serve on the original screening committee to make a final decision.

At the central office level, an oversight committee will review school based decisions and may overturn ineligibility decisions if inconsistencies are found in the screening process.

Students who are newly enrolled in Arlington Public Schools may be screened for gifted services by submitting records to the principal and/or the resource teacher for the gifted. The RTG, in collaboration with the supervisor of Arts Education, supervisor of Gifted Services, and the principal, will make a determination of eligibility. If the student is not eligible, he/she may be referred during the next screening window.

Best and Current Practices

The theoretical foundations of the APS gifted service model attributes are based on three guiding principles from within the Program Design section of the National Association for Gifted Children (NAGC) PreK–12 Gifted Program Standards:

- Rather than any single gifted program, a continuum of programming services must exist for gifted learners.
- Gifted education programming services must be an integral part of the general education day.
- Flexible grouping of students must be developed in order to facilitate differentiated instruction and curriculum.

In addition, three guiding principles from within the Curriculum and Instruction section of the National Association for Gifted Children PreK–12 Gifted Program Standards are used:

- Differentiated curriculum for the gifted learner must span grades K–12.
- General education classroom curricula and instruction must be adapted, modified, or replaced to meet the unique needs of gifted students.
- Instructional pace must be flexible to allow for the accelerated learning of gifted learners as appropriate.

With APS' adoption of Professional Learning Communities and the focus on personalized learning, the cultural shift from a focus on teaching to a focus on learning has begun. As part of that shift, RTGs work with collaborative learning teams through a new lens to view curriculum and instruction. Within a PLC, collaborative teams consider ways in which they can reduce content with the goal of identifying and delivering the most meaningful content taught at greater depths. For students that may have already mastered certain grade-level content, this more rigorous curriculum is necessary if they are to extend their learning. According to Richard and Rebecca Dufour in "Neglecting the Gifted and Talented," they reject the notion that, within a PLC, focusing on the needs of struggling learners will result in neglecting gifted learners. Instead, they state that the "staff of a PLC attempts to create a culture that stretches all students beyond their comfort zone and then provides the support to help them be successful in meeting the challenge." They go on to state that students who are "comfortable in the standard curriculum are called upon to stretch to meet the challenges of an accelerated curriculum. Students in the most rigorous curriculum are challenged to see how far they can go in extending their learning."

In APS the model for gifted services is cluster grouping and collaboration. The general education teacher is the primary source to provide daily differentiation in the general education classroom through cluster grouping (minimum 5 – 8 students) and support from the resource teacher for the gifted The Cluster Grouping Model is a research-based approach of intentionally grouping students according to their strengths and needs in a mixed ability classroom with a teacher who has the background and understanding of gifted learners and knows how to plan and implement strategies and/or resources written for gifted learners on a daily basis. The grouping size of at least 5 – 8 is very important as it provides a group of students for which planning will be intentional and ongoing for at least a year of growth. This model is proven to improve teaching, learning and achievement in all students especially in schools with strong collaborative learning teams.

RTGs work with these collaborative teams and cluster teachers to reduce the content through the collaborative design and implementation of pre-assessments and ongoing assessments. Pre-assessments are a best practice for all learners in terms of identifying areas which students have mastered prior to direct instruction, and they can be particularly helpful for gifted learners. Data from pre-assessments

enables teachers to utilize techniques such as **curriculum compacting**, "a technique for differentiating instruction that allows teachers to make adjustments to curriculum for students who have already mastered the material to be learned, replacing content students know with new content, enrichment/extension activities, or other activities." (Renzulli)

Based on the varying needs in the classroom, teachers work with collaborative teams to employ Arlington's Tiered System of Support (ATSS) to help every student reach success in academics and behavior. The focus of ATSS is to address the whole child and what supports he or she needs to be successful both academically and socio-emotionally. The ATSS framework uses the data decision-based model in the Professional Learning Communities (PLC), to analyze data, identify students who are in need of remediation or extension, and create timely action plans.

In its position statement regarding Response to Intervention (RtI) for Gifted Children, The Association for the Gifted, a division of the Council for Exceptional Children, posits that "the RtI model be expanded in its implementation to include the needs of gifted children." The use of the RtI framework for gifted students would support advanced learning needs of children in terms of a faster paced, more complex, greater depth and/or breadth with respect to their curriculum and instruction. It should also be noted that students who are gifted with disabilities may need more than one level of intervention and advancement in terms of curriculum and instructional strategies."
As teachers use pre-assessment data to determine the need for more rigorous curricular resources, they ensure student learning while providing instruction that is commensurate with the students' ability. Furthermore, pre-assessments and curriculum compacting fall very much in line with key principles of ATSS:

- Intervene early through the use of universal screeners and other forms of assessment
- Use a multi-tiered system of support
- Tailor instruction to the individual learner's needs
- Use data-based decision making to inform instruction and monitor progress
- Use research-based interventions and instruction
- Ensure fidelity of implementation
- Document and encourage parental involvement in all steps of the process

To support the continued implementation of PLC, ATSS and personalized learning, the Gifted Services Office created a Best Practices for Advanced Learners handbook to support all classroom teachers and particularly those teachers working with clusters of identified gifted students, or cluster teachers. The handbook provides a common framework that supports meaningful and continuous collaboration between cluster teachers and each school's resource teacher for the Gifted (RTG). In an effort to support teachers as they plan for both the academic and socio-emotional needs of their advanced students, this handbook includes information about:

- Curricular resources designed for advanced learners
- Critical and creative thinking skills for all learners
- Behaviors and characteristics of diverse gifted learners
- Socio-emotional needs of gifted learners

APS Policies Related to Program Differentiation

The APS Gifted Services Office's differentiated curriculum and instructional model is based on additional guiding principles of Program Design and Curriculum and Instruction from the NAGC PreK-12 Gifted Program Standards and on the NAGC position paper on acceleration. The guiding principles respond to individual, unique student achievement needs that extend well beyond the general education curriculum:

- Instructional pace must be flexible to allow for the accelerated learning of gifted learners as appropriate. (As noted in *A Nation Empowered,* there are multiple forms of acceleration.)
- Educational opportunities for subject and grade skipping must be provided to gifted learners.

The APS Policy, Section 20-3, Program Differentiation, provides an overview on Gifted Services. Included within this policy are the procedures and guidelines for program differentiation that meet the learning needs of gifted students. Procedures and guidelines exist for

- First grade placement of underage students
- Acceleration of progress through school (including grade-level acceleration when a child shows mastery of all core content and is testing at the top of the next grade level in all content)
- Acceleration of progress through content (including cross-grade-level grouping and advanced levels of study without limits to number of years above grade level)
- Summer school (including new work for credit and acceleration through high school)
- Dual Enrollment
- Independent study for high school credit (including research, self-directed course, internship, and work experience)

Curriculum and Instruction

Curriculum, Resources and Models for Advanced Learners (Specific Academic Areas)

The APS Program of Studies, which incorporates the state Standards of Learning, delineates a scope and sequence of content in each discipline building on previous knowledge and increasing the depth of understanding as students move from kindergarten through grade 12. Learning experiences in APS are designed to challenge and engage highly able students in such a way as to nourish their abilities and encourage excellence. In its Position Statement on Differentiating Curriculum and Instruction for Gifted and Talented Students, the National Association of Gifted Children recommends that in order for a focus to remain on learning and continued growth, gifted students should be provided with access to curricular resources designed for advanced learners. For gifted learners, appropriate differentiation allows for increasing levels of advanced, abstract, and complex curriculum that is substantive and responds to learner differences. The National Association for Gifted Children strongly recommends that every school provide:

- access to curricular resources that are designed for gifted learners;
- systematic and substantial professional development for all teachers regarding the needs of gifted learners, differentiation in general, and flexible grouping approaches; and

- resource specialists who can support the classroom teacher in assessing gifted learner differences,
- making adjustments to the curriculum, and implementing differentiated instruction.

Collaborative Instructional Model and the RTGs for the Gifted

In alignment with the NAGC position paper on Collaboration Among All Educators to Meet the Needs of Gifted Learners, the collaborative instructional model employed through the RTGs is essential to instruction of the gifted population within the general education setting and to making gifted programming an integral part of the school day. Collaboration for effective differentiation for gifted students involves the classroom teacher and the RTG working together to design and implement appropriate instruction for identified gifted students.

Working collaboratively has professional benefits for both the classroom teacher and the RTG. The benefits include

- Collective focus on gifted student learning within cluster groups (minimum 5– 8)
- Opportunities to model and support the implementation of best practices in gifted education within the general education classroom
- Shared ownership of instructional practice
- Spirit of collaborative responsibility for the learning of all students
- Reflective and ongoing dialogue

This collaboration has instructional benefits that have a positive impact on student learning. The instructional benefits include

- Greater exposure to best practices in gifted education to challenge and engage all learners
- Increased use of data to drive instruction to monitor student progress and growth
- Increased likelihood of finding and nurturing those students who are ready for advanced curriculum but who may not have been identified for gifted services

Collaborative instruction can take many forms. The classroom teacher and the RTG work together to assess students, plan the unit or lesson, and instruct students in program of studies building in the depth and complexity that advanced/gifted learners need to show academic growth. Collaboration is most often employed when the classroom teacher or RTG takes the lead role and provides all the direct instruction, with the other teacher taking anecdotal notes on student responses/behaviors based on the lesson. Each teacher takes on instructional tasks within a lesson or unit. Teachers share the instruction by taking turns teaching to the whole class and to small groups. The RTG uses this time to model content, process, and/or product differentiation strategies and curriculum written for advanced/gifted learners.

Critical and Creative Thinking

APS Gifted Services is dedicated to teaching students creative and critical thinking skills.

All students have the ability to

- Think abstractly

- See numerous relationships
- Make generalizations
- Work at varying levels of complexity

Therefore, it is imperative to develop processing tools so that they can use metacognition to organize their thinking to

- Pursue tasks, themes, and topics independently
- Develop their ability to examine issues at a continually developing level of abstraction/complexity
- Develop their ability to use generalizations, principles, and theories to structure thought in an area of study

Enduring understandings resulting from the development of thinking skills include

- Abstract/complex content requiring a systematic way of thinking
- Instruction in productive thinking tools—creative, critical problem solving to improve higher level thinking
- An increase in students' ability to apply these tools across disciplines

Guided by the Critical and Creative Thinking Strategies Framework, K–12 RTGs work with collaborative teams and/or individual classroom teachers to embed critical and creative thinking strategies into lessons that teach the Standards of Learning (SOL) content.

The role of the RTG in training/supporting classroom teachers is to:

- Model critical and creative thinking strategies using content with whole class and/or small groups
    - Collaborate with teachers in developing future lessons/units that teach students the thinking strategies and provide additional support for the teacher as they implement these strategies
    - Provide opportunity to observe students' responses and behavior and to take anecdotal notes for evidence of advanced potential
- Conduct school-based inservice opportunities for teachers in critical and creative thinking strategies to promote opportunities for students to apply higher level thinking on a daily basis
- Provide resources to teachers to use during instruction

Elementary Level

Rigorous, challenging curricula are designed by classroom teachers in collaboration with RTGs in a cooperative effort to meet the unique cognitive needs of students who are identified for gifted services in English, mathematics, science, and social studies. Art and music teachers work directly with the students to provide appropriate differentiation for their most highly able students. All K–5 classroom teachers and K–5 arts specialists use a variety of supplemental content materials, creative and critical thinking strategies, and instructional methods that link content in an integrated manner.

A variety of flexible groupings are encouraged in order to meet the varied needs of learners to include whole class, small flexible groups within and outside the classroom, and individual instruction. Flexible

groupings and in-class instruction extend and enrich the curriculum and encourage self-understanding, self-direction, and critical/creative thinking skills for all students. Teachers are encouraged to provide lessons that allow for multiple responses, with opportunities for diverse products that challenge existing ideas and thoughts. Technology is used to enrich and extend the curriculum in order to challenge the students.

In Grades K–5, identified students are cluster grouped (minimum 5 – 8) in heterogeneous classes with teachers who have been trained in characteristics, identification, and curriculum differentiation for gifted students. These teachers work collaboratively with the RTG to implement the curricular resources outlined in the Best Practices for Advanced Learners Handbook to support daily differentiation.

Secondary Level

Middle School

Similar to elementary, in Grades 6-8, identified students are cluster grouped (minimum 5 – 8) in heterogeneous classes with teachers who have been trained in characteristics, identification, and curriculum differentiation for gifted students.

RTGs and classroom teachers use the collaboration model to plan rigorous, challenging curricula to meet the daily, unique cognitive needs of students who are identified for gifted services in English, mathematics, science, and social studies. Identified students are clustered in heterogeneous student teams with core subject teachers trained in the characteristics and curriculum written for gifted students.

Teachers are encouraged to use flexible grouping to meet the needs of identified gifted and highly able students using curriculum written for gifted learners to add depth and complexity to the program of studies. Cluster teachers work collaboratively with the RTG to implement the curricular resources outlined in the Best Practices for Advanced Learners Handbook to support daily differentiation.

Content differentiation and acceleration for middle school mathematics is delineated by specific course title with students identified as gifted accelerated into grade 7 or 8 mathematics in grade 6; grade 8 mathematics or Intensified Algebra I in grade 7; and Intensified Algebra I or Intensified Geometry in grade 8.

Differentiation occurs using a variety of methods including, but not limited to, pre-assessment, tiered assignments/centers/products, problem-based learning, independent study, advanced content, flexible grouping, and student choice. Students can be flexibly grouped by achievement within English and math courses. Eligible middle school students may be accelerated in math with Intensified Algebra I in grade 7 and Intensified Geometry in grade 8. Other high school credit-bearing courses available to identified gifted and highly able middle school students include World Geography, Latin I and II, Spanish I and II, and French I and II. Eighth-grade students may apply for freshman admission to the regional academic-year Virginia Governor's School (Thomas Jefferson High School for Science and Technology, located in Annandale, VA, and operated by Fairfax County Public Schools, VA).

Art and music teachers work directly with the students to provide appropriate differentiation for their most highly able students. All 6^{th} – 8^{th} classroom teachers and arts teachers use a variety of

supplemental content materials, creative and critical thinking strategies, and instructional methods that link content in an integrated manner.

High School

At the high school level, RTGs and classroom teachers use the collaboration model to plan rigorous, challenging curricula to meet the daily, unique cognitive needs of students who are identified for gifted services in English, mathematics, science, and social studies. Content differentiation is achieved by course selection at the high school level.

High school students identified as gifted in academic areas and the arts are offered a variety of advanced/intensified courses including the IB Program at one high school and the AP courses offered at all four comprehensive secondary schools. All students in AP and IB courses are required to take the end-of-course examinations, which are fully funded by APS. In addition, students may participate in independent study for credit and/or dual enrollment in college courses. APS provides full funding for eligible students to attend the regional academic-year Governor's School (Thomas Jefferson High School for Science and Technology).

Additionally, APS offers two countywide programs. One high school offers the IB Certificate and Diploma Program, and a secondary 6–12 school operates on the premise of self-discipline and self-motivation. Finally, students have the opportunity to take advanced technical courses at the APS Career Center.

The RTGs support in-class differentiation and implementation of curriculum written for advanced learners to add depth and complexity to the program of studies, AP, and/or IB curriculum.

The RTG may also directly serve identified students through specialized seminars, instructional and social-emotional support for cohorts of minority students working in advanced classes, application processes for summer opportunities to include the Summer Residential Governor's School program, and other projects developed at each school.

In addition to advanced/intensified/AP courses for Grades 9–12 arts students, enrichment opportunities are offered to all visual arts and music students as part of the countywide K–12 programs.

K–12 Countywide Opportunities

There are countywide activities available to students identified for gifted services in academic areas (English, math, science, and social studies). These experiences are designed to extend school-based activities and respond to students' interests. Opportunities include

- Elementary Summer Laureate Program (K–4)
- Enrichment offerings at the Career Center (4–12)
- Regional Governor's School for the Gifted—Thomas Jefferson High School for Science and Technology (9–12)
- Independent Study for elective credit (10–12)
- P.R.I.M.E. (Professionally Related Internship/Mentorship Experience) (rising 11 and 12)
- Summer Residential Governor's School for Academics/Mentorships (rising 11 and 12)
- Summer Residential Governor's Foreign Language Academies (rising 11 and 12)

- Summer Superintendent's Seminar (rising 11 and 12)
- Academic core area local, state, and national competitions (K–12) such as Geography Bee (4–8), Math Counts (6–8), VJAS (7–12), and National Poetry Contest (9–12)

Additionally, gifted services for students identified in arts areas (instrumental music, vocal music, and visual arts) are provided through school-based and countywide activities that comply with school board and state objectives. School-based services are delivered through differentiated curricula that extend and/or accelerate content, process, and products. Opportunities exist within the school day for students to be selected for and participate in performance groups that challenge varied skill levels at K–8 and through course offerings including advanced/intensified, IB, and AP arts courses at Grades 9–12.

The Arts Education office coordinates specialized fine arts experiences beyond the curriculum at the elementary and secondary levels to extend school-based activities and respond to gifted arts students' interests through the following countywide programs:

Countywide Elementary Opportunities

- Junior Honors Band (Grades 4 through 6, younger by exception)
- Junior Honors Orchestra (Grades 4 through 6, younger by exception)
- Elementary Honors Chorus (Grades 4 and 5)
- School Initiated Programs/Teacher Incentive Projects, K–5 (arts-related experiences arranged in connection with curriculum objectives as requested by individual teachers/schools and in cooperation with Arts Education office)

Countywide Secondary Opportunities

- Junior Honors Band (Grades 4–6) and Honors Band (Grades 7 and 8)
- Junior Honors Orchestra (Grades 4–6) and Honors Orchestra (Grades 7 and 8)
- Enrichment offerings at the Career Center (Grades 4–12)
- Independent Study for elective credit (Grades 10–12)
- Fine Arts Apprentice Program (Grades 10–12)
- Summer Residential Governor's School for Visual and Performing Arts (rising 11 and 12)
- Summer Superintendent's Seminar (rising 11 and 12)
- Arts area local, state, and national competitions (K–12) such as Reflections Contest (K–12), Scholastic Arts Awards (Grades 9–12), or District XII Solo/Ensemble Competitions (Grades 7–12)
- School Initiated Programs/Teacher Incentive Projects, Grades 6–12 (arts-related experiences arranged in connection with curriculum objectives as requested by individual teachers/schools and in cooperation with Fine Arts Gifted)

Effective Relationships

APS is committed to a strong relationship between the school and family. The Gifted Services Office is committed to this goal and encourages parent/community awareness and involvement in the education of advanced learners.

Information available to APS communities includes the following:

- Gifted Services pages on the APS website
- Gifted Services Twitter account @APSGifted
- Annual Gifted Services Information Night held at each school K–12 to provide specific information on differentiated services available for identified students and the APS Gifted Services Eligibility Process
- Information trifold brochures at the local schools that highlight the work of RTGs
- A listing of courses appropriate to identified secondary gifted students within the APS High School Program of Studies
- Media coverage of activities and achievements of gifted students; print media and cable broadcast of countywide Arts Education events
- Gifted Services Advisory Committee countywide reports and recommendations
- Quarterly differentiated forms done collaboratively with the RTG and classroom teachers outlining how content was differentiated each quarter; this form is sent home with each report card at the elementary level; middle schools send quarterly differentiation updates to parents
- Mentors and volunteers to support Professional Related Intern/Mentorship Experience (PRIME) program and Superintendent's Seminar
- Mentors for independent study for credit courses at high school level
- Materials and books available for checkout from APS Parent Resource Center

Professional Development and Collaboration

APS Policy Implementation Procedure Section 35-3.9, *Teacher Qualifications – Education of Gifted* guides the professional development needed by teachers in elementary, middle and high school who teacher gifted learners.

Specifically, NAGC believes all teachers entering the classroom should be able to:

- recognize the learning differences, developmental milestones, and cognitive/affective characteristics of gifted and talented students, including those from diverse cultural and linguistic backgrounds, and identify their related academic and social-emotional needs; and
- Understand how to differentiate curriculum and instruction, including modifying instructional strategies, materials, and assessments, in response to the learning needs of students who have mastered key concepts earlier than their classmates.

Arlington Public Schools recognizes that teachers and counselors are on a continuum in terms of professional learning needs; therefore, personalized professional development opportunities are necessary in order to meet the varying needs of administrators, teachers and counselors in the county. In order to provide more differentiated support, the Gifted Services office provides a variety of training formats:

- Opportunities to work with consultants with an expertise in gifted education and differentiated curricular resources written for gifted learners and shown to raise achievement scores for all students
- School-based professional development opportunities led by the RTGs throughout the school year such as collaborative book studies, staff development trainings, working with collaborative learning teams, and/or cognitive coaching opportunities with individual teachers
- Blended county-wide learning opportunities developed by the Gifted Services office such as Young Scholars Model, Advancing Differentiation, Introduction to Gifted, Differentiation for Gifted, Mindset, and Framework of Critical and Creative Thinking Strategies
- Opportunities to attend professional learning opportunities sponsored by the National Association for the Gifted, Center for Gifted Education at William and Mary, Virginia Association for the Gifted, and Learning Forward of Virginia

Resources

The budget for Gifted Services for FY 2017 is $1,196,392 which includes funds to pay for the following:

- Curricular resources written for gifted learners purchased for RTGs and teachers
- salaries for curriculum work done by teachers;
- salaries and costs for in-service professionals, including outside consultants, contract courses, and staff participating in professional learning outside of their contract hours; and
- conference registration fees for both presenters and attendees.
- Materials purchased for Summer Laureate and Superintendent Seminar
- Summer Residential Governor's School yearly payments
- Thomas Jefferson for Science and Technology yearly payments

Implementation of the Gifted Services Program is the responsibility of the two employees in the Gifted Services Office as well as school-based RTGs. The primary responsibilities of the two Gifted Services Office employees are below:

Table 1: Gifted Services Office Staff and Responsibilities

Employee	Primary Responsibilities
Gifted Services Supervisor (fulltime)	• Serve as an advocate for identified gifted students through collaborative work within the Department of Instruction in areas of countywide focus such as Professional Learning Communities, Arlington Tiered System of Support, Personalized Learning, Whole Child, Aspire2 Excellent and , Festival of the Mind, etc. • Work collaboratively with the Arts Education office on the identification of gifted students in art and music and differentiation strategies for fine arts teachers • Work collaboratively with school principals in a variety of ways to include presentations at principals meetings, interviewing for RTG positions, curriculum for advanced learners, school visits, classroom observations, etc. • Work collaboratively with the Office of Special Education to advocate for the needs of twice exceptional (2e) learners • Serve as co-chair of the APS 2e committee to raise awareness and expand services for 2e learners • Work collaboratively with the Office of Minority Achievement to advocate for students from groups who have been historically underrepresented in gifted services • Work collaboratively with the Office of ESOL/HILT to advocate for gifted English language learners (ELLs) • Work collaboratively with the Office of Planning and Evaluation on the Naglieri (NNAT-2) and Cognitive Abilities Test (CogAT) in the development of training materials for school teams to use the data effectively • Work collaboratively with the Department of Information Services to strengthen Synergy as a source of needed data for the Gifted Service office and RTGs at each school • Work collaboratively with the office of Human Resources to support the gifted cohort to include cohort interviews and supporting teachers taking the graduate courses • Work collaboratively with the Gifted Services Advisory Committee • Collaborate with core curriculum and program supervisors in the development and selection of materials for gifted students • Facilitate and train RTGS and classroom teachers in curriculum written for gifted learners • Provide support and training to RTGs as they implement the collaborative model • Facilitate and train RTGs in the identification of gifted students, including underserved populations and all other aspects of their supportive role to teachers and students • Provide support for the RTG in the delivery of differentiated curriculum written for gifted learners

	• Facilitate and/or support in-school and countywide staff development on gifted education topics as per PIP 35-3.9 • Support mastery and extensions that add depth and complexity to the general education standards in all curriculum areas at a pace and depth appropriate for gifted learners • Conduct training and provide leadership to staff of RTGs for the gifted in ways to differentiate curriculum, support instructional needs of classroom teachers, and meet individual needs of gifted students and their families • Present to various parent advisory groups as an advocate for gifted learners (current supervisor has presented to the following ACI committees: Early Childhood, Minority Achievement, Arts Education, ESOL/HILT, Mathematics) • Communicate to the school community about gifted services at the schools through the Gifted Services webpage, Gifted Services annual newsletter of summer opportunities, emails and/or phone calls to parents • Write, manage, and update Gifted Services web pages and APS staff Gifted Services Blackboard and Google site • Coordinate, monitor, assess, and evaluate all programs related to gifted services including Summer Laureate, Superintendent's Seminar, and Summer Residential Governor's Schools • Monitor and support programs related to gifted students including High School Independent Study, PRIME, and Superintendent's Seminar • Support and coach all gifted services staff: K–12 RTGs and administrative assistant • Manage all accounts delineated for Gifted Services • Monitor all school-based grade-level accelerations as per PIP 20-3, Program Differentiation • Participate in Gifted Educational Groups, including the Virginia Association of the Gifted (current supervisor is president and previously served as Vice President and as a member); the Virginia Committee for the Education of the Gifted (current supervisor is vice president and served on the board); Virginia Consortium of Gifted Education Administrators; the Northern Virginia Council for Gifted/Talented Education (NVCG/TE; the current supervisor is a member); and the National Association of the Gifted (as a member).
Administrative Assistant (full time)	• Manage STARS financial accounts for Gifted Services • Manage ERO registration system • Manage Payroll for Department of Instruction • Work with Synergy to support supervisor in data collection • Support supervisor in daily tasks such as preparation for RTG and GSAC meetings • Process consultant paperwork, ordering requests, and coordination of specialized programs related to Gifted Services sponsored events at the schools such as the Summer Residential Governor's School Fine Arts auditions

	• Oversee all mailings/emails/phone calls to families (i.e.Summer Laureate, Superintendent's Seminar, Summer Residential Governor's School, APS and non- APS parent and community questions) • Handle filing and record maintenance

The following school-based positions contribute to the implementation of the Gifted Services program:

Resource Teacher for the Gifted

The RTG, working under the supervision of the principal in cooperation with the supervisor of Gifted Services, uses the collaborative cluster instructional model to work with teachers to plan, model, and/or co-teach strategies and curriculum written for gifted learners in the general education classroom.

RTGs responsibilities include:

- Complete the Schoolwide Agreement Form which serves as the overall plan for delivery services and supporting teachers during the school year
- Conduct a SMART goal that directly supports the education of gifted learners in curriculum written for gifted learners and/or supports teachers of gifted learners to be able to deliver curriculum and resources on a daily basis
- Serve as an advocate for identified gifted students
- Act as an instructional leader in the area of gifted education within school buildings and support differentiation for gifted and highly able learners in the general education classroom
- Participate on collaborative team meetings to keep needs of gifted learners a priority
- Instruct gifted and highly able students through a collaborative model to facilitate daily differentiation of content when RTG is not present in the classroom
- Model lessons for the classroom teacher in differentiation strategies including creative thinking strategies, critical thinking strategies, creative problem solving, product development, and research skills
- Work collaboratively with the classroom teachers to communicate to parents about the academic growth of gifted learners
- Conduct school-based collaborative book studies to support collaboration and implementation of best practices for gifted learners
- Facilitate cross-grade instructional grouping and acceleration opportunities for students, as needed
- Facilitate all aspects of the Gifted Services Screening Process for both Academic and Fine Arts referrals
- including finding and nurturing historically underrepresented gifted populations
- Facilitate specialized school-based programs that encourage high academic achievement for all students such as Cohort, SOAR, CAS
- Conduct in-school and countywide staff development and parent information evenings on gifted education topics
- Communicate with parents/guardians
- Be a positive contributor in RTG meetings

The following RTG allocations are in place for FY 2017 (to be updated later):

- Fulltime Elementary RTG in all elementary schools
- Middle School RTG at each middle school (5 positions)
- Grades 6–12 RTG at the HB Woodlawn Program (1 position)
- High School RTG at each high school (3 positions)

Cluster Teachers and Intensified/AP/IB Teachers

The classroom teacher is the primary instructor of gifted students and is responsible for the daily differentiation of instruction and curriculum to nourish and enhance student learning. Teacher responsibilities include:

- Provide differentiated instruction using curriculum written for gifted learners to students in cluster groups and/or those who are ready for a challenge
- Work collaboratively with the RTG to continue to develop strategies to meet the needs of gifted learners on a daily basis
- Work collaboratively with the RTG to communicate to parents about the academic growth of gifted learners (Differentiation Record Form at all elementary schools; Various formats employed in collaboration with RTGs and middle schools teachers to include newsletter, email blasts, website updates to communicate differentiation to parents)
- Complete the required gifted education training per APS Policy Implementation Procedures (3 hours of graduate credit or 40 hours of training in gifted education)
- Attend professional development on curriculum written for gifted learners
- Refer students for gifted services based on observations and data

Principal

The principal works in collaboration with the Gifted Services Supervisor, the RTG, and the classroom teacher to provide oversight for the building-level implementation of Gifted Services. Principal responsibilities include:

- Meet with RTG on an ongoing basis to support the Schoolwide Agreement Form for the delivery gifted services
- Ensure that there are scheduled opportunities for staff to plan together and collaborate
- Cluster-group (minimum 5 – 8) students in classrooms with teachers trained in providing gifted services
- Evaluate RTGs on the extent to which curriculum written for advanced learners is being delivered in a collaborative model for daily differentiation for gifted learners
- Evaluate classroom teachers and arts specialists on the extent to which differentiated instruction occurs for eligible students
- Provide time and provisions for staff development and training on gifted services
- Ensure that the school adheres to the requirements for the Gifted Services Eligibility Process and Gifted Services procedures directed by Virginia regulations and APS directives and procedures

- Work collaboratively with the Supervisor of Gifted Services on continuous improvement of services for advanced learners

Status of Recommendations Made in Previous Evaluations

The Gifted Services Program was last evaluated in 2008 and included the following recommendations:

Table 2: Status of Recommendations Made in Previous Evaluations

Recommendation	Status
Recommendations to be implemented by Gifted Services:	
1. Create a clear definition and vision of the role of the RTG.	Done by evolving; was created and now is being revised again
2. Align Gifted Services training opportunities more closely to the behaviors noted as deficient in the classroom observations conducted by the consultants from William and Mary.	Differentiation strategies: most RTGs are doing at least one school-based collaborative book study on differentiation strategies; redesigned book clubs to include planning and implementing with RTG to develop or continue to develop the collaborative relationship; aligns with National Standards for Professional Learning: Implementation (long term change) Creation of Framework of Critical and Creative Thinking Strategies and Best Practices for Advanced Learners Handbook with recommended curricular resources written by experts for gifted learners; creation of Google site for teachers to access both and supporting documents to help with implementation
3. Improve the identification of students in the areas of science and social studies through a study of full-time elementary RTGs where the new job description focuses more on differentiated instructional support to science and social studies lessons.	2016-2017 first year of full time RTGs at all elementary schools; increase in social studies and science IDs (Regina's data)
Recommendations requiring work with other programs, departments, and/or schools:	
4. Improve the identification of students in all academic areas by providing a report to RTGs to assist with referrals.	In collaboration with IS, public queries have been created so that RTGs can get ID data and referral data; Creation of electronic ID forms for more efficiency in screening process and better tracking of data

5. Promote and support understanding and implementation of differentiated instruction across APS.	RTGs are integral part of collaborative learning teams at their schools; Creation of Framework of CCT and Best Practices Handbook of recommended curricular resources to use at each grade level
Recommendations requiring the School Board to change policies or to consider future budget allocations:	
6. Provide nationally normed objective data to all teachers through the E-School Plus Student Data Base to aid in teachers' knowledge of student strengths.	Since 2013, APS gives every 2nd grader the Naglieri Nonverbal Abilities Test (NNAT) and every 4th grader the Cognitive Abilities Test (CogAT) does this for all 4th grade students
7. Repeat the COS-R classroom observation tool and method used to evaluate classroom differentiation in this report in the final year of the strategic plan (2010–2011) to determine whether there is an improvement as a result of the Strategic Plan Initiative.	This was part of the Program Evaluation outside observations done by Dr. Joyce VanTassel Baska and team

Methodology

Evaluation Design and Questions

Table 3 displays the Gifted Services evaluation design.

Table 3: Gifted Services Evaluation Design

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 1: Implementation – How effectively was the Gifted Services Program implemented?		
Objective 1: Best practices in gifted education are evident in instruction for gifted students.	1a To what extent are best practices in gifted education evident in instruction for gifted students?	• CLASS • COS-R

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 1: Implementation – How effectively was the Gifted Services Program implemented?		
Objective 2: APS teachers understand what differentiation is and effectively differentiate their own instruction for advanced learners.	2a To what extent do all APS teachers understand what differentiation looks like for advanced learners?	• Staff survey
	2b To what extent do APS teachers effectively differentiate their own instruction for advanced learners?	• CLASS COS-R
Objective 3: Curriculum for gifted students is implemented effectively and appropriately for all APS advanced learners.	3a To what extent are strategies and curriculum materials for gifted students • available to classroom teachers? • used effectively in a comprehensive and systemic way in classrooms? 3b To what extent are teachers aware of which students in their classes are identified as gifted?	• COS-R • Staff survey
	3c To what extent are advanced learners clustered in classrooms?	• Elementary homeroom enrollment • Secondary course enrollment
Objective 4: APS Gifted Services programs are accessible to all students.	4a To what extent are APS student groups represented in the population of students identified as gifted? How does this vary across schools? 4b To what extent has the implementation of mass screening tests changed the representation of students who are referred? 4c To what extent has the proportion of students identified as gifted in science and social studies increased since the implementation of mass screening tools?	• Gifted identification data • Gifted referral data

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 1: Implementation – How effectively was the Gifted Services Program implemented?		
	4d To what extent are gifted students receiving appropriate academic and social counseling? To what extent do counselors understand social/emotional needs of gifted students?	• Counselor focus groups
	4e To what extent do English language learners and students with disabilities identified as gifted • receive specialized support? • have their needs met?	• Staff survey • Student survey • Parent survey
	4f To what extent do families and teachers understand the identification process? 4g To what extent are students and parents aware of gifted services they/their children are receiving?	• Staff survey • Parent survey • Student survey
Objective 5: APS manages Gifted Services resources effectively.	5a What is the alignment of the day-to-day activities of the RTG and the defined role of the RTG?	• RTG position description • Running records • Staff survey • RTG focus groups
	5b How do administrators, teachers, and RTGs describe the role • of the RTG? • of the classroom teacher as it relates to instruction for gifted students? 5c To what extent do administrators monitor and enforce PIP 35-3.9, Teacher Qualifications – Education of Gifted Students?	• Staff survey • RTG focus groups

Program/Service Objective	Program/Service Question	Data Source(s)
Evaluation Question 1: Implementation – How effectively was the Gifted Services Program implemented?		
	5d To what extent are APS teachers trained in the use of gifted approaches/materials?	• ERO • Staff survey
	5e What is the impact of middle school scheduling on gifted students' access to services?	• Counselor focus group
	5f What is the program delivery model in exemplary districts similar to APS?	• Literature review and interviews with other school systems (Hanover Research)

Program Service/Objective	Program/Service Question	Data Source(s)
Evaluation Question 2: Outcomes – What were the outcomes for the targeted population?		
Objective 6: Advanced learners are actively engaged in learning and experience appropriate academic growth.	6a To what extent are students identified as gifted engaged?	Existing Tools and Data Sources: • CLASS • Student survey
	6b Have gifted students take algebra I by 8th grade (meaning 6th or 7th grade?0)	• Middle school course enrollment
	6c To what extent are students identified as gifted selecting the most challenging classes?	• Secondary course enrollment
	6d To what extent do students identified as gifted experience academic growth?	• SOL results • AP results • IB results • Middle school Reading Inventory (RI)

Study Measures

Data sources used to inform this evaluation are described in detail below.

Classroom Assessment Scoring System (CLASS)

The Classroom Assessment Scoring System (CLASS) is an observation tool developed at the University of Virginia's Curry School of Education to analyze the interactions between teachers and their students in order to boost the effectiveness of teaching and learning. As part of multiple ongoing evaluations, CLASS observations were conducted throughout the 2014-15 school year. For purposes of the Gifted Services

evaluation, CLASS scores related specifically to differentiation and student engagement were analyzed for classes with clusters of gifted students. The domains and dimensions of the CLASS tool are described in detail in **Appendix B1**. **Appendix B2** describes the alignment between CLASS dimensions and APS best instructional practices. A summary of CLASS observations conducted for this evaluation is available in **Appendix B3.**

Classroom Observation Scale-Revised (COS-R)

In the spring of 2016, the Office of Planning and Evaluation contracted with Dr. Joyce VanTassel-Baska, Professor Emerita of Education and former Executive Director of the Center for Gifted Education at the College of William and Mary. Dr. VanTassel-Baska is the primary author of the Classroom Observation Scale-Revised (COS-R), an observation tool used nationally to assess the use of differentiation for the gifted in classroom practice. She and two additional consultants conducted COS-R observations at eight elementary schools, two middle schools, and two high schools. Schools were selected purposively to represent a variety of demographic groups and gifted delivery models across the district. Observations focused on the four academic gifted areas and included classrooms with clusters of gifted students. Dr. VanTassel-Baska's full report is available in **Appendix B4**.

Gifted Referrals and Identifications

This evaluation includes gifted referral and identification data from the data warehouse. This data is summarized in **Appendix C1**.

Gifted Clusters and Participation in Advanced Coursework

This evaluation includes elementary homeroom and secondary course enrollment data from Synergy, the student information system, to analyze the extent to which gifted students are clustered in classrooms and taking advanced coursework. This data is available in **Appendix C2**.

Running Records

During the 2015-16 school year, RTGs for the gifted (RTGs) completed running records for three two-week periods in the fall, winter, and spring. The purpose of the running records was to document the day-to-day activities of the coordinators in order to evaluate the role of the RTG across the school system. The full analysis available in **Appendix C3**.

Electronic Registrar Online (ERO)

The Office of Planning and Evaluation used data from Electronic Registrar Online (ERO) to gauge the number of professional development sessions offered by APS in the area of gifted education. This data is summarized in **Appendix C4**.

Surveys

A survey was administered to students identified as gifted and parents of identified students in the spring of 2016. An additional survey was administered to school staff in the fall of 2016. Surveyed staff included principals; assistant principals; counselors; and core content, ESOL/HILT, art, music, and world languages teachers. This data is available in **Appendix D1**.

Focus Groups

In the spring and fall of 2016, an external facilitator conducted four 90-minute focus groups: one each with elementary, middle school, and high school counselors; and one with secondary directors of counseling. The elementary focus group addressed questions related to the Gifted Services evaluation, while the secondary groups addressed questions for the evaluations of both Career, Technical, and Adult Education (CTAE) and Gifted Services. The full Gifted Services focus group report is available in **Appendix D3**.

In addition, as part of her evaluation of the Gifted Services program, Dr. VanTassel-Baska conducted focus groups with RTGs. Her findings are included in her overall report in **Appendix B4**.

Gifted Delivery Models in Other School Districts

The Office of Planning and Evaluation contracted with Hanover Research to conduct research on best practices in delivery of services for gifted students. Hanover's analysis consisted of a literature review as well as interviews with gifted services program staff at six exemplar school districts. The Hanover report is available in **Appendix E1**.

Standards of Learning (SOL) Assessments

The Commonwealth of Virginia measures academic achievement through annual Standards of Learning (SOL) tests. SOL results for gifted students were extracted from the data warehouse. This data is summarized in **Appendix F1**.

Reading Inventory (RI)

The Reading Inventory (RI) is computer-adaptive reading assessment that measures reading comprehension using Lexile measures. Lexile measures indicate a student's reading level and can be used to match readers with appropriately leveled text. An analysis of growth on the RI for middle school students gifted in English is included in **Appendix F2**.

Advanced Placement (AP) Exams

Advanced Placement (AP) is an intensive program developed by the College Board that offers students an opportunity to develop their academic strengths through rigorous college-level curricula and challenging national exams. An analysis of AP exam scores for students identified as gifted in the content area of the test is included in **Appendix F3**.

International Baccalaureate (IB) Exams

International Baccalaureate (IB) is an academic program licensed by the International Baccalaureate Organization (IBO) that, upon successful completion, results in the awarding of a high school degree. IB courses are available at Washington Lee High School. IB exam scores for students identified as gifted in the content area of the test are summarized in **Appendix F4**.

SECTION 2: FINDINGS

Evaluation Question #1: How effectively was the Gifted Services program implemented?

To address this question, the evaluation focused on several areas: access to services, delivery of services, and quality of instruction.

Access to Services

Referral and Identification

In recent years, there has been a concerted effort to increase the number of students who are referred for gifted identification. One goal of this effort is to cast a wider net, therefore hopefully finding more gifted students from traditionally underrepresented groups. Additionally, while the expectation is that increased referrals will lead to increased identifications, the increase in referrals is a goal in and of itself, in that the act of referring a student generates a conversation among school staff about that individual student. Thus the hope is that even if a referred student is not ultimately identified as gifted, that student has come to the attention of school staff, who then explicitly discuss the student's individual needs.

The APS Gifted Services Office has implemented several recent changes in an effort to increase referrals and identification among historically underrepresented students:

- In 2013-14, universal screening for giftedness was implemented. In the fall, every 2nd grader takes the Naglieri Nonverbal Test (NNAT) and every 4th grader takes the Cognitive Abilities Test (CogAT).
- Since identifying and serving culturally and linguistically diverse students and students from poverty is still an influencing factor on standardized tests, the Gifted Services Office collaborated with multiple offices (ESOL/HILT, Minority Achievement, Special Education and various content offices) to create the APS Gifted Behavior Commentary (GBC) form as a way to identify students from diverse populations for gifted services. This document also serves as a training tool for schools on the diverse behaviors and characteristics of gifted learners across all cultural and racial/ethnic groups. It is the guiding structure for schools as they create portfolios of student work to document the behaviors identified on the GBC.

The screening process for gifted identification is explained in detail in the program description starting on page 5.

Referrals

APS aims to identify most gifted students at the elementary level, with the goal of having the greatest possible impact on the identified student over time. Accordingly, the data show that most referrals occur at the elementary level, and starting in 2014-15, APS has seen a sharp increase in elementary referrals in all academic areas. **Figure 1** shows the number of elementary students referred in each identification area between 2010-11 and 2015-16. While most referrals have been for English and math during this period, the sharpest increase in referrals has occurred for science and social studies. As universal screening focuses on increasing the number of academic referrals, there has been little change in the number of referrals for visual arts and music.

Figure 1: Number of Referrals of Elementary Students, 2010-11 through 2015-16

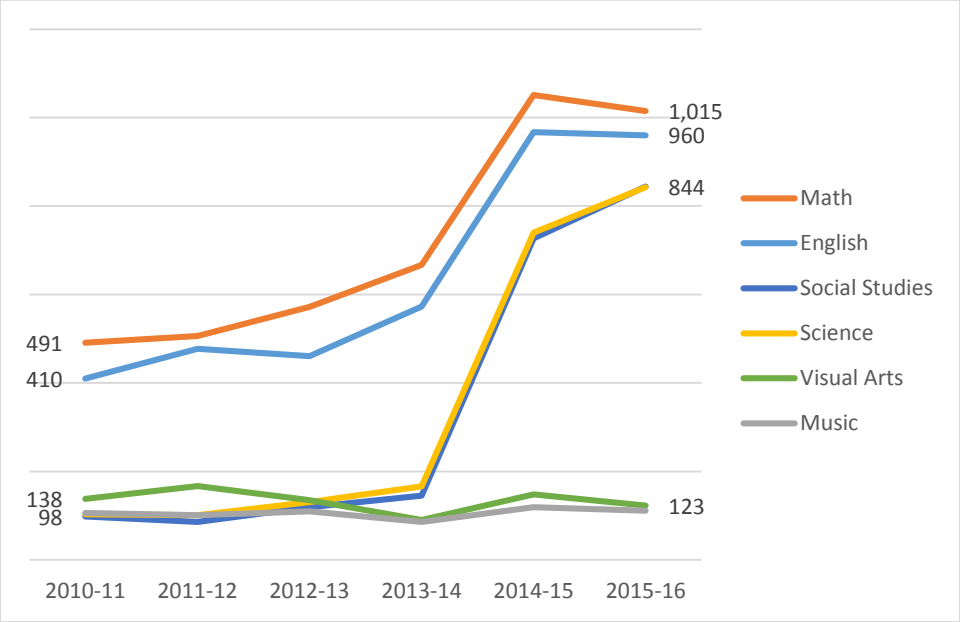
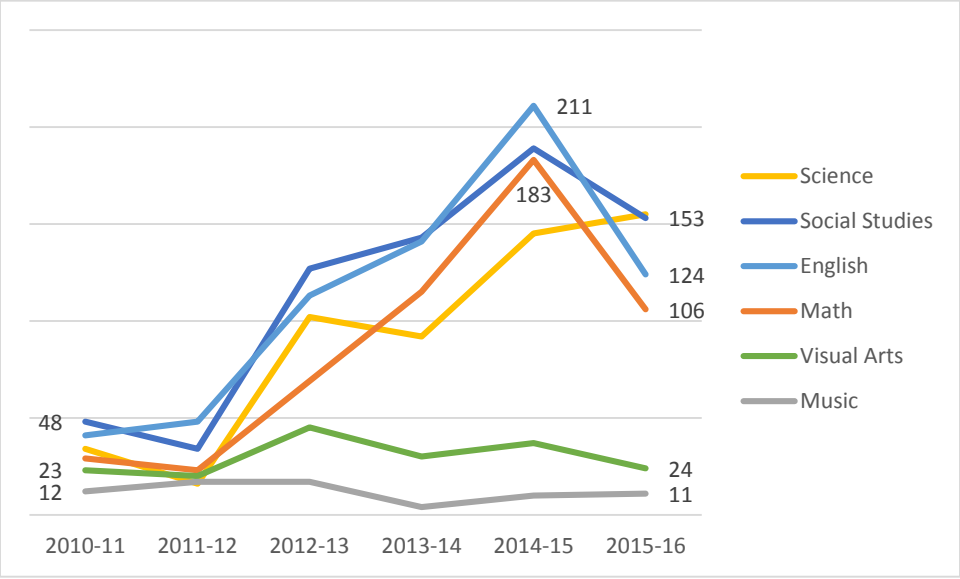


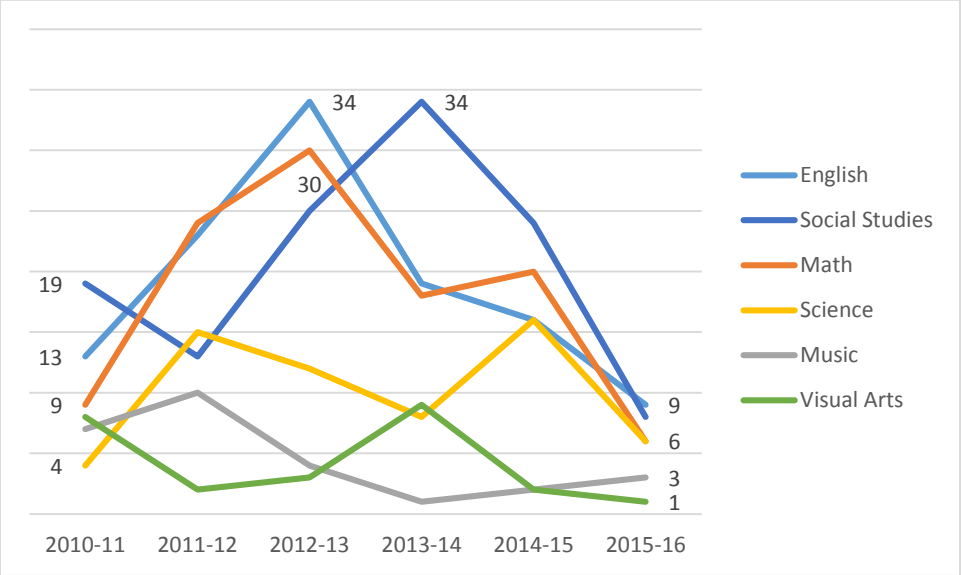
Figure 2 shows the number of middle school students referred in each identification area over the same time period. As expected, the total number of referrals is lower than at the elementary level. Like elementary, there has also been an increase in referrals in academic areas at this level. In 2015-16, there were more referrals in science and social studies than in English and math.

Figure 2: Number of Referrals of Middle School Students, 2010-11 through 2015-16



Unsurprisingly, the number of referrals at the high school level is relatively lower, as shown in **Figure 3**. The primary goal for referrals at the high school level is to identify gifted students who are new to APS.

Figure 3: Number of Referrals of High School Students, 2010-11 through 2015-16



Given that most referrals and identifications occur at the elementary level, data from this level was further examined to assess the level of variation from school to school. **Table 4** compares the districtwide percentage of students being referred and identified, as well as the percentage of referred students being identified, to the range of percentages at the school level. It also shows the number of elementary schools where these percentages fall more than three points above or below the overall district percentage.

During the most recent two years, the range in the percentage of students being referred and identified, and the percentage of referred students being identified, has widened. The number of schools falling far out of the range (three percentage points above or below the district percentage) increased during this period as well, suggesting that variation in the implementation of referrals and identifications has increased since the implementation of universal screening.

Table 4: Percentage of Elementary Students Referred and Identified as Gifted, Districtwide with Variation by School

Statistic	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
APS Elementary Population	11,476	11,975	12,129	12,950	13,537	13,846
% of APS Elementary Population **Referred**	7%	6%	7%	6%	10%	10%
Range across Elementary Schools	2-13%	1-8%	3-11%	3-13%	2-24%	2-22%
Number of Schools with Percentage Falling More than 3 Points Above or Below District Percentage	7	2	3	3	8	9
% of APS Elementary Population **Identified**	6%	6%	6%	6%	9%	8%
Range across Elementary Schools	2-11%	1-8%	3-10%	3-12%	2-20%	1-17%
Number of Schools with Percentage Falling More than 3 Points Above or Below District Percentage	5	2	3	3	7	9
% of APS Elementary **Referred Students who Are Identified**	78%	90%	90%	97%	85%	82%
Range across Elementary Schools	58-100%	73-100%	68-100%	87-100%	65-100%	54-97%
Number of Schools with Percentage Falling More than 3 Points Above or Below District Percentage	16	15	17	6	16	20

Change in Referrals since Implementation of Universal Screening

To assess progress towards the goal of increasing the percentage of students from historically underrepresented groups who get referred and identified, this evaluation examined referrals and identifications in two ways:

- **Representation**: This looks at whether the percentage of the population of referred or identified students who belong to a student group matches the percentage of the APS population who belong to that group. For example, if 50% of the student population is male, the expectation is that 50% of students referred or identified would be male.
- **Percentage of Students within Group**: This looks at the percentage of students within a group who are referred or identified, in comparison to percentages of other student groups. For example, if 10% of males are referred, the expectation is that 10% of females would be referred.

Given that the bulk of referrals and identifications occur at the elementary level, this section of the report includes elementary data only. Data for middle and high school are included in **Appendix C1**.

Representation of Student Groups among Referred and Identified Students

The ultimate goal is that the population of students referred and identified will be representative of the overall APS population.

Over the past six years, certain student groups have been consistently underrepresented among elementary students who are referred and identified in at least one area. **Table 5** and **Table 6** show the representation of student groups at the beginning of this period in 2010-11, and during the most recent year, 2015-16. This data is available for all years in **Appendix C1** and follows a consistent pattern. Examining trends over the entire five-year period yields the following findings:

- LEP students have been underrepresented by between 13 and 19 points among both referred and identified students. The highest level of underrepresentation has occurred in the most recent two years.
- Underrepresentation of students with disabilities has shown a small decrease, from 9-10 points in 2010-11, to 7 points in each of the last three years.
- The underrepresentation of economically disadvantaged students has shown a small increase, from 15-16 points in 2010-11 to 21-22 points in 2015-16.
- Black students were slightly underrepresented in 2010-11, by 2 to 3 points. During the last two years, they have been underrepresented by 4-5 points.
- Hispanic students have been underrepresented by between 11 and 16 points. This was highest during the most recent year.

Table 5: Representation of Elementary Student Groups among Referred and Identified Students, 2010-11

Group	% of APS Population	% of Referred Population	% of Identified Population
Female	49%	50%	51%
Male	51%	50%	49%
Non-LEP	68%	84%	84%
LEP	32%	16%	16%
Non-disadvantaged	69%	84%	84%
Disadvantaged	31%	16%	16%
Non-SWD	86%	96%	96%
SWD	14%	4%	4%
Asian	9%	9%	9%
Black	10%	7%	8%
Hispanic	27%	12%	12%
White	48%	62%	63%
Other	6%	10%	8%

Table 6: Representation of Elementary Student Groups among Referred and Identified Students, 2015-16

Group	% of Population	% of Referred Population	% of Identified Population
Female	49%	46%	47%
Male	51%	54%	53%
Non-LEP	70%	88%	89%
LEP	30%	12%	11%
Non-disadvantaged	69%	90%	91%
Disadvantaged	31%	10%	9%
Non-SWD	86%	94%	94%
SWD	14%	6%	6%
Asian	9%	11%	11%
Black	9%	5%	5%
Hispanic	27%	11%	11%
White	49%	63%	64%
Other	6%	10%	10%

Percentage of Students within Group Who Are Referred and Identified

Figure 4 shows the percentage of elementary students who were referred as well as the percentage identified, among different racial/ethnic groups over the past six years. There has been an increase in the percentage of white and Asian students being both **referred and identified** in the last two years. There have been smaller increases – between one to two percentage points – for black and Hispanic students being **referred**, with no corresponding increase in the percentage identified.

Figure 4: Percentage of Elementary Students Referred and Identified by Race/Ethnicity, 2010-11 through 2015-16

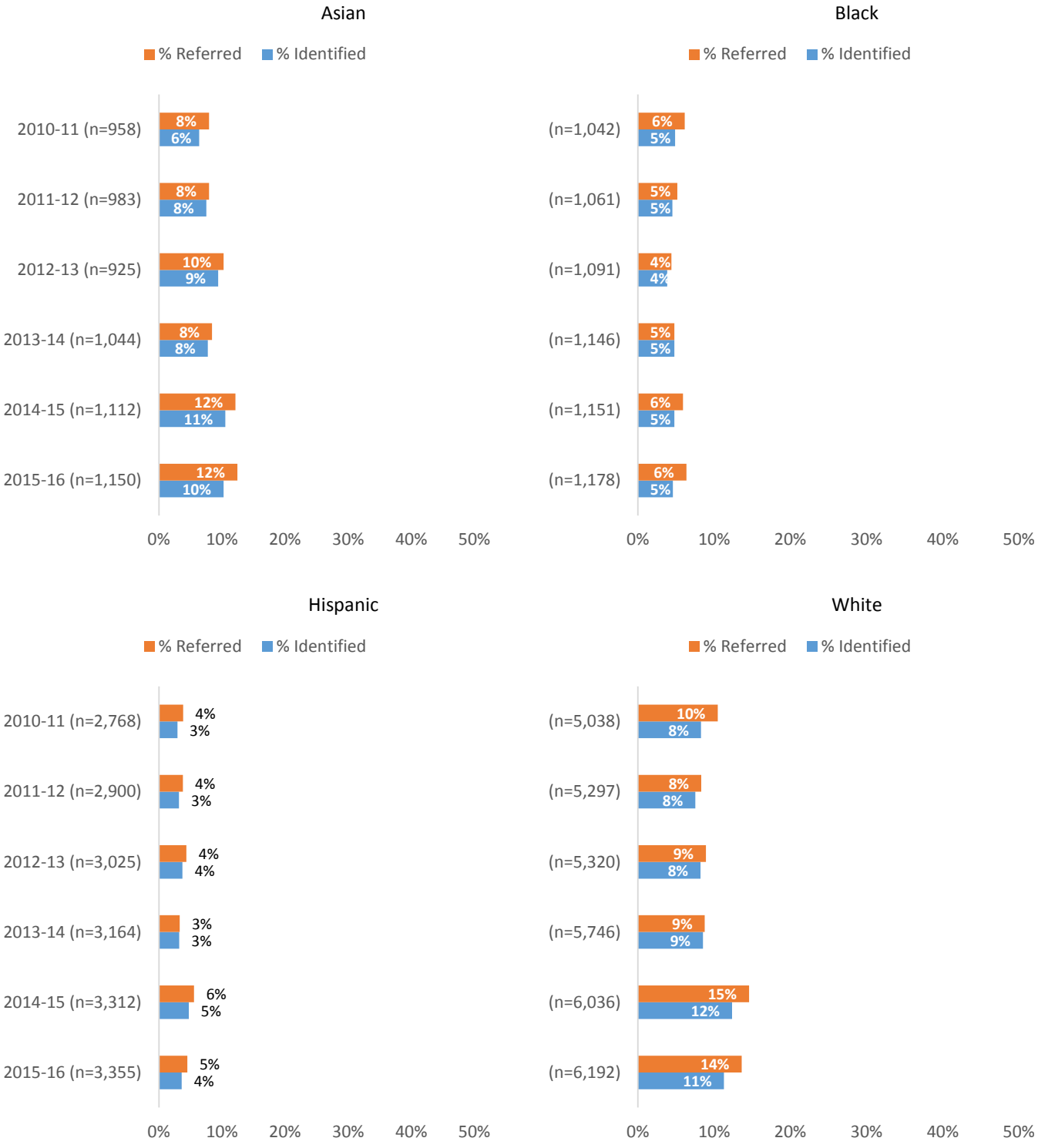
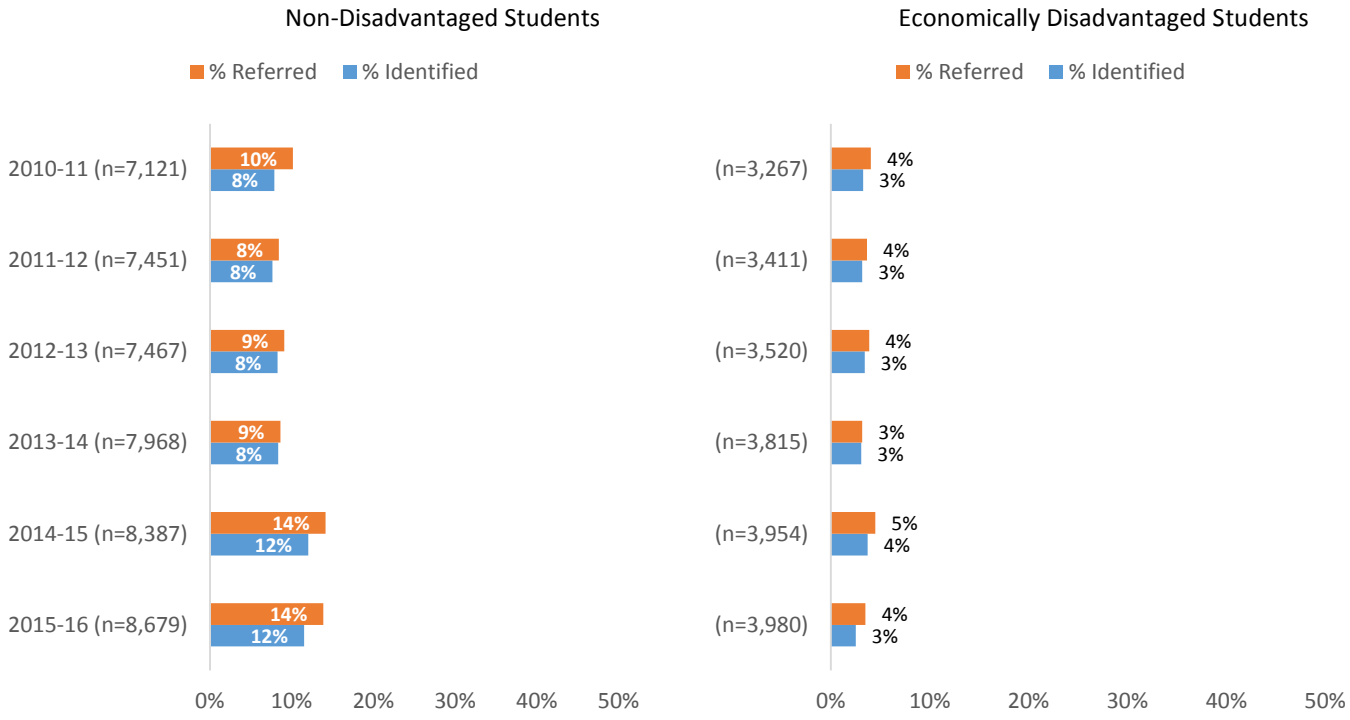


Figure 5 shows the percentage of elementary students who were referred and identified over the past six years, disaggregated by LEP and disability status. Referrals and identifications increased for all groups except LEP students during the past two years.

Figure 5: Percentage of Elementary Students Referred and Identified by LEP and Disability Status, 2010-11 through 2015-16

Figure 6 shows the percentage of elementary students who were referred and identified over the past six years, disaggregated by economic status. Following the pattern with LEP students, there has been little change in the percentage of economically disadvantaged referred and identified during this period.

Figure 6: Percentage of Elementary Students Referred and Identified by Economic Status, 2010-11 through 2015-16



Another indicator of progress in increasing identifications among underrepresented groups is the percentage of referred students who ultimately end up being identified, within each student group. As shown in **Figure 7**, after universal screening was implemented in 2013-14, the percentage of referred students being identified decreased across racial/ethnic groups. This decrease has been steepest for black students. In 2015-16, 72% of referred black students were identified, compared to 80-83% of other student groups.

Figure 7: Percentage of Elementary Referred Students Who Are Identified, by Race/Ethnicity, 2010-11 through 2015-16

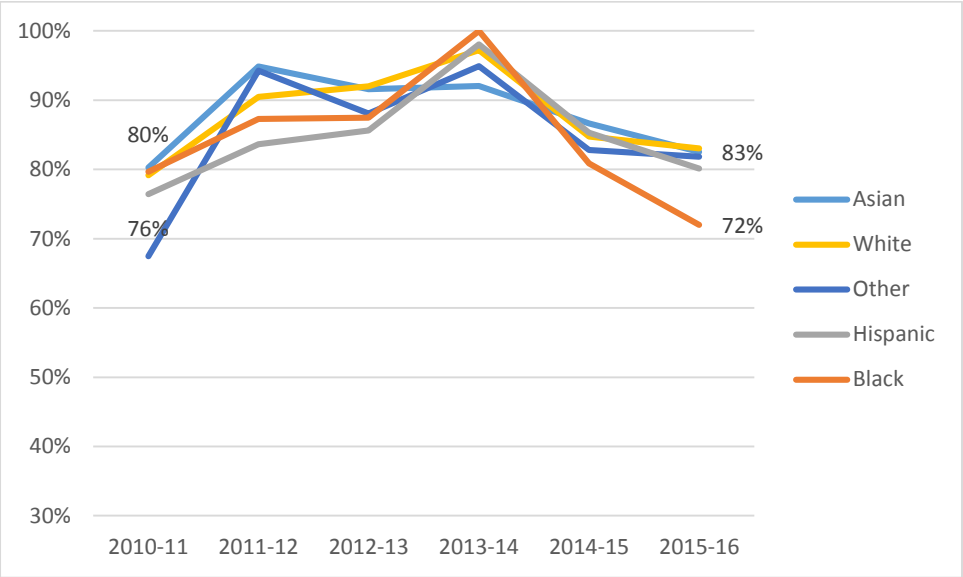


Figure 8 shows the percentage of elementary referred students who were identified, by LEP status. In the past six years, there have not been great differences between non-LEP and LEP students, though in 2015-16 LEP students who were referred were slightly less likely to be identified than non-LEP students.

Figure 8: Percentage of Elementary Referred Students Who Are Identified, by LEP Status, 2010-11 through 2015-16

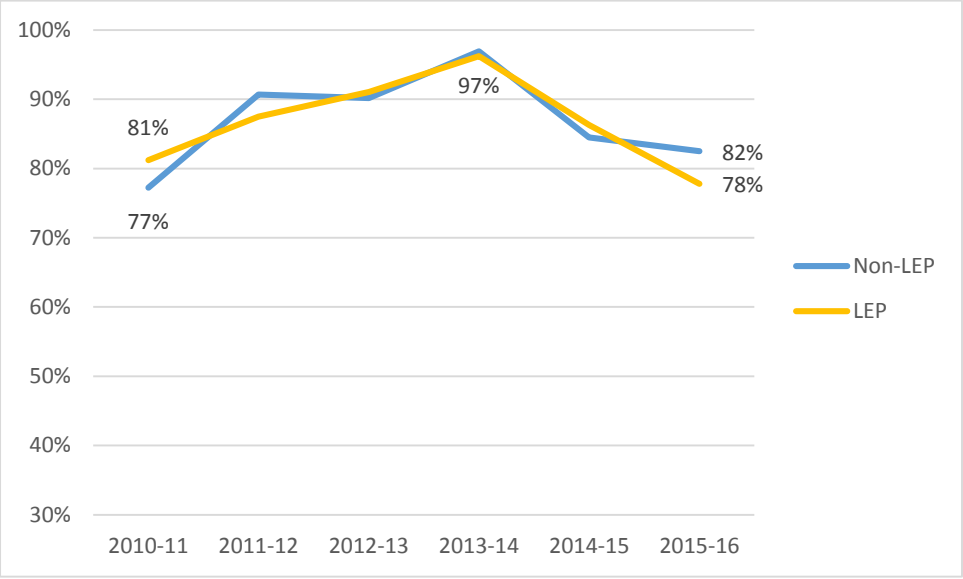


Figure 9 shows the percentage of elementary students who were identified, by disability status. Prior to 2014-15, students who did not have a disability and were referred were less likely than students with a disability to be identified. During the most recent two years, there has been no difference between the two groups.

Figure 9: Percentage of Elementary Referred Students Who Are Identified, by Disability Status, 2010-11 through 2015-16

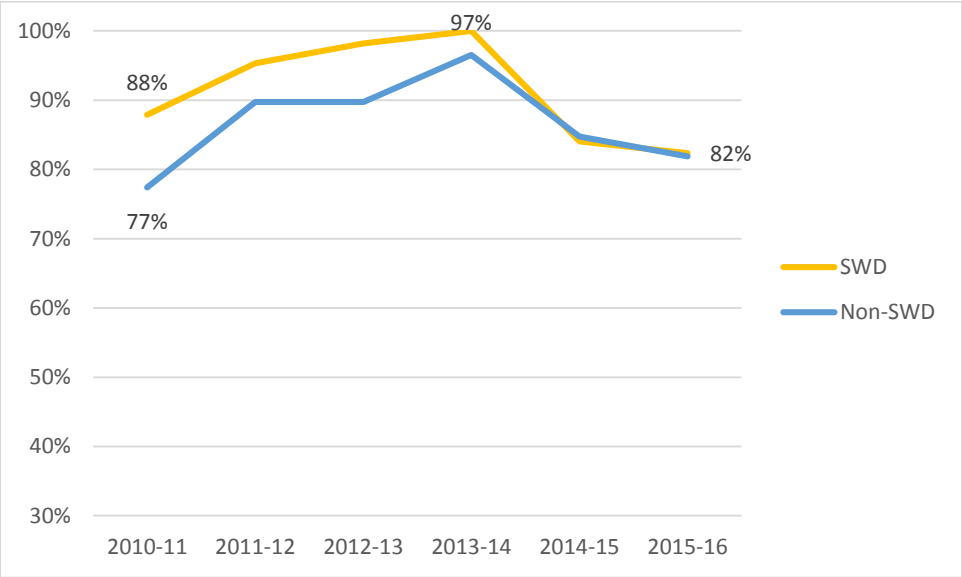
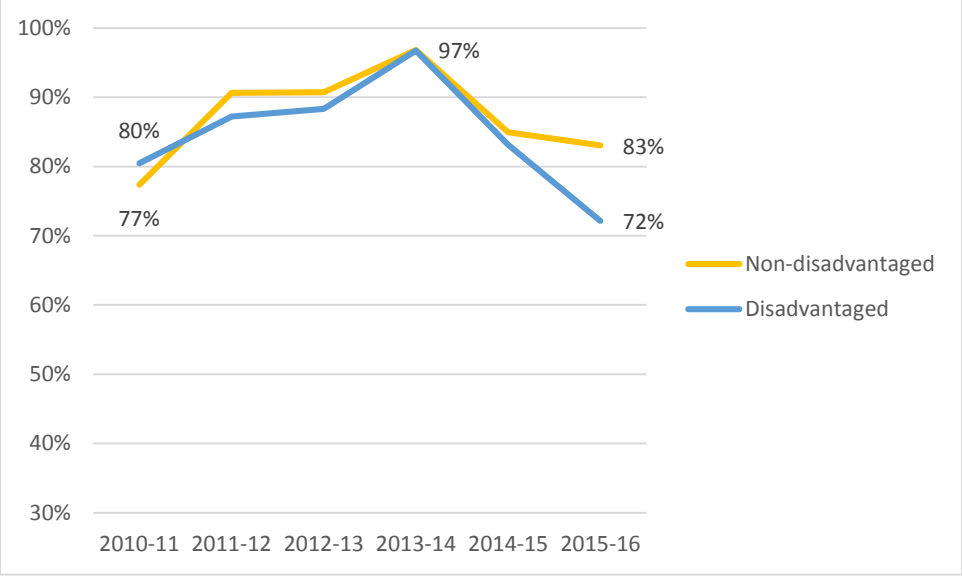


Figure 10 shows the percentage of elementary students who were identified, by economic status. Following the pattern with LEP students, a gap emerged in 2015-16, and economically disadvantaged students who were referred were less likely than non-disadvantaged students to be identified.

Figure 10: Percentage of Elementary Referred Students Who Are Identified, by Economic Status, 2010-11 through 2015-16



Findings from External Evaluator

In the spring of 2016, the Office of Planning and Evaluation contracted with Dr. Joyce VanTassel-Baska, Professor Emerita of Education and former Executive Director of the Center for Gifted Education at the College of William and Mary. Dr. VanTassel-Baska conducted classroom observations as well as focus groups with RTGs. In addition, she included an examination of APS' referral and identification

procedures in her evaluation. She analyzed identification data, reviewed documentation, interviewed the Gifted Services Supervisor, and included the topic in her focus groups with elementary and secondary RTGs. She found that:

- The new identification system meets the national standard for working on finding underrepresented groups. Many new facets of identification have improved the equitability of the program, yet data from the identification of student groups across the two years of its implementation suggest that it has been less effective in finding underrepresented groups. Without going deeper into the data, it is not possible to attribute that result directly to the new instruments or to the procedures employed in selection. However, it is important to evaluate the identification process for its effectiveness and the predictive validity of the new instrumentation.
- The processes used in local identification do not meet all of the national standards due to the lack of focus on providing for individual differences of gifted students through the careful analysis of profile data.
- Elementary RTGs viewed the new identification process as an improvement over the prior system, in that it was intended to find more underrepresented students. Many felt, however, that it had not produced the numbers expected. Many felt that it should be streamlined, simplified, and used consistently across schools. Since the system is still quite reliant on teacher recommendations, there was a perception that teachers needed more training in the process. The use of both the CogAT and the Naglieri tests was perceived as helpful to the process.
- Secondary RTGs were not united in their perceptions about the impact of the new identification process, some seeing it as a better process and others concerned about its unintended effects. Most of the specialists found the new identification process cumbersome but noble in its attempt to identify more underrepresented students. Most felt it could be streamlined in ways that would produce more positive results. Some argued it is currently having the opposite effect in who was being identified.

Support for English Language Learners and Students with Disabilities who are Identified as Gifted

As part of the Gifted Services evaluation, a survey was administered to students identified as gifted and parents of identified students in the spring of 2016. An additional survey was administered to school staff in the fall of 2016. Surveyed staff included principals; assistant principals; counselors; and core content, ESOL/HILT, art, music, and world languages teachers.

Table 7 shows the response rates and margin of error for each survey administered. Generally, when the margin of error is greater than 5, the results should be interpreted with caution.

Table 7: Response Rates and Margin of Error for Gifted Services Surveys

Survey	*Time Administered*	*Population*	*Responses*	*% of Population*	*Margin of Error*
Parents	Spring 2016	5,027	1,241	25%	2.4
Students (grades 5-12)	Spring 2016	3,880	527	14%	4.0
*Teachers**	Fall 2016	1,974	421	21%	4.2

Administrators	Fall 2016	92	51	55%	9.2
Counselors	Fall 2016	92	49	53%	9.6

*Teachers invited to participate in this survey included core content, ESOL/HILT, Art/Music, and World Languages teachers.

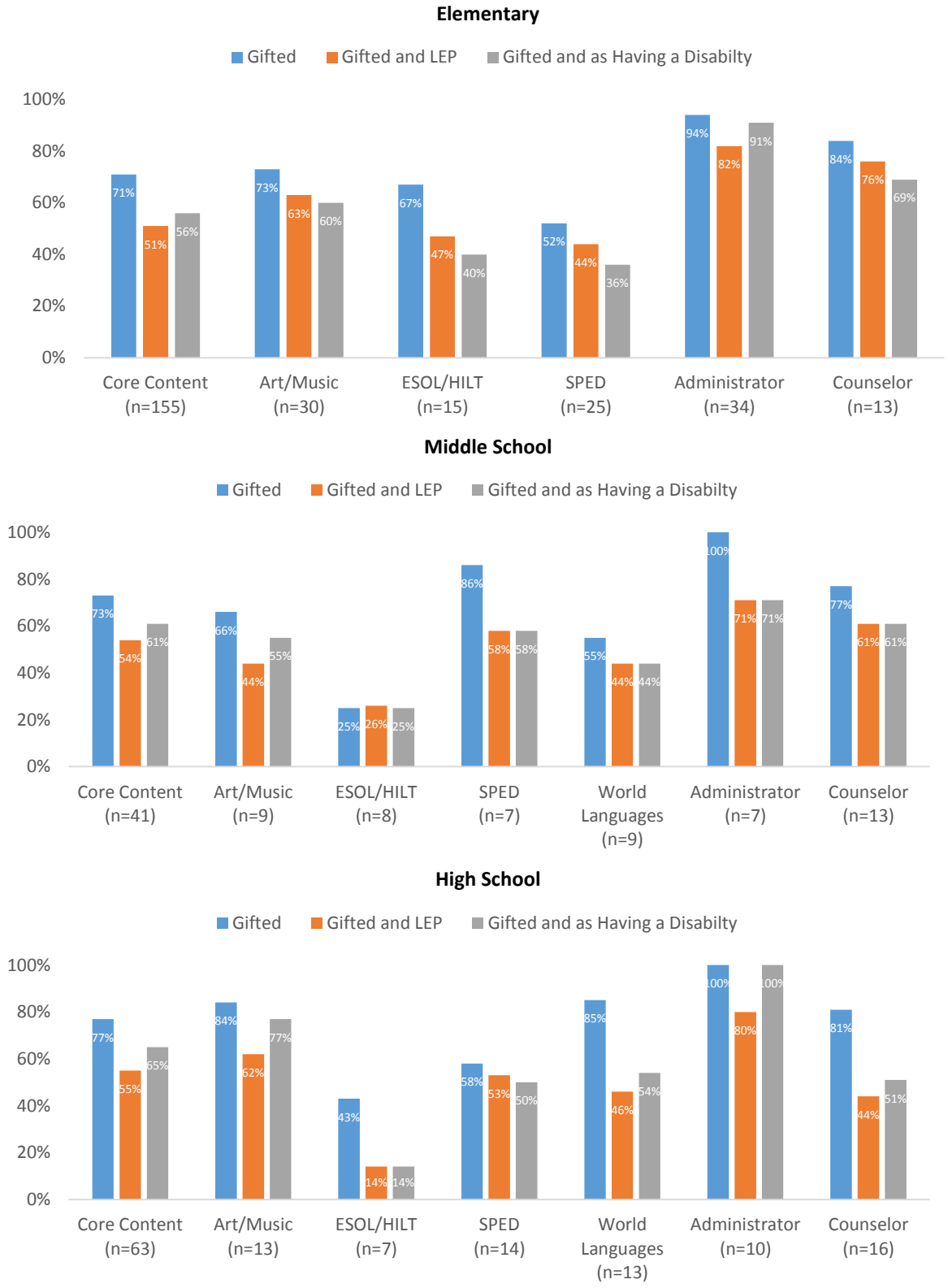
Staff were asked the extent to which they agreed that instructional practices in their school met the needs of the following groups of students:

- Students identified as gifted
- Students identified as both gifted and LEP
- Students identified as both gifted and as having a disability

Responses are displayed in **Figure 11**. Across the board, staff were more likely to indicate that they *strongly* or *somewhat agree* that instructional practices meet the needs of students identified as gifted, and less likely to agree that this is true for students who are dually identified as gifted and either LEP or as having a disability. Administrators at all levels were the most likely to respond positively for either group of students.

ESOL/HILT teachers at all levels were relatively less likely than their peers to agree that the needs of any dually identified students were being met (either LEP or those with a disability). This was also true of special education teachers at the elementary level.

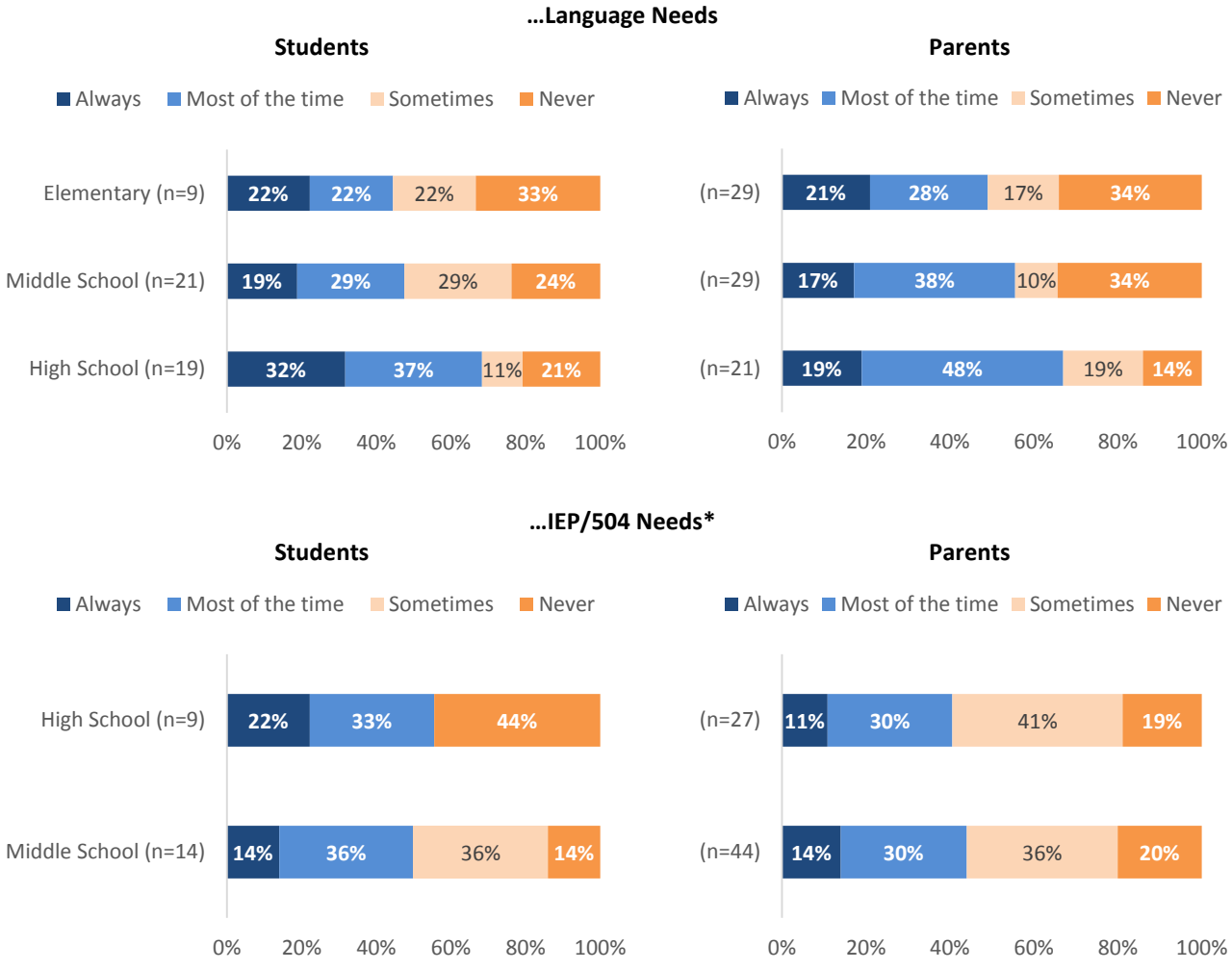
Figure 11: Percentage responding Strongly Agree/Agree: Instructional practices in this school meet the needs of students who are Identified as... (Teachers, Counselors, Administrators)



Students who were identified as gifted and also were currently or had been identified as LEP or as having a disability were asked whether their teachers were able to provide lessons that challenge and engage them while also supporting their language or IEP/504 needs. Parents of dually identified students answered a parallel question. Responses are displayed in **Figure 12**.

Among LEP students, around half of elementary and middle school students, and two-thirds of high school students, responded that this occurs *always* or *most of the time*. Parent responses were similar. Among students with a disability, around half of middle and high school students selected always or most of the time. This was lower among parents, ranging from 41% of high school parents to 44% of middle school parents. Elementary responses were not included due to the low number of responses.

Figure 12: Are your teachers/your child's teachers able to provide lessons that challenge and engage you/your child while also supporting your/his/her…(Students, Parents of Students Currently/Formerly in HILT/HILTEX or with an IEP/504 Plan)

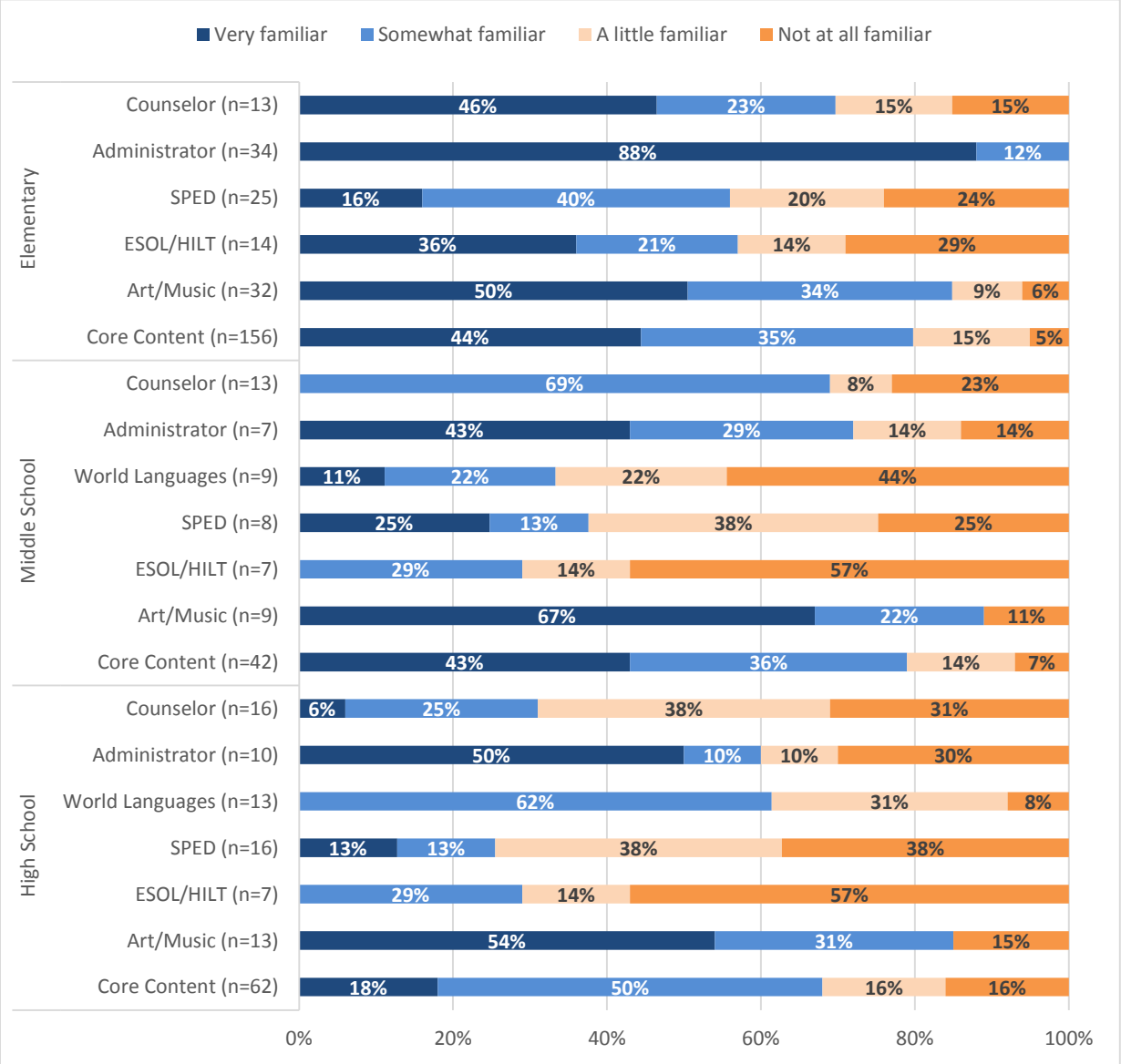


***Due to the low number of responses, elementary responses are not included.**

Staff and Parents' Familiarity and Involvement with the Identification Process

Figure 13 shows staff responses to the question, "**How would you rate your level of familiarity with the process for identifying students as gifted?**" Staff most likely to select *very* or *somewhat familiar* included **core content** and **art/music teachers** at the elementary and middle school levels (79-89%), as well as **elementary administrators** (100%) and high school art/music teachers (85%). Staff least likely to select these responses included ESOL/HILT and special education teachers at the middle and high school levels, with between a quarter and a third selecting *very* or *somewhat familiar*, as well as high school counselors (31%) and middle school world languages teachers (33%).

Figure 13: How would you rate your level of familiarity with the process for identifying students as gifted? (Teachers, Counselors, Administrators)



In the spring and fall of 2016, an external facilitator conducted four 90-minute focus groups: one each with elementary, middle school, and high school counselors; and one with secondary directors of

counseling. The elementary focus group addressed questions related to the Gifted Services evaluation, while the secondary groups addressed questions for the evaluations of both Career, Technical, and Adult Education (CTAE) and Gifted Services.

Reflecting the survey responses listed above, the elementary and middle school focus group participants were more likely to be familiar with the identification process and several had participated in identification meetings. High school participants noted that few students are identified as gifted at that grade level and that they prefer to refer parents' questions to the RTG.

Figure 14 shows responses to the question, "**When there is a student in your class/school who you think may be gifted, what do you do?**" Across staff types and levels, the most commonly selected response by far was **reach out to my RTG to discuss the student**. With few exceptions, most staff groups at the elementary and middle school level chose this response at least 75% of the time. This was also the most popular response among high school staff, though at a lower rate (between 31% of world language teachers and 70% of administrators). High school staff were the most likely to indicate that they do **nothing**, including 22% of core content teachers. Among high school core content teachers who selected this response, almost half reported that this was because "**I didn't know that I could refer a student for identification**," and around a third reported that "**I don't understand the purpose of identification.**"

Figure 14: When there is a student in your class/school who you think may be gifted, what do you do? Select all that apply. (Teachers, Counselors, Administrators)

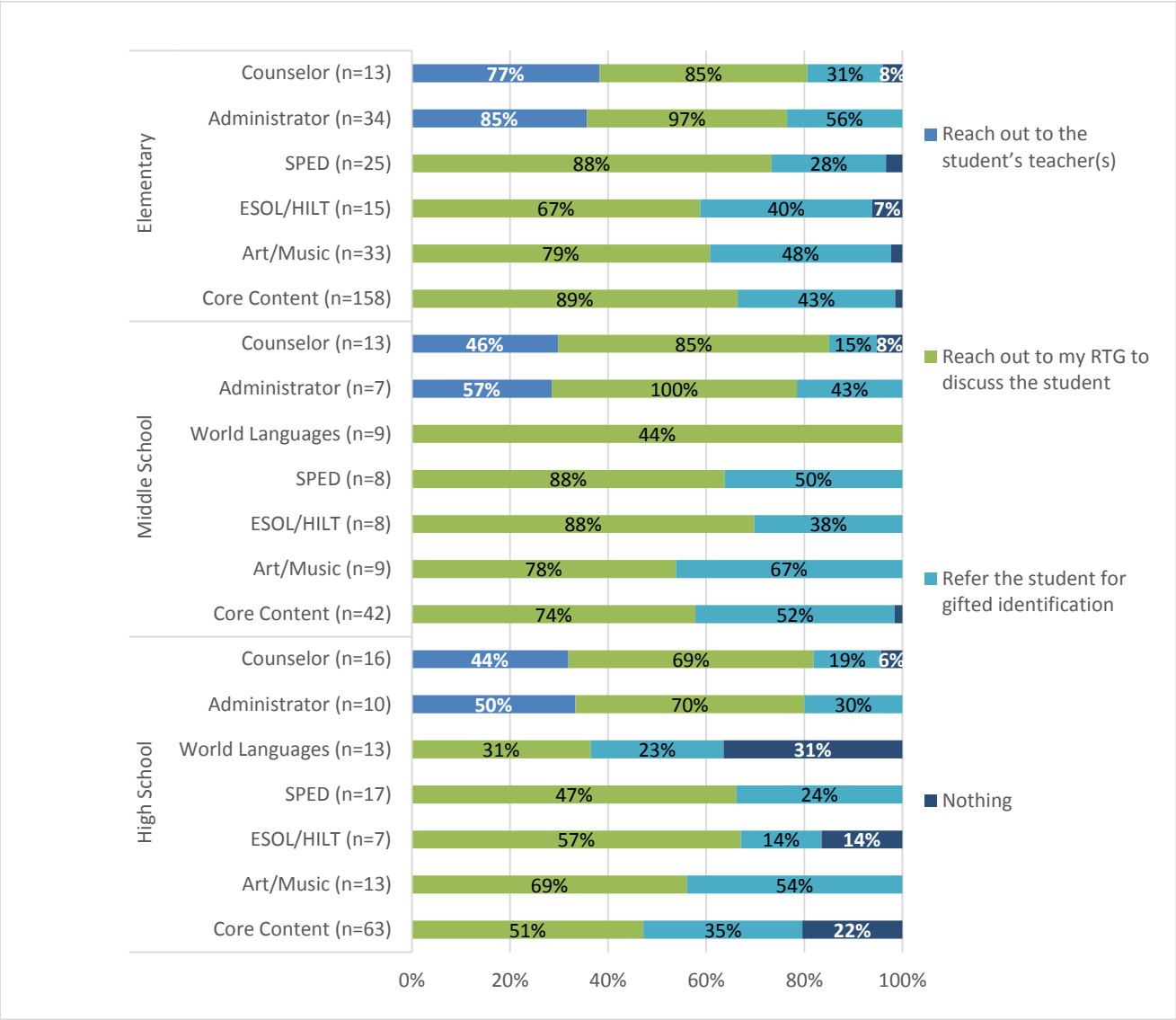
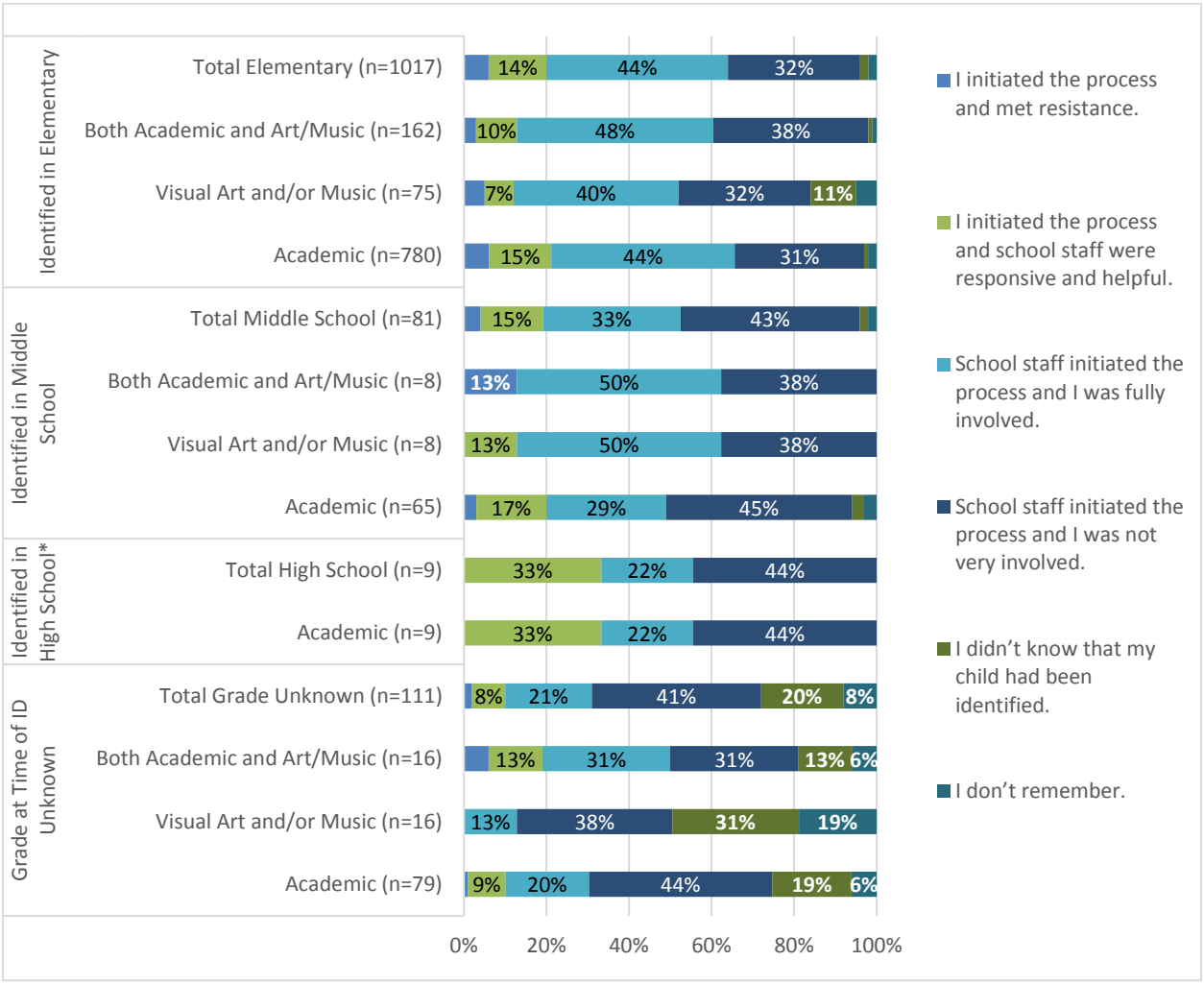


Figure 15 shows responses to the parent survey question, "**When your child was identified as gifted, how involved were you in the identification process?**," disaggregated by the student's level at the time they were identified and by gifted area. Across levels, parents were most likely to indicate that **school staff had initiated the identification process**. Among parents who remembered their child's grade at the time they were identified, most indicated they had been actively involved in the identification process, either by initiating it themselves (between 19-33% across grade levels) or by being fully involved when the school initiated the process (between 22-44%).

Figure 15: When your child was identified as gifted, how involved were you in the identification process? (Parents)



*No parents indicated that their child had been identified as gifted in visual art and/or music while in high school.

Parents also responded to the question, "**Prior to receiving this survey, did you know in which areas your child was identified as gifted?**" Around 90% of parents whose children were identified in elementary and middle school responded **Yes** to this question. Among the nine parents whose children were identified in high school, 7 responded Yes.

Awareness of Services among Students and Parents

Services Received as a Result of Being Identified as Gifted

The student and parent surveys included a series of questions about whether students **receive specific services as a result of being identified as gifted**, both from the classroom teacher and the RTG. When interpreting responses, it is important to keep in mind that the ratio of RTGs to gifted students and to teachers varies at each level. While there is one RTG at each comprehensive school, the number of students and staff increases with each level. Thus while the average elementary RTG serves 107 gifted students and 61 teachers, the average high school RTG serves 514 gifted students and 156 teachers,

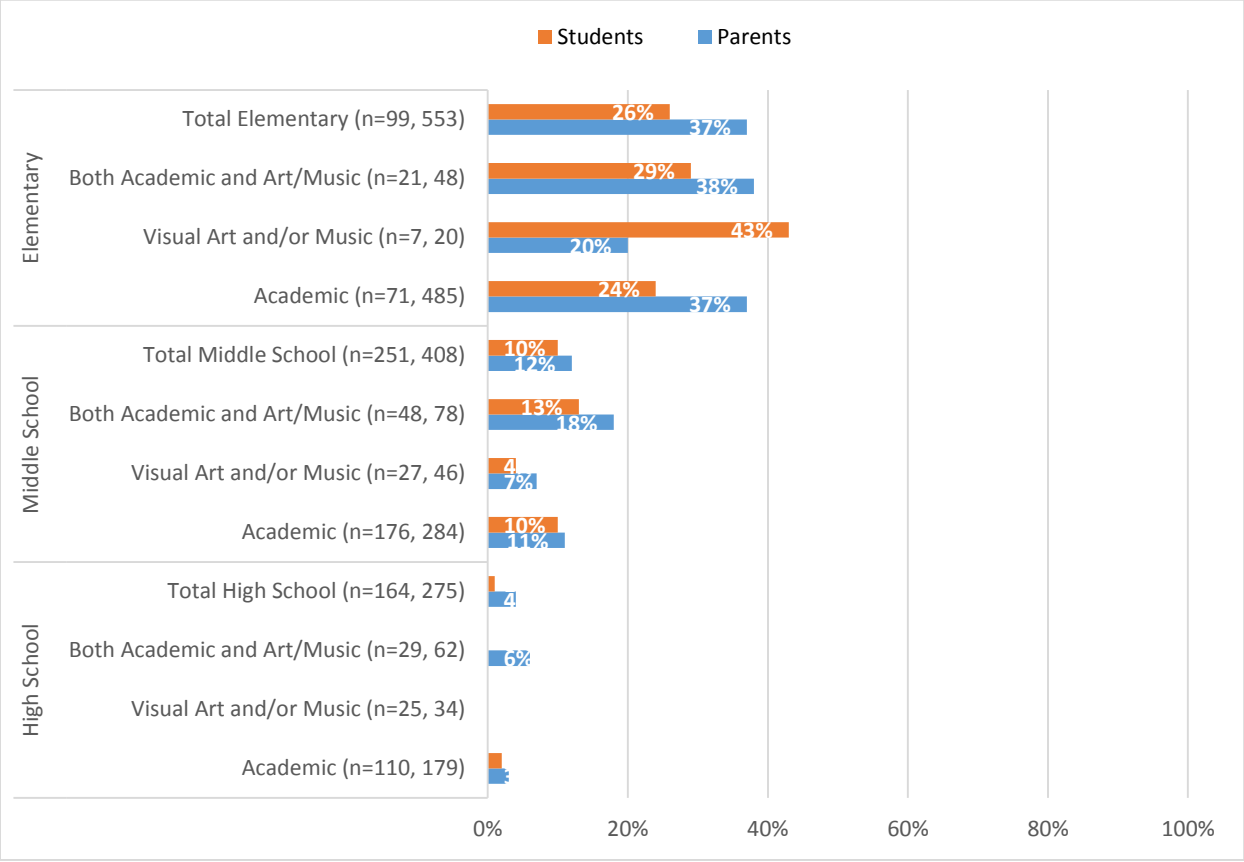
according to 2015-16 data shown in **Table 8**. This variation will necessarily impact the types of services the RTG provides.

Table 8: Average Number of Gifted Students and T-Scale Staff (Teachers), by Level, 2015-16

Grade Level	Average number of T-Scale Staff	Average number of Gifted Students
Elementary Schools	61	107
Middle School	97	318
High School	156	514
H-B Woodlawn	64	327

Figure 16 shows the percentage of students and parents who indicated that their or their child's teachers **provide tailored instruction for them**. Around a quarter of elementary students indicated they received tailored instruction from their teacher, in comparison to 10% of middle school students and 2% of high school students. Parents were generally more likely to indicate that their child receives tailored instruction and followed the same pattern by level, with 37%, 12%, and 4% of elementary, middle school, and high school students, respectively, indicating that this happens.

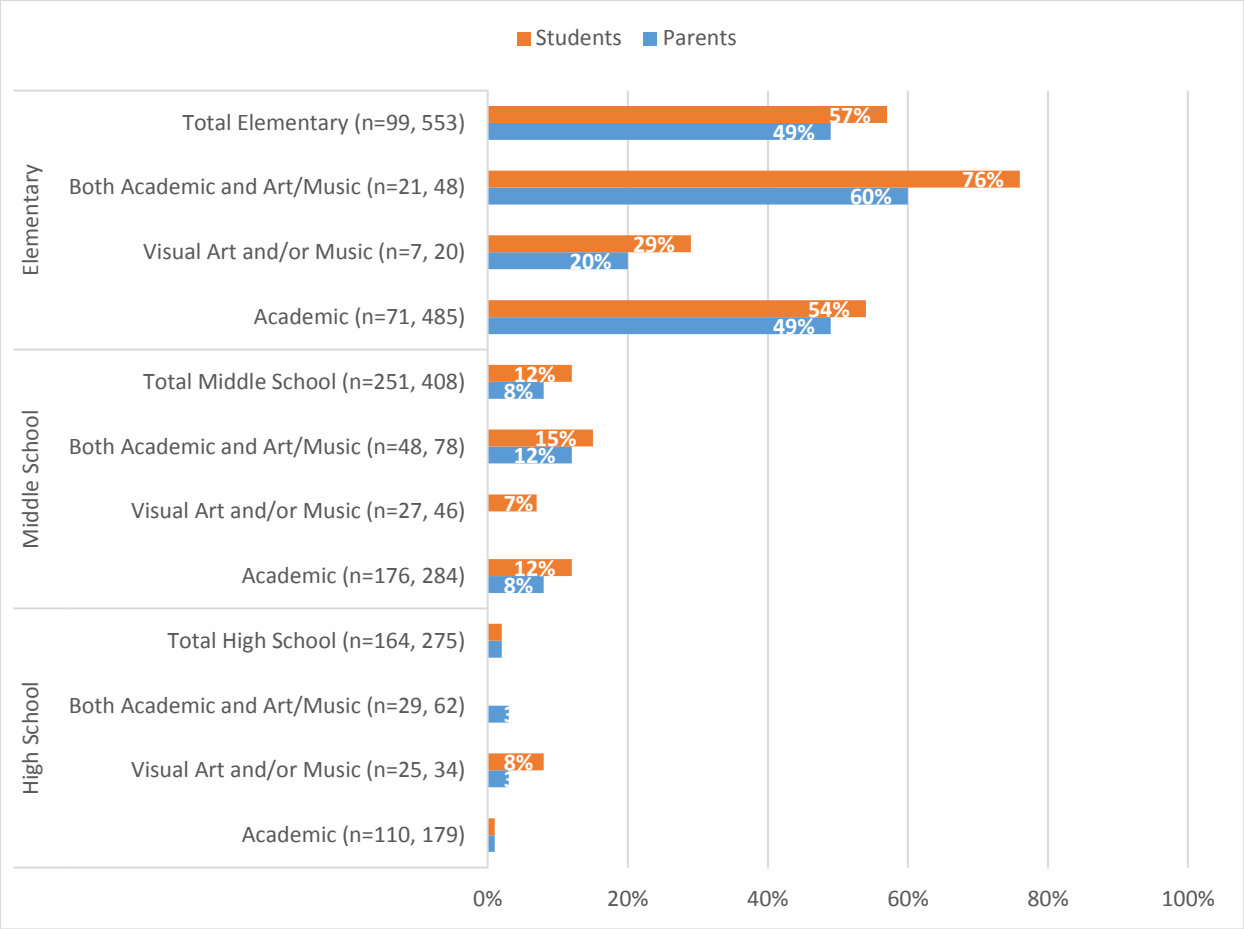
Figure 16: My teachers/my child's teachers provide tailored instruction for me/for him/her. (Students, Parents)*



*n represents the number of students and parents, in the same order as listed in the legend. For example, 99 elementary students and 553 elementary parents responded to this question.

Figure 17 shows the percentage of students and parents who indicated that their or their child's **RTG works with them as part of a small group in their classroom**. With the exception of elementary students identified in visual art or music, elementary students and parents were more likely to indicate they receive this service than tailored instruction from their teachers, with 54% of those identified in an academic area and 76% of those identified in both an academic area and art/music selecting this service.

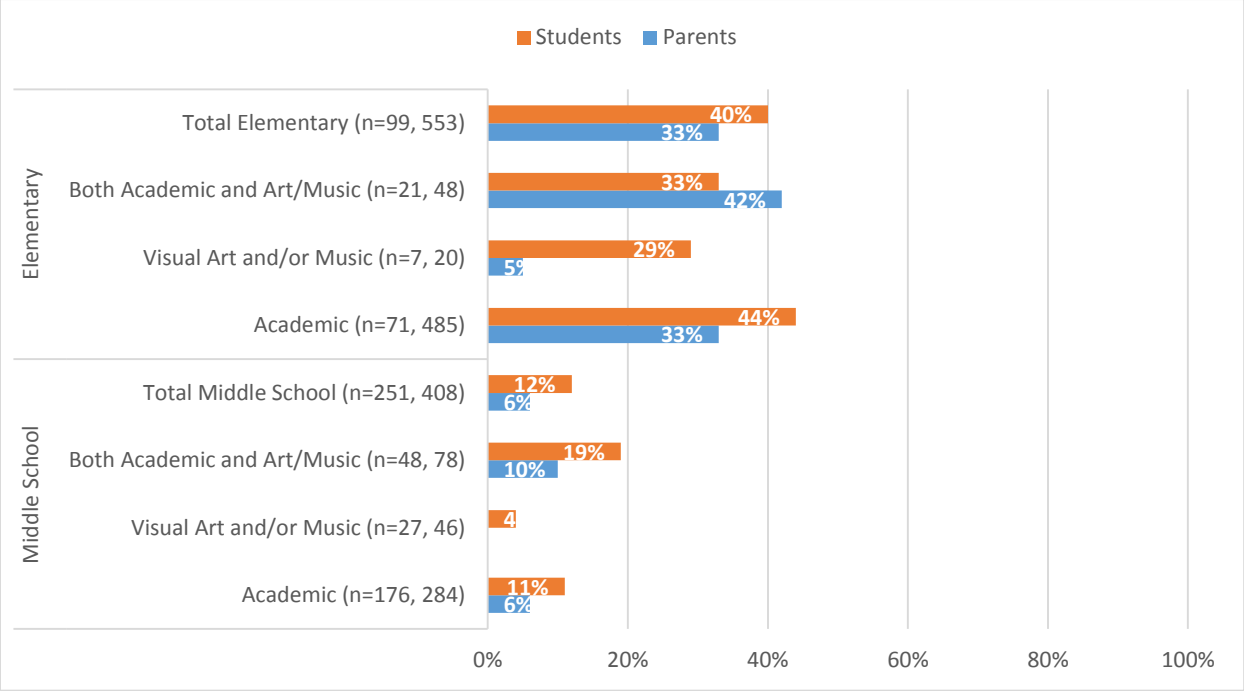
Figure 17: The RTG works with me/my child as part of a small group in my/his/her classroom. (Students, Parents)*



*n represents the number of students and parents, in the same order as listed in the legend. For example, 99 elementary students and 553 elementary parents responded to this question.

Figure 18 shows the percentage of students and parents who indicated that they or their child's **RTG works with them in a weekly pullout group**. High school students and parents are not included in this graph as none reported that they or their child receive this service.

Figure 18: The RTG works with me/my child in a weekly pullout group. (Students, Parents)*

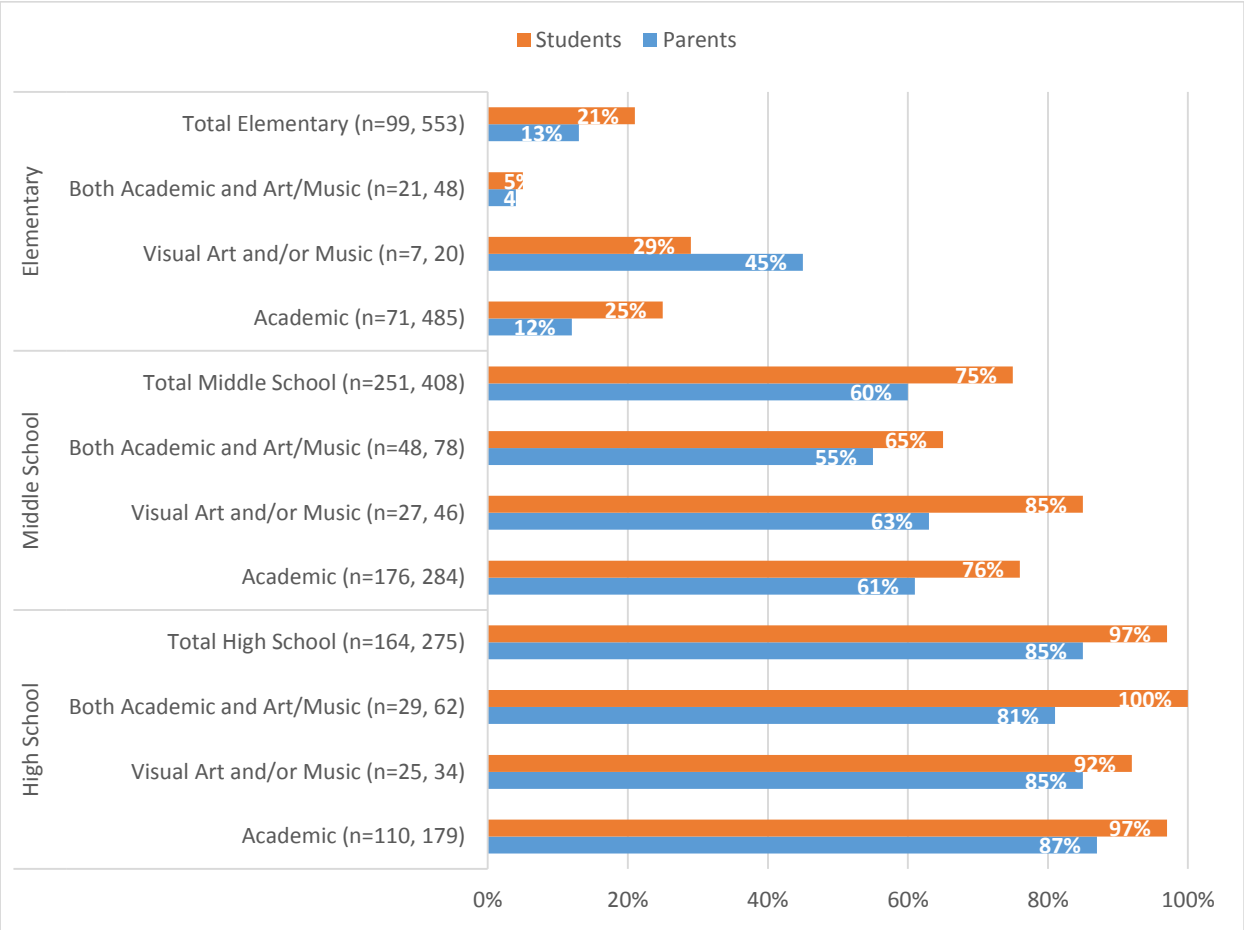


*No high school students or parents indicated that the RTG works with them or their child in a weekly pullout group.

Students and parents were also asked if their **RTG works with them individually**. One percent of high school students selected this service and 2% each of elementary and middle school students selected it.

Figure 19 shows the percentage of students and parents who selected **none that I know of** when asked what services they receive as a result of being identified as gifted. Middle and high school students and parents were far more likely to select this response than elementary students and parents, with 75% of middle school students and 97% of high school students indicating they receive no services that they know of, compared to 21% of elementary students. Likewise, 60% of middle school parents and 85% of high school parents chose this response, compared to 13% of elementary parents.

Figure 19: Services Received as a Result of Being Identified Gifted: None that I know of (Students, Parents)*



Parents were also able to select **I don't know** in response to the question of what services their child receives. Middle school parents were the most likely to select this response (23%), followed by elementary (13%) and high school (11%).

Dr. VanTassel-Baska's evaluation included a conversation with RTGs about their perceptions of the benefits that students receive as a result of being identified as gifted.

- Elementary RTGs noted the importance of peer support; in other words, that identified students have a critical mass of students to whom they can relate and with whom they can learn.
- Elementary RTGs also felt that a primary benefit is the opportunity to learn through differentiated instruction appropriate to students' needs.
- Elementary and secondary RTGs listed the role of advocacy of the RTG as a major benefit. Elementary RTGs noted that their advocacy provided students emotional support, and secondary RTGs noted the social, emotional, and advising aspects of student development.
- A few elementary RTGs also mentioned the importance of access to research-based materials as an asset for students in the program.

- Secondary RTGs all saw challenging curriculum and peer interaction as the strongest benefits of identification for secondary students.

Communication with Parents about Services Their Child Receives

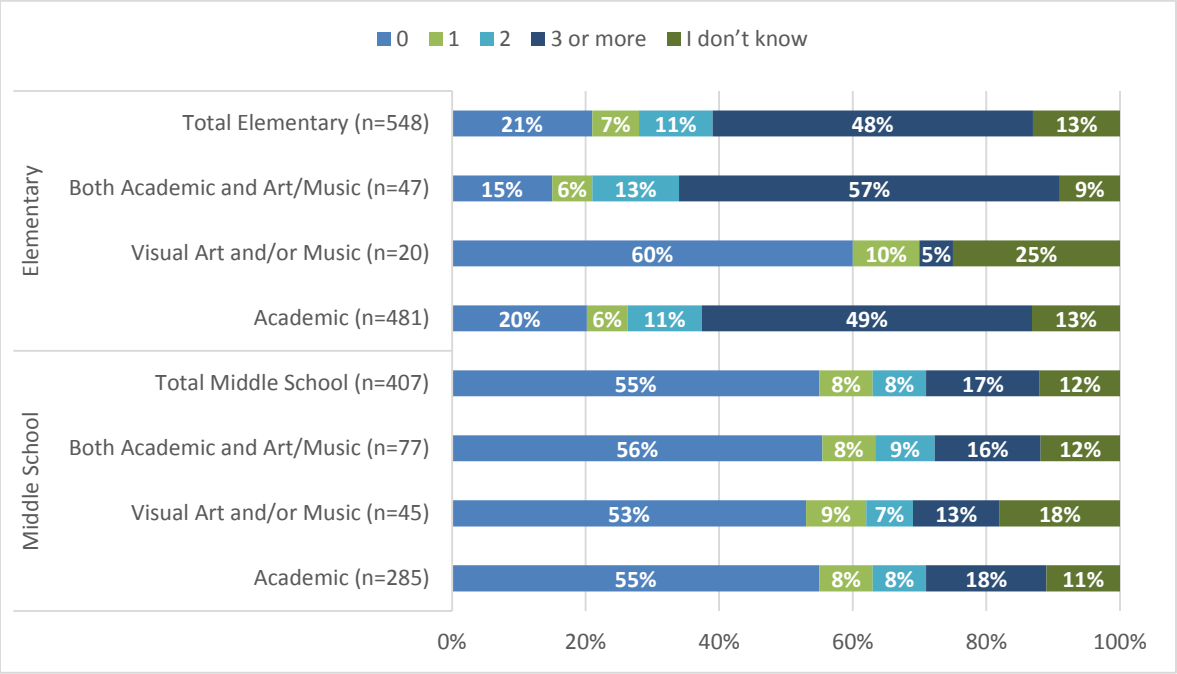
The Gifted Services Office expects that parents of elementary students who are identified as gifted will receive a **Differentiation Form** with every report card. This form should explain how instruction was adjusted during the semester to challenge and engage the student. Likewise, parents of middle school students who are identified as gifted should receive **quarterly communication** from the school about how instruction was adjusted to challenge and engage the student.

The parent survey included a description of this communication requirement along with the questions, "**How many times have you received the Differentiation Form this school year so far?**" for elementary parents and "**How many times have you received such communication this school year so far?**" for middle school parents. The survey was administered in the spring and the expectation was that parents would have received communication about differentiation at least three times at that point in the school year. Responses are displayed in **Figure 20**.

Just under half of elementary parents reported that they had received the Differentiation Form three or more times. Parents of elementary students identified in an **academic area** (49-57%) were far more likely to report that they had received the form three times than parents of students identified in **art or music** (5%). Conversely, parents of students identified in art or music were far more likely to report that they had received the Differentiation Form zero times (60% vs 15-20%).

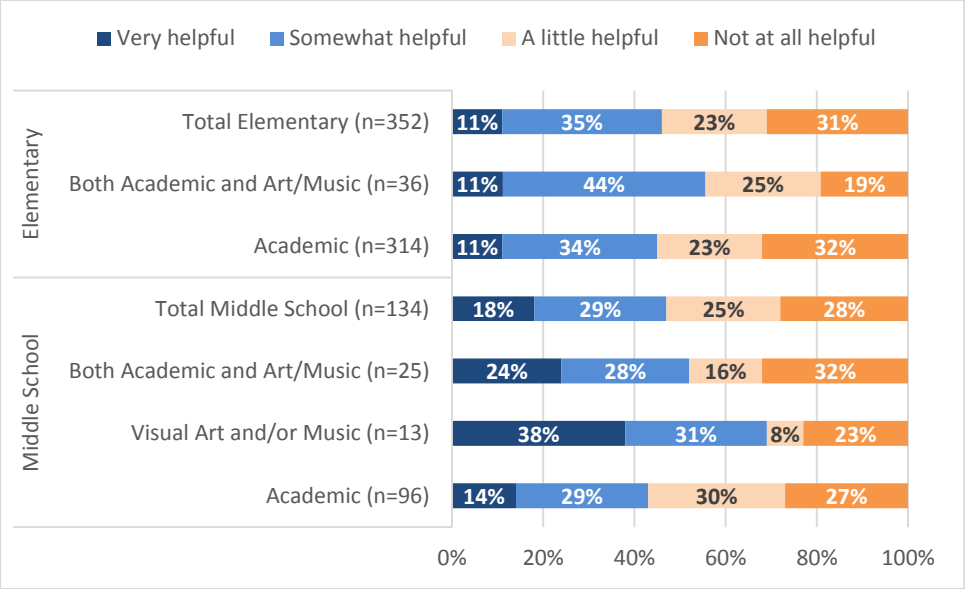
In comparison, 17% of middle school parents reported that they had received communication about differentiation for their child three or more times, while 55% reported that they had received such communication zero times.

Figure 20: Number of Times Parents Received Differentiation Form (Elementary) or Communication (Middle School) about How Instruction Was Adjusted to Challenge and Engage Child



Parents who indicated that they had received the Differentiation Form or middle school communication about differentiation for their child were asked a follow-up question, "**How helpful was the information included in the Differentiation Form/the information that you received?**" Parents at both levels were equally likely to indicate that the information had been *very* or *somewhat helpful* (46-47%). Just under a third at both levels indicated that the information had been *not at all helpful*.

Figure 21: How helpful was the information included in the Differentiation Form?/How helpful was the information that you received? (Parents who received Differentiation Form/communication)*



*Fewer than five parents of elementary students identified in art or music responded to this question; responses are omitted.

Delivery of Services

Implementation of Cluster Grouping

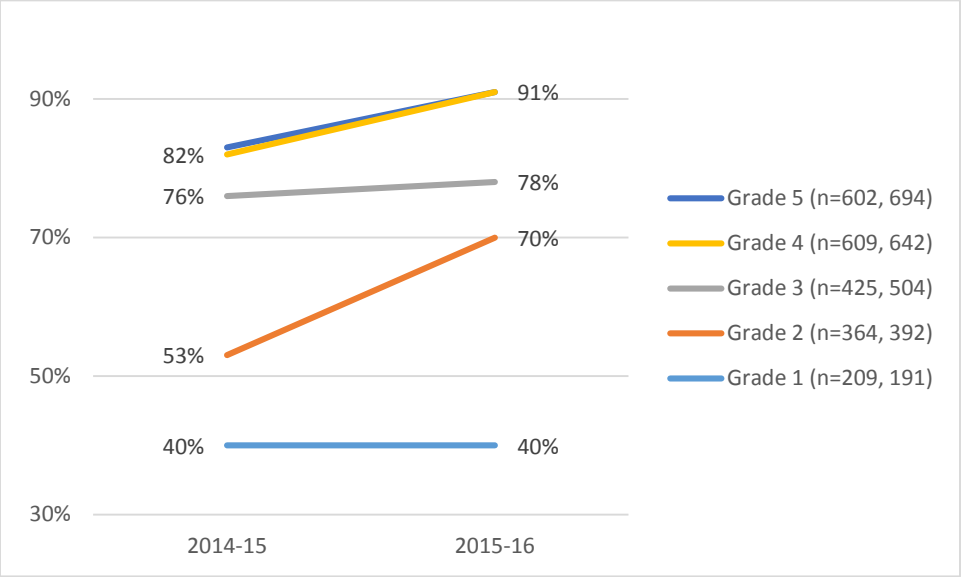
APS's delivery model for gifted learners is to provide daily differentiation in the general education classroom through cluster grouping. Students identified as gifted should be clustered in groups of 5-8 in elementary homerooms. At the secondary level, gifted students should be clustered with other students gifted in the content area of their class (e.g., students identified as gifted in English should be clustered in English courses).

Additionally, secondary students have access to advanced coursework. Middle school students may take advanced math courses. High school students may take advanced coursework in all core content courses, as well as art and music. This section includes information about cluster grouping at the elementary and middle school levels. A later section, *Selection of Academically Challenging Coursework*, explores enrollment of gifted middle and high school students in advanced coursework. That section begins on page 108.

Figure 22 shows the percentage of elementary gifted students in grades 1-5 who were enrolled in a homeroom with a gifted cluster. Cluster information for 2016-17 has not been included due to incomplete data. The percentage of students who are in a cluster classroom increases with each grade

level. There was also an increase in the percentage of students in cluster classrooms from 2014-15 to 2015-16 for grades 2, 4, and 5.

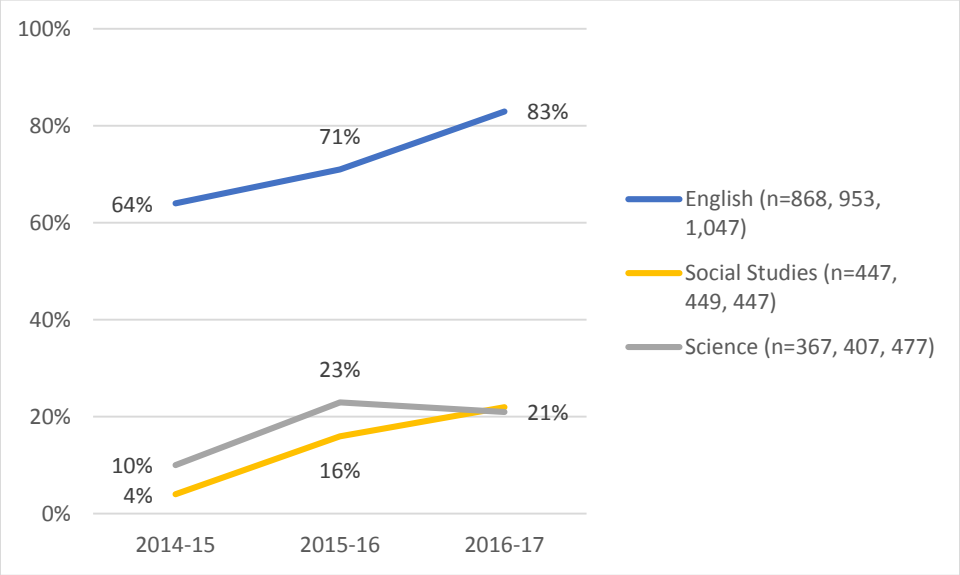
Figure 22: Percentage of Elementary Gifted Students Enrolled in a Homeroom with a Gifted Cluster*



*n represents the number of gifted students each year. For example, in 2014-15, there were 602 gifted 5th graders and in 2015-16, there were 694 gifted 5th graders.

Figure 23 shows the percentage of middle school students identified as gifted in English, social studies, and science who are enrolled in classes with gifted clusters in the content area of their gifted identification. Cluster grouping has increased steadily for English and social studies, and saw a slight drop in 2016-17 for science. Students identified in English are far more likely to be clustered in their English courses, at 83% in 2016-17, compared to 21-22% of students identified in science or social studies.

Figure 23: Percentage of Middle School Gifted Students Enrolled in a Class with a Cluster in the Area of their Identification*



*n represents the number of gifted students each year. For example, in 2014-15, 2015-16, and 2015-16, there were 868, 953, and 1,047 students identified as gifted in English, respectively.

In the counselor focus groups, middle school counselors reflected on the delivery model of clustering gifted students. They noted that maintaining clusters of gifted students at the middle school level is difficult due to specialized scheduling needs.

> *This kid needs Arabic or advanced band, when there's a singleton it makes it difficult to cluster all of the GT- identified students even though that's part of our strategy.*—MS DOC

Middle school RTGs noted in their focus group with Dr. VanTassel-Baska that cluster grouping runs counter philosophically to the middle school model of heterogeneous grouping which was still seen as the model of choice in APS. Dr. VanTassel-Baska also found through her observations that grouping practices were uneven or nonexistent at the middle school level. She concluded that there was little evidence of effective differentiation, based on the lack of differentiated services provided in areas other than mathematics, and that even within clustered classrooms, little instruction was differentiated since subgrouping of gifted students for activities rarely occurred.

Social-Emotional Needs of Gifted Students

Student and Parent Surveys

Almost all students at all levels indicated that the following **positive indicators of social-emotional wellbeing** are true *always* or *sometimes*, though – with one exception - the percentage of students selecting these frequencies decreased from elementary to middle school to high school (percentages are displayed in order by level; i.e., elementary, middle school, high school).

- I enjoy going to school. (92%, 89%, 84%)
- I am accepted by other students in my class. (99%, 95%, 97%)
- Interacting with other students is easy for me. (100%, 95%, 92%)

- I feel happy at school. (94%, 87%, 81%)

Among the **negative indicators of social-emotional wellbeing**, students at all levels were most likely to indicate that the following occur *always* or *sometimes*. Following the pattern with positive indicators, the percentage of students indicating these factors occur frequently increased from elementary to middle school to high school. A large majority of high school students indicated that they are **stressed about school** and that they are **bored at school** *always* or *sometimes* (82% and 79%, respectively).

- I feel stressed about school. (21%, 59%, 82%)
- I feel anxious about school. (16%, 34%, 63%)
- I am bored at school. (52%, 72%, 79%)
- I get upset if I feel my work isn't perfect. (35%, 51%, 61%)

Students were less likely to indicate that the following statements are true *always* or *sometimes*, though the same pattern exists with increasing percentages by level:

- I feel lonely at school. (9%, 15%, 23%)
- I have to hide my ability in order to be accepted by other students in my class. (10%, 14%, 20%)

Parents responded to a parallel set of questions about their child. Generally, their responses followed the same pattern as the student survey, though elementary and high school parents were more likely than students at those levels to feel that **their child gets upset if he/she feels his/her work isn't perfect**, and that **their child is bored at school**. Full details on parent responses are available in **Appendix D1**.

The parent survey also included the question, "**How much of an impact does being identified as gifted have on your child's social wellbeing?**" Responses are displayed in **Figure 24**. Parents at the elementary level were more likely to indicate that being identified as gifted had a *strong* or mode*rate positive impact* on their child's social wellbeing than *no impact*. At the middle school level, parents were equally likely to report a *strong/moderate positive impact* or *no impact*, and at the high school level, parents were more likely to select *no impact* than *strong* or *moderate positive* impact.

Figure 24: How much of an impact does being identified as gifted have on your child's social wellbeing? (Parents)

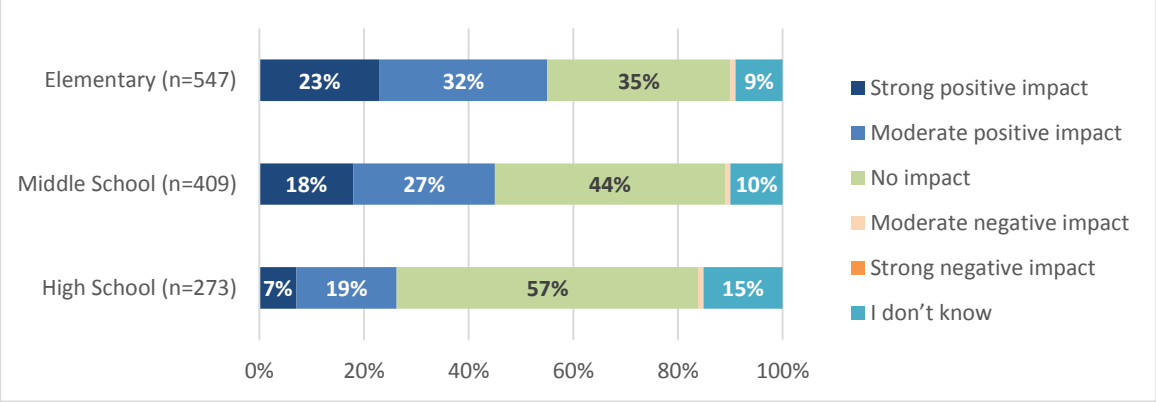
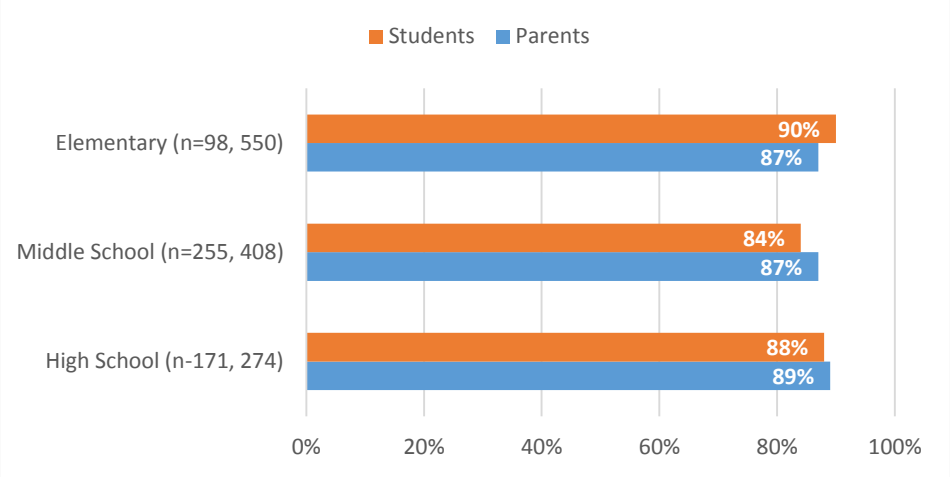


Figure 25 shows responses to the question, "**I have friends in school who are intellectual peers (for example, they make me think when we have a conversation, or they like the same books, etc.),**" with

a parallel parent version. Most students and parents indicated that they *strongly* or *somewhat* agreed with this statement.

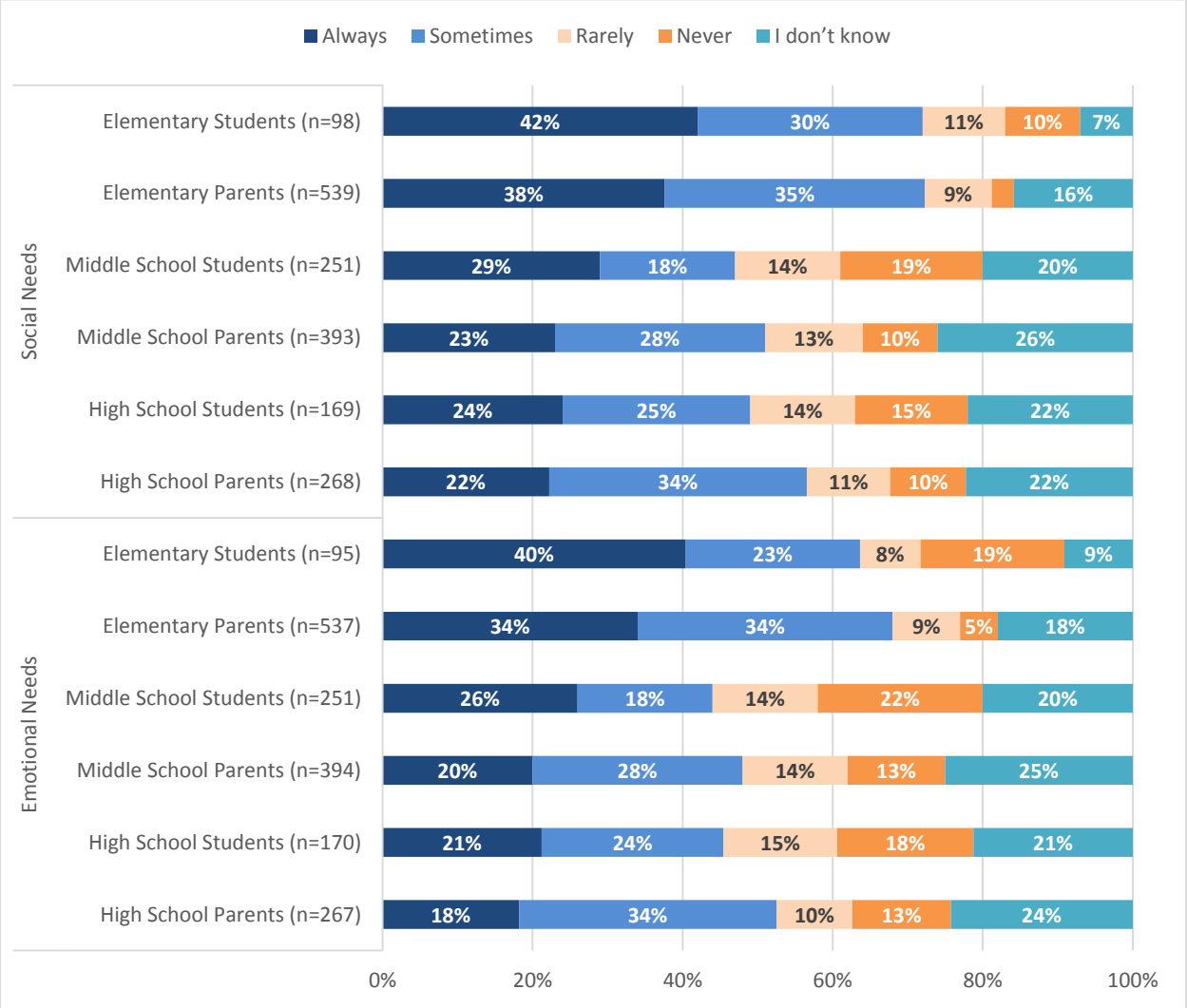
Figure 25: Percentage Selecting Strongly or Somewhat Agree: I/My child have/has friends in school who are intellectual peers (for example, they make me/him/her think when we/they have a conversation, or they like the same books, etc.). (Students, Parents)*



*n represents the number of students and parents, in the same order as listed in the legend. For example, 98 elementary students and 550 elementary parents responded to this question.

Students and parents were asked how frequently their or their child's social and emotional needs were addressed. Responses are displayed in **Figure 26**. Elementary students and parents were the most likely to respond that their or their child's needs were met *always* or *sometimes*. There was little difference between middle school responses and high school responses.

Figure 26: How frequently would you say your/your child's needs in the following areas are being addressed? In other words, how frequently do you get/does your child get what you/he/she need for the following areas? (Students, Parents)



Counselor Focus Groups

In the spring and fall 2016 focus groups, counselors and DOCs discussed the emotional needs of gifted students as well as the types of counseling services available to them. On the topic of emotional needs, there were two strong themes among all participants:

- Gifted students who experience emotional difficulty at school tend to feel **anxiety around expectations** (their own or others') that they must perform well. These students may also experience the negatives of being a perfectionist. Such anxiety was said to be the most pronounced at the high school level, although it occurs in younger grades as well. One counselor noted that middle school is an ideal opportunity to help students set strategies to deal effectively with this anxiety when they reach high school. Others agreed, noting that pressure climbs in 8th grade in particular, as students take courses for high school credit and some prepare for private school admissions and placement testing.

- Some gifted students experience **social difficulty**, especially those who are gifted in all areas (rather than just one or two), who have characteristics such as an Asperger Profile, or who are otherwise twice exceptional (with gifted and special education needs).

Counselors and DOCs spontaneously raised the idea that there is a subset of exceptionally gifted students among the much larger population of gifted students. This exceptional subset, many said, is more likely to have difficulties of anxiety and social issues associated with their giftedness. In discussing these very gifted students, DOCs described a student so smart and able that he or she feels bored or even has disdain for the schoolwork presented. Despite these students' vast capability, negative feelings like these can hinder achievement at school. It was these very advanced students—believed to be a minority within the gifted population—who the DOCs said APS struggles most to serve.

> *For the most part, I do think [APS] provides [well] for the students who are identified....The place I've seen where I've had difficulty is those kids that are truly gifted. Bright, bright, right off the chart. Can make 100 percent on the test but don't do any of the homework because they are so bright. That's where I don't think we have a safety net or something to do with them. Because no matter how many times the counselor or the RTG goes to the teacher and says, "Hey, this kid is identified gifted, they have this IQ at this level. Can we modify and not make them do all this day-to-day work and do something more?" The answer is typically, "No, they have to learn how to do all this work."*—HS DOC

Several counselors pointed out that gifted students may find schoolwork easy in general, but then feel unprepared—having fewer strategies and less resilience—when tougher school challenges come up.

> *I'd say the expectations are very high, so when a kid who's been very gifted and kind of sailed through suddenly runs into a challenge, I think it's even more difficult because they haven't had the practice. And then they're like, "But I'm supposed to be gifted, why is anything difficult?" It's hard when that doesn't match up with their expectations.*—MS Counselor

> *And one thing I've noticed over the years is that for those students who have been identified gifted, things typically came naturally easy to them all along. Then, when they get to these upper level classes, they find they don't know notetaking and study skills. When it comes to doing flashcards, they're like, "Well that takes too much time. I've never had to do that before." And, they don't have the resiliency to push forward.*—HS Counselor

> *So my first year, when we got that list [of gifted students], I did work really hard to [convince them to take advanced classes in their gifted area]. What I found out was a good number of them struggled in those higher level classes. The testing wasn't effective in determining their work ethic. It's really interesting to see that about half of them were successful in those higher courses... and then about half were not. Either because they were perfectionists and dealt with some mental health stuff as a result of overstressing, or because they didn't have the work ethic to manage those classes.*—HS Counselor

Although counselors and DOCs clearly view anxiety and difficulty with peer social connections as problems that can occur related to giftedness, they tended to talk about counseling the gifted students just as they would counsel any other student. In other words, they approach helping students manage anxiety case by case, whether gifted or not. In discussing the relevance of giftedness in counseling, some

again distinguished between students who are in an exceptional subpopulation of giftedness and those who are gifted in perhaps one area. For the former group, counselors are more likely to have giftedness in mind as a factor in the student's problem.

> *In cases that make me automatically think, "This kid's gifted," it's related to the reasons they've been sent to me over and over again—for example, if they're not interacting with their peers or if they're so anxious. If [the trouble is] a generic friend issue, or "my dog died and I'm upset," or "my parents are getting divorced soon," then I'm not going to think about that as a gifted issue. But, if [the teacher says the trouble is], "She's super anxious in class and asks me ten times if this is for a grade even though she has a 99 percent in the class," and it's sixth-grade science, which is pretty low-key, has no SOL [then, I'm going to start to think about giftedness]. When teachers say, "This kid is way anxious when they don't need to be about these grades."*—MS Counselor

> *I think we know the students who have the social and emotional needs, some are gifted and some aren't. I think we're just trying to reach them.*—HS DOC

> *I would say, when you look at the population as a whole, we're obviously supposed to serve all kids. I would probably say, I see about 80% of our IEP kids are in counseling—whether it's group or individual or something else. Of the identified GT, I would probably see almost 50% of them. The ones in the middle are the ones that I don't see. I might see 30% of them. I would say next to SPED, the GT kids are the kids I see the most.*—ES Counselor

As an aside, one elementary counselor noted her opinion that teachers may be less likely to refer gifted students to the counselor because the students are so capable in so many ways that doing so may not occur to the teacher. Moreover, the elementary counselors agreed among themselves that anxious students tend to be more reserved or private about their emotional needs than other students. Similarly, a few counselors mentioned that gifted students or their parents are sometimes reluctant to seek counselors' support because they worry about negative perceptions of doing so.

> *In my building, a lot of the gifted students tend to be highly perfectionistic. So sometimes they get themselves so stressed out and freaked out that I'll end up seeing some of those gifted kids, especially our 5th graders before school in the morning. They come in the morning because they don't want the other kids to know, or think, there's something wrong. They're much more private than some of the other kids.*—ES Counselor

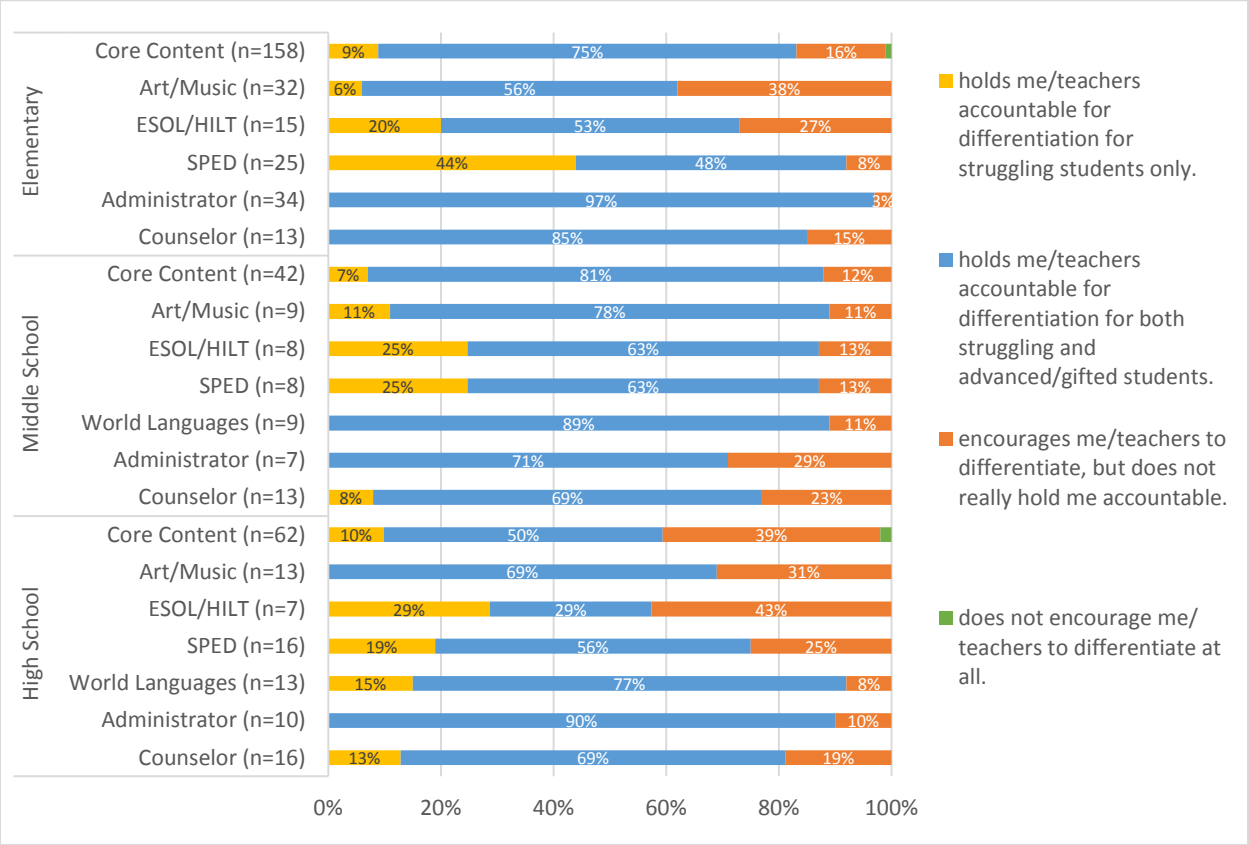
> *For the social piece, they get referred to me, definitely. The anxiety piece, I feel like doesn't always get referred because the parents maybe don't want to be upfront about it...Perception is key.*—MS Counselor

Role of the Classroom Teacher

The classroom teacher is the primary instructor of gifted students and is responsible for the daily differentiation of instruction and curriculum to nourish and enhance student learning. The staff survey included an open-ended question for all teachers, "**How would you describe your role as it relates to instruction for gifted students?**" By far, most teachers said that their role is to **differentiate instruction to provide challenge and enrichment** for their gifted students. This was the case for all teacher types.

An additional question aimed to gauge the extent to which teachers are held accountable for differentiation. Responses from teachers, administrators, and counselors are displayed in **Figure 27**. Teachers most likely to report that their school's administration **holds them accountable for differentiation for both struggling and advanced/gifted students** were elementary and middle school core content teachers, middle school art/music teachers, and secondary world languages teachers. Elementary and high school administrators selected this response at a high rate as well. Special education and ESOL/HILT teachers were more likely than other teacher types to indicate that their school's administration **holds them accountable for struggling students only**.

Figure 27: Which of the following best describes how accountable you/teachers in your school are for differentiation? (Teachers, Counselors, Administrators)

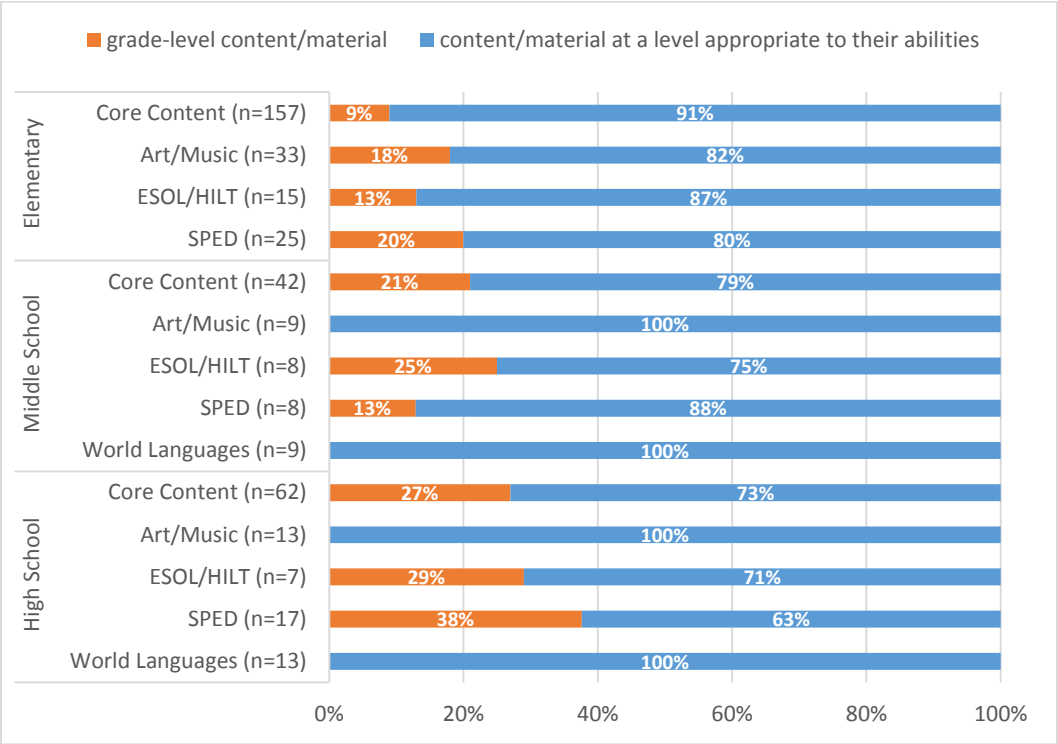


Teachers were also asked whether their primary focus in providing instruction was ensuring that all students can access:

- the grade-level content/material, OR
- the content/material at a level appropriate to their abilities.

Across levels and teacher types, most teachers responded that their primary focus is ensuring that students can access the content/material at a **level appropriate to their abilities**. This includes 100% of world languages teachers and middle school art/music teachers.

Figure 28: Which of the following most closely matches your primary focus in providing instruction? (Teachers by Type)



Role of the Resource Teacher for the Gifted

The RTG, working under the supervision of the principal in cooperation with the supervisor of Gifted Services, uses the collaborative cluster instructional model to work with teachers to plan, model, and/or co-teach strategies and curriculum written for gifted learners in the general education classroom. The RTG can work with all teachers to help them provide expansion, regardless of whether the teacher's students are identified as gifted. RTG responsibilities include:

- Complete the Schoolwide Agreement Form which serves as the overall plan for delivery services and supporting teachers during the school year
- Conduct a SMART goal that directly supports the education of gifted learners in curriculum written for gifted learners and/or supports teachers of gifted learners to be able to deliver curriculum and resources on a daily basis
- Serve as an advocate for identified gifted students
- Act as an instructional leader in the area of gifted education within school buildings and support differentiation for gifted and highly able learners in the general education classroom
- Participate on collaborative team meetings to keep needs of gifted learners a priority
- Instruct gifted and highly able students through a collaborative model to facilitate daily differentiation of content when RTG is not present in the classroom
- Model lessons for the classroom teacher in differentiation strategies including creative thinking strategies, critical thinking strategies, creative problem solving, product development, and research skills

- Work collaboratively with the classroom teachers to communicate to parents about the academic growth of gifted learners
- Conduct school-based collaborative book studies to support collaboration and implementation of best practices for gifted learners
- Facilitate cross-grade instructional grouping and acceleration opportunities for students, as needed
- Facilitate all aspects of the Gifted Services Screening Process for both Academic and Fine Arts referrals
- including finding and nurturing historically underrepresented gifted populations
- Facilitate specialized school-based programs that encourage high academic achievement for all students such as Cohort, SOAR, CAS
- Conduct in-school and countywide staff development and parent information evenings on gifted education topics
- Communicate with parents/guardians
- Be a positive contributor in RTG meetings

As mentioned in a prior section, *Services Received as a Result of Being Identified as Gifted*, the ratio of RTGs to gifted students and to teachers varies at each level, which has an impact on the services the RTG can provide. This information is provided in more detail on page 47.

Running Records

During the 2015-16 school year, RTGs completed running records for three two-week periods:

- November 2 - 13
- January 11 - 25
- April 4 – 15

The purpose of the running records was to document the day-to-day activities of the RTGs in order to understand the role of the RTG across the school system. The running record template provided by the Office of Planning and Evaluation included several data entry categories, including the amount of time devoted to a given task and the specific nature of the task. The full report on running records, including examples of the types of activities that fall into each category listed below, is available in **Appendix C3**.

Table 9 provides information from the fall and spring running records submitted by elementary RTGs. Highlights include:

- In the fall, most elementary RTGs spend at least 16% of their time **providing instruction, enrichment, or extension to gifted students**. This increases in the spring, when most are spending at least 26% of their time on these activities. This is the activity reported by the highest number of RTGs as taking up a large portion of their time.
- Several activities relate to a key goal of the Gifted Services program, **building capacity for daily differentiation**:
    - Twelve out of 20 RTGs (fall) and 12 out of 19 (spring) spent none of their time **co-teaching**.

- The amount of time RTGs spend on **collaborative planning** varies, with 8, 4, and 6 RTGs spending 1-5%, 6-15%, and 16-25% of their time on this, respectively, in the fall. In the spring, six RTGs spend no time on collaborative planning, while 10 spend 6-15% of their time on it.
- Six RTGs spent no time **modelling strategies** in the fall, and 10 RTGs spent no time on this in the spring. Similarly, eight RTGs spent no time on **providing professional development** in the fall, and 10 RTGs spent no time on this in the spring.

- The **identification process** appears to take up a similar amount of time in the fall and spring with 11-12 RTGs reporting that they spend between 1% and 15% of their time on this during both time periods.
- Thirteen RTGs in the fall and 11 in the spring spent between 6-15% of their time on activities categorized as **professional responsibility**, which includes activities generally related to the functioning of a school such as bus duty or lunch duty.

Table 9: Number of Elementary RTGs Spending Specified Percentages of Time Working on Activities (n=20, 19)

Activity	Number of RTGs													
	Fall							Spring						
	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher
Building capacity for daily differentiation														
Co-teach	0-27%	12	2	2	3	1	0	0-32%	12	3	2	1	1	0
Collaborative planning	0-25%	2	8	4	6	0	0	0-24%	6	2	10	1	0	0
Modeling strategies	0-19%	6	9	4	1	0	0	0-24%	10	7	1	1	0	0
Provide professional development	0-12%	8	6	6	0	0	0	0-6%	10	8	1	0	0	0
Other Activities														
Assessment	0-6%	13	6	1	0	0	0	0-4%	16	3	0	0	0	0
Communicate with/contact/ meet parents	0-21%	3	5	11	1	0	0	0-14%	6	8	4	0	0	0
Communicate/ contact/meet staff	0-17%	5	7	7	1	0	0	0-9%	4	11	4	0	0	0
Identification process	0-40%	4	7	4	2	1	2	0-53%	2	4	8	3	1	1
Providing instruction/enrichment/ extension	0-50%	1	2	3	6	4	4	5-83%	0	1	2	2	6	8
Observing lessons	0-3%	19	1	0	0	0	0	n/a	0	0	0	0	0	0
Other	0-7%	17	2	1	0	0	0	0-10%	14	1	4	0	0	0

Activity	Number of RTGs													
	Fall							Spring						
	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher
Participate in professional development	0-12%	10	7	3	0	0	0	0-12%	4	6	9	0	0	0
Planning/ preparation	0-32%	1	1	6	10	2	0	0-26%	1	5	9	3	1	0
Professional Responsibility*	1-28%	0	5	13	1	1	0	0-38%	2	3	11	2	0	1

*This category includes activities generally related to the functioning of a school such as bus duty, lunch duty, etc.

Table 10 provides information from the fall and spring running records submitted by middle school RTGs. Highlights include:

- The percentage of time middle school RTGs spend **providing instruction, enrichment, or extension to gifted students** ranges from 4% to 24% in the fall and from 1% to 44% in the spring.
- Middle school RTGs spend the following amounts of time **building capacity for daily differentiation**:
    - **Co-teaching** takes up relatively little of middle school RTGs' time; two out of four spent no time on this in the fall and four out of five spent no time on this in the spring.
    - All but one RTG spent some percentage of their time on **collaborative planning** in both the fall and spring.
    - Three out of four RTGs spent none of their time **modelling strategies** in the fall, and none of the middle school RTGs spent time on this in the spring. None of the RTGs spent time in the fall **providing professional development**. Of the three RTGs in the spring who did spend time on this, it took up between 1% and 15% of their time.
- The **identification process** takes between 2% and 9% of middle school RTGs' time in the fall. In the spring this ranges from 0% to 32%.
- In the fall, RTGs spent between 14-36% of their time on activities categorized as **professional responsibility** (bus duty, etc.). In this spring, the range was 7-23%.
- One RTG spent between 1-5% of his/her time on **social supports for students** in the fall, and two RTGs spent this amount of time in the spring.

Table 10: Number of Middle School RTGs Spending Specified Percentages of Time Working on Activities (n=4, 5)

Activity	Number of RTGs													
	Fall							Spring						
	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher
Building capacity for daily differentiation														
Co-teach	0-12%	2	1	1	0	0	0	0-3%	4	1	0	0	0	0
Collaborative planning	1-17%	0	1	2	1	0	0	0-10%	1	3	1	0	0	0
Modeling strategies	0-7%	3	1	0	0	0	0	n/a	0	0	0	0	0	0
Provide professional development	n/a	0	0	0	0	0	0	0-7%	2	2	1	0	0	0
Other Activities														
Communicate with/contact/ meet parents	1-9%	0	1	3	0	0	0	0-6%	1	3	1	0	0	0
Communicate/ contact/meet staff	1-19%	0	0	1	2	0	0	0-13%	0	3	2	0	0	0
Communicate/ contact/meet students	0-6%	2	1	1	0	0	0	0-9%	3	1	1	0	0	0
Identification process	2-9%	0	2	2	0	0	0	0-32%	1	1	1	0	2	0
Providing instruction/ enrichment/ extension	4-24%	0	1	1	2	0	0	1-44%	0	1	1	1	0	2
Observing lessons	0-14%	0	0	1	0	0	0	0-11%	3	2	1	0	0	0
Other	0-2%	2	2	0	0	0	0	0-5%	2	3	0	0	0	0
Participate in professional development	0-9%	3	0	1	0	0	0	2-9%	0	3	2	0	0	0
Planning/ preparation	3-22%	0	1	2	1	0	0	6-19%	0	0	3	2	0	0
Professional Responsibility*	14-36%	0	0	1	0	2	1	7-23%	0	0	3	2	0	0
Social support for students	0-5%	3	1	0	0	0	0	0-2%	3	2	0	0	0	0

*This category includes activities generally related to the functioning of a school such as bus duty, lunch duty, etc.

Table 11 provides information from the fall and spring running records submitted by high school RTGs, including the RTG from H-B Woodlawn Secondary Program. Highlights include:

- The percentage of time high school RTGs spend **providing instruction, enrichment, or extension to gifted students** ranged from 9-20% in the fall and 4-57% in the spring[2].
- High school RTGs spend the following amounts of time **building capacity for daily differentiation**:
    - One high school RTG spent 4% of his/her time in the fall **co-teaching**. No other RTGs engaged in this activity in the fall or spring.
    - Three out of four high school RTGs engaged in **collaborative planning** in both the fall and spring. This was one of the more time-consuming activities for two of them, who spent between 16-25% of their time in the fall on this activity and between 6-15% of their time in the spring.
    - Three out of four high school RTGs spent some amount of their time **modelling strategies**; this ranged from 1-18% in the fall and 1-11% in the spring. **Providing professional development** accounted for 0-3% of RTGs' time in the fall, and 6-23% of their time in the spring.
- The amount of time high school RTGs spent on the **identification process** varied and ranged from 0-5% in the fall and 0-28% in the spring.
- In the fall, RTGs spent between 0-10% of their time on activities categorized as **professional responsibility** (bus duty, etc.). In this spring, the range was 0-9%.
- One RTG spent 4% of his/her time on **social supports for students** in the fall and 2% in the spring.

Table 11: Number of High School RTGs Spending Specified Percentages of Time Working on Activities (n=4)

Activity	Number of RTGs													
	Fall							Spring						
	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher
Building capacity for daily differentiation														
Co-teach	0-4%	3	1	0	0	0	0	0%	0	0	0	0	0	0
Collaborative planning	0-16%	1	0	1	2	0	0	0-11%	1	1	2	0	0	0
Modeling strategies	0-18%	1	1	1	1	0	0	0-11%	1	2	1	0	0	0
Provide professional development	0-3%	2	2	0	0	0	0	6-23%	0	0	3	1	0	0
Other Activities														
Communicate with/contact/meet parents	3-15%	0	1	3	0	0	0	0-5%	1	3	0	0	0	0
Communicate/contact/meet staff	2-12%	0	1	3	0	0	0	0-4%	1	3	0	0	0	0

[2] One high school RTG teaches an AP class. That time is not included in this category and is counted separately in Table 11.

Activity	Number of RTGs													
	Fall							Spring						
	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher	Range	0%	1-5%	6-15%	16-25%	26-35%	36% or higher
Communicate/contact/meet students	0-21%	1	1	1	1	0	0	2-7%	0	2	2	0	0	0
IB coordinator Role	0-18%	3	0	0	1	0	0	0-9%	3	0	1	0	0	0
Identification process	0-5%	2	2	0	0	0	0	0-28%	1	1	1	0	1	0
Providing instruction/enrichment/extension	9-20%	0	0	2	2	0	0	4-57%	0	1	0	0	1	2
Observing lessons	0%	0	0	0	0	0	0	0-2%	3	1	0	0	0	0
Other	0-25%	1	2	0	1	0	0	0-3%	2	2	0	0	0	0
Participate in professional development	0%	0	0	0	0	0	0	0-12%	1	1	2	0	0	0
Planning/preparation	0-22%	1	0	0	3	0	0	0-15%	2	0	2	0	0	0
Professional Responsibility	0-10%	1	0	3	0	0	0	0-9%	1	2	1	0	0	0
Social support for students	0-4%	3	1	0	0	0	0	0-2%	3	1	0	0	0	0
Teach AP	0-13%	3	0	1	0	0	0	0-10%	3	0	1	0	0	0

Perception of RTG Role

The staff survey asked respondents to choose which description most closely matched how they would describe the role of the RTG at their school, ranging from primarily providing support to students to primarily providing support to teachers. As displayed in **Figure 29**, responses were varied, hinting at variation across schools in the RTG's role. Other than **I don't know**, the response most likely to be selected at each level was **He/she provides support both to students and to teachers about equally**, which was selected by about a third of respondents at each level. Middle school and high school staff were more likely to select **I don't know**, which was selected by 38% of middle school staff and 33% of high school staff.

Figure 29: Which of the following most closely matches how you would describe the role of the resource teacher for the Gifted (RTG) at your school? (Teachers, Counselors, Administrators, by Level)

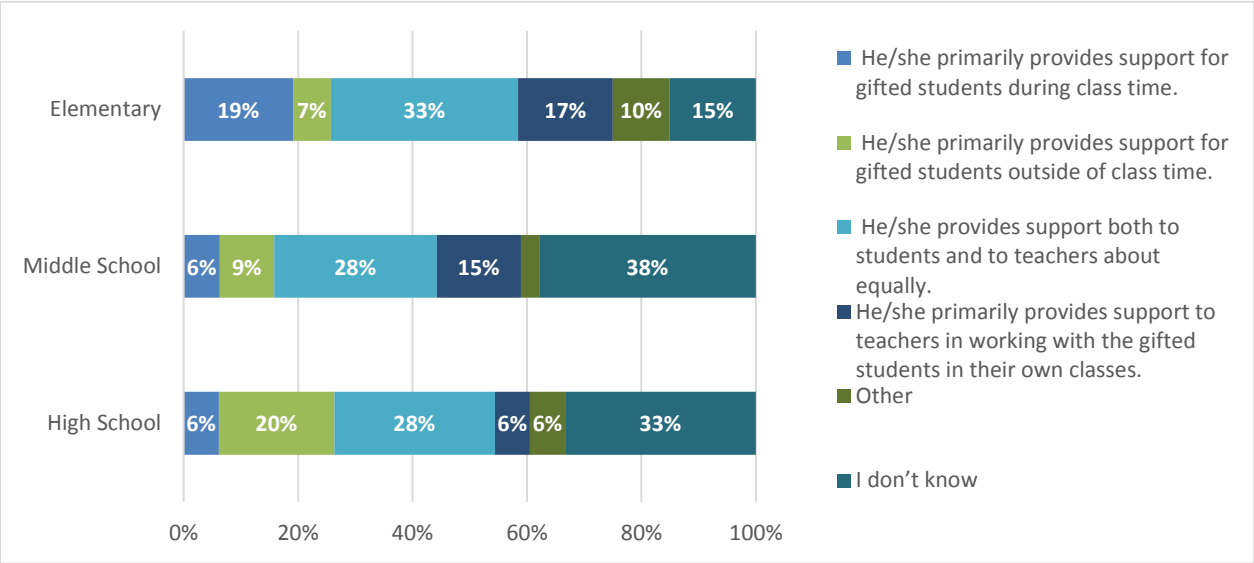
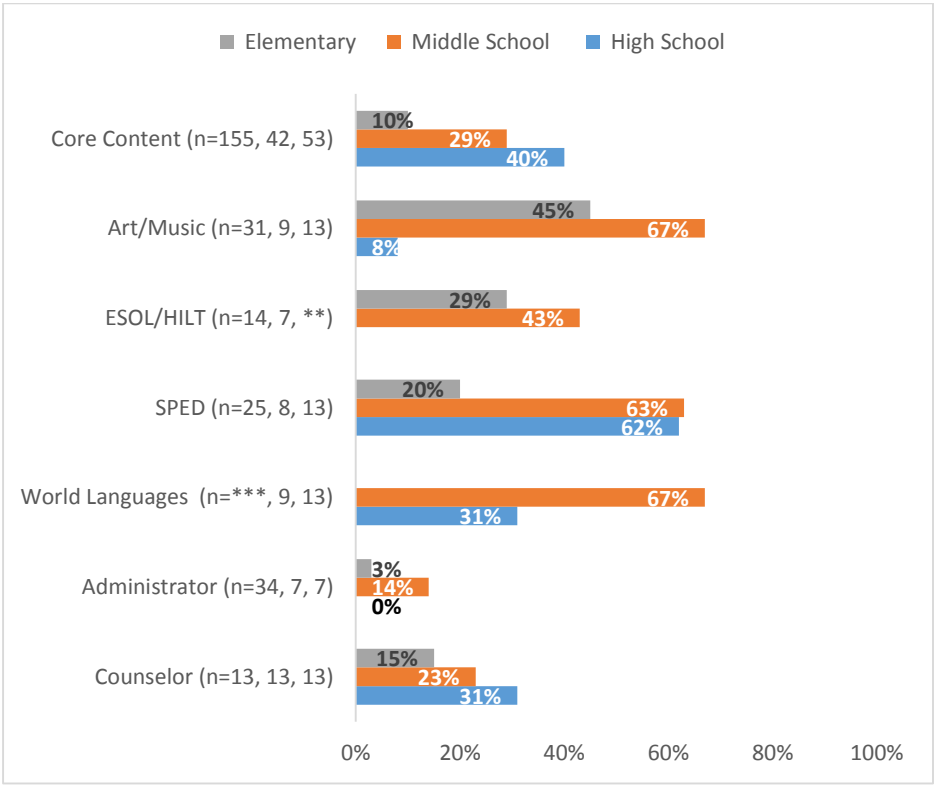


Figure 30 takes a closer look at staff types indicating they don't know what the role of the RTG at their school is. Staff least likely to select this response were elementary core content and art/music teachers, elementary counselors, and administrators at all levels.

Figure 30: Percentage Responding I Don't Know: Which of the following most closely matches how you would describe the role of the resource teacher for the Gifted (RTG) at your school? (Teachers, Counselors, Administrators, by Staff Type and Level)*



*n represents the number of respondents, in the same order as listed in the legend. For example, among core content teachers, there were 155 respondents at the elementary level, 42 at the middle school level, and 53 at the high school level.
**Fewer than five high school ESOL/HILT teachers responded to this question; responses omitted.
***World Language teacher was not an included category in the elementary survey.

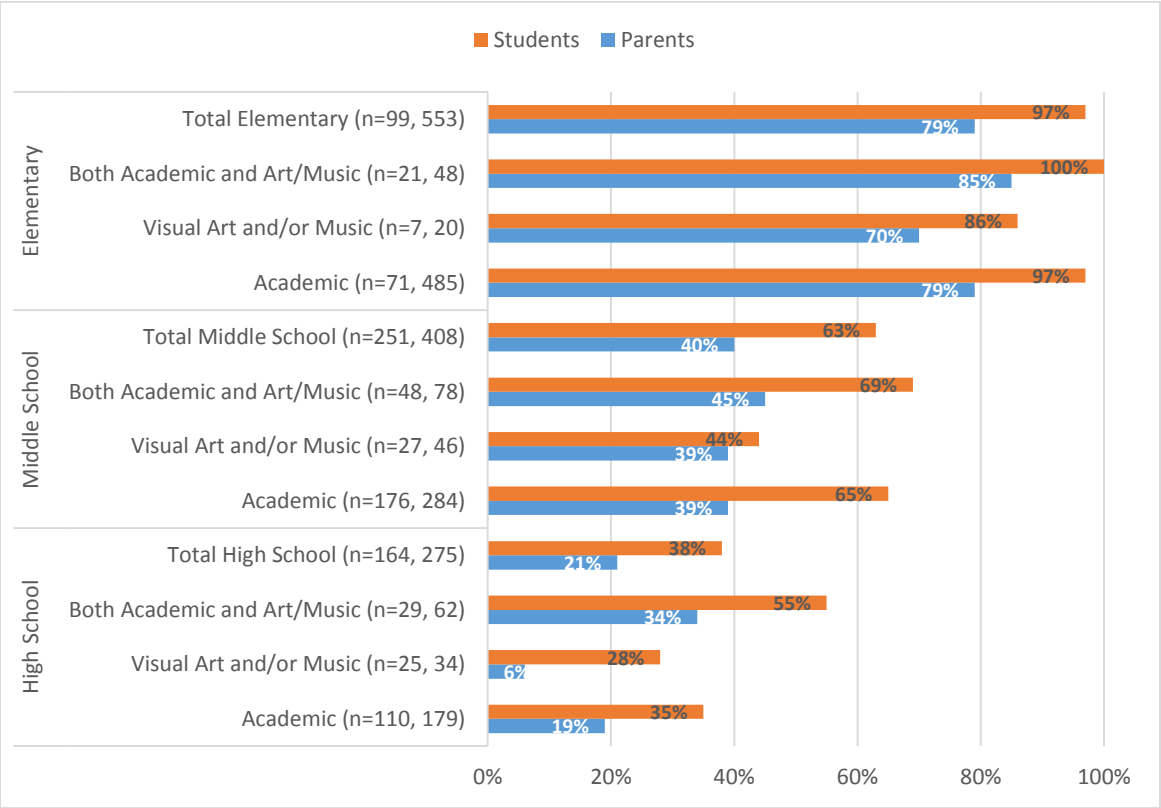
Dr. VanTassel-Baska's focus groups with RTGs revealed that elementary and secondary RTGs perceive their roles somewhat differently:

- In general, the majority of elementary RTGs said that they spend more than half their time, some up to 90%, working directly with students in whole class instruction, pull-out, and some push-in work with small cluster groups. Around 20% of RTG time was spent with teachers, engaging in co-teaching, planning differentiated lessons, and providing professional development.
- None of the secondary group participants worked directly with gifted students even half of their time. In most instances, the role was perceived to be collaborative: facilitating student opportunities 40% of the time in a variety of ways, and being an instructional coach, spending up to 30% of time on tasks that involved teacher support, professional development, and work on differentiated lesson planning. Secondary RTGs felt that their work with teachers was unevenly divided between departments and teachers who were interested versus those who were not.

Familiarity with RTG

On the student and parent survey, respondents were provided with the name of their RTG or their child's RTG, and then asked if they knew the RTG. **Figure 31** shows the percentage responding **yes**. Unsurprisingly, students were more likely to select yes than parents, and both groups were most likely to select yes at the elementary level. In addition, students identified in an **academic area** were more likely to know their RTG than those identified in **art or music**. This pattern was not as strong for parents.

Figure 31: Percentage Responding "Yes:" Do you know your RTG/your child's RTG? (Students, Parents by Gifted Identification Area)*



*Respondents were provided with the name of the RTG at their school/their child's school

Collaboration between Teachers and RTG

Teachers indicated **how frequently they collaborate with the RTG at their school** in a variety of ways. **Figure 32** shows the percentage of **classroom teachers** who indicated that they collaborate with the RTG frequently; in other words, *daily*, *once a week*, or *once a month*. Responses are disaggregated by whether the classroom teacher has a gifted cluster (elementary and middle school) or teaches advanced classes (high school). Elementary teachers were the most likely to indicate that they collaborate with the RTG frequently, and this was even higher for elementary cluster teachers. Interestingly, middle school teachers who did not have a gifted cluster were more likely to collaborate with the RTG on **planning for daily differentiation** and **co-teaching a lesson/unit**. None of the middle school cluster teachers reported that they collaborate frequently with their RTG to co-teach a lesson/unit.

Figure 32: Percentage Responding Daily, Once a Week, or Once a Month: How frequently do you collaborate with the RTG at your school in the following ways? (Core Content Teachers by Cluster/Non-Cluster)

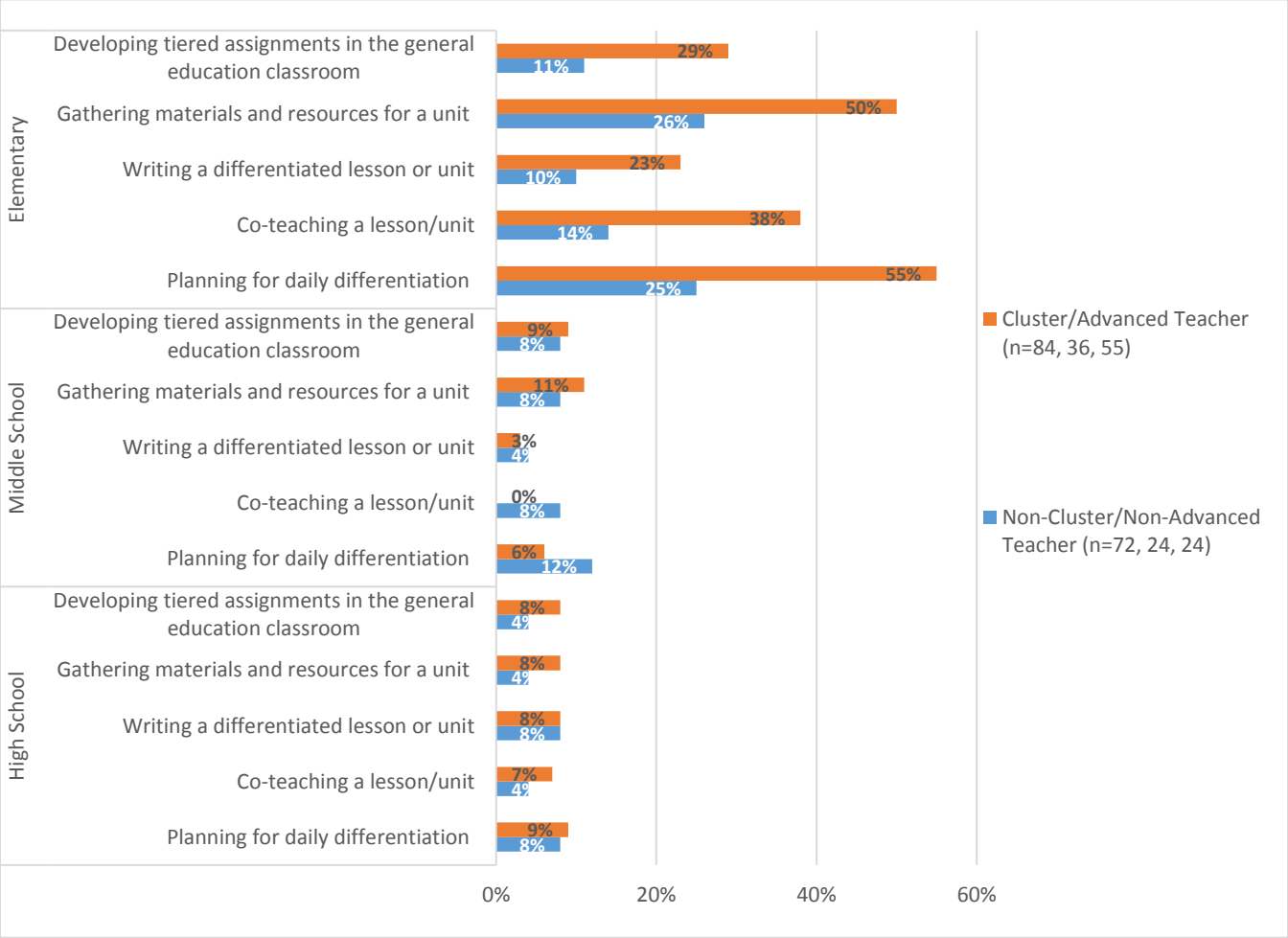


Table 12 examines the same survey question, showing the percentage of **all teachers**, including non-classroom teachers, who responded that they *never* collaborate with the RTG on the specified activities. This response was selected by over half of respondents in most respondent groups. Teachers least likely to select *never*, and therefore most likely to indicate that they collaborate with some level of frequency with the RTG, were:

- **Elementary core content teachers**: planning for daily differentiation, co-teaching a lesson/unit, gathering materials and resources for a unit
- **Elementary ESOL/HILT teachers**: Gathering materials and resources for a unit
- **Elementary special education teachers**: Planning for daily differentiation
- **Middle school core content teachers**: Gathering materials and resources for a unit
- **High school art/music teachers**: Planning for daily differentiation

Table 12: Percentage Responding "Never:" How frequently do you collaborate with the RTG at your school in the following ways? (Teachers by Type)

Level	Activity	Core Content		Art/Music		ESOL/HILT		SPED		World Languages	
		n	%	n	%	n	%	n	%	n	%
Elementary	Planning for daily differentiation	150	37%	29	59%	14	71%	23	48%	n/a	n/a
	Co-teaching a lesson/unit	150	48%	29	86%	14	79%	23	73%	n/a	n/a
	Writing a differentiated lesson or unit	150	61%	29	71%	14	71%	23	68%	n/a	n/a
	Gathering materials and resources for a unit	150	36%	29	76%	14	50%	23	59%	n/a	n/a
	Developing tiered assignments in the general education classroom	150	56%	29	72%	14	71%	23	68%	n/a	n/a
Middle School	Planning for daily differentiation	41	54%	9	56%	8	88%	8%	75%	9	100%
	Co-teaching a lesson/unit	41	71%	9	67%	8	88%	8%	75%	9	100%
	Writing a differentiated lesson or unit	41	68%	9	67%	8	88%	8%	88%	9	100%
	Gathering materials and resources for a unit	41	48%	9	78%	8	88%	8%	63%	9	88%
	Developing tiered assignments in the general education classroom	41	68%	9	67%	8	75%	8%	63%	9	78%
High School	Planning for daily differentiation	53	70%	13	46%	*	*	13%	92%	13	54%
	Co-teaching a lesson/unit	53	77%	13	85%	*	*	13%	85%	13	77%
	Writing a differentiated lesson or unit	53	87%	13	69%	*	*	13%	100%	13	62%
	Gathering materials and resources for a unit	53	68%	13	67%	*	*	13%	77%	13	62%
	Developing tiered assignments in the general education classroom	53	87%	13	75%	*	*	13%	92%	13	62%

*fewer than five responses; responses omitted

In addition to collaboration with the RTG, the survey included questions about **types of support the RTG may provide to teachers**. **Figure 33** shows the percentage of teachers who responded *yes* for each type of support. While teachers most likely to select this response were elementary core content teachers, all

teacher groups at all levels had some portion who indicated that the RTG provides their classes with support in multiple ways.

Figure 33: Percentage Responding "Yes:" Does the RTG provide your class(es) with any of the following support? (Teachers by Type)

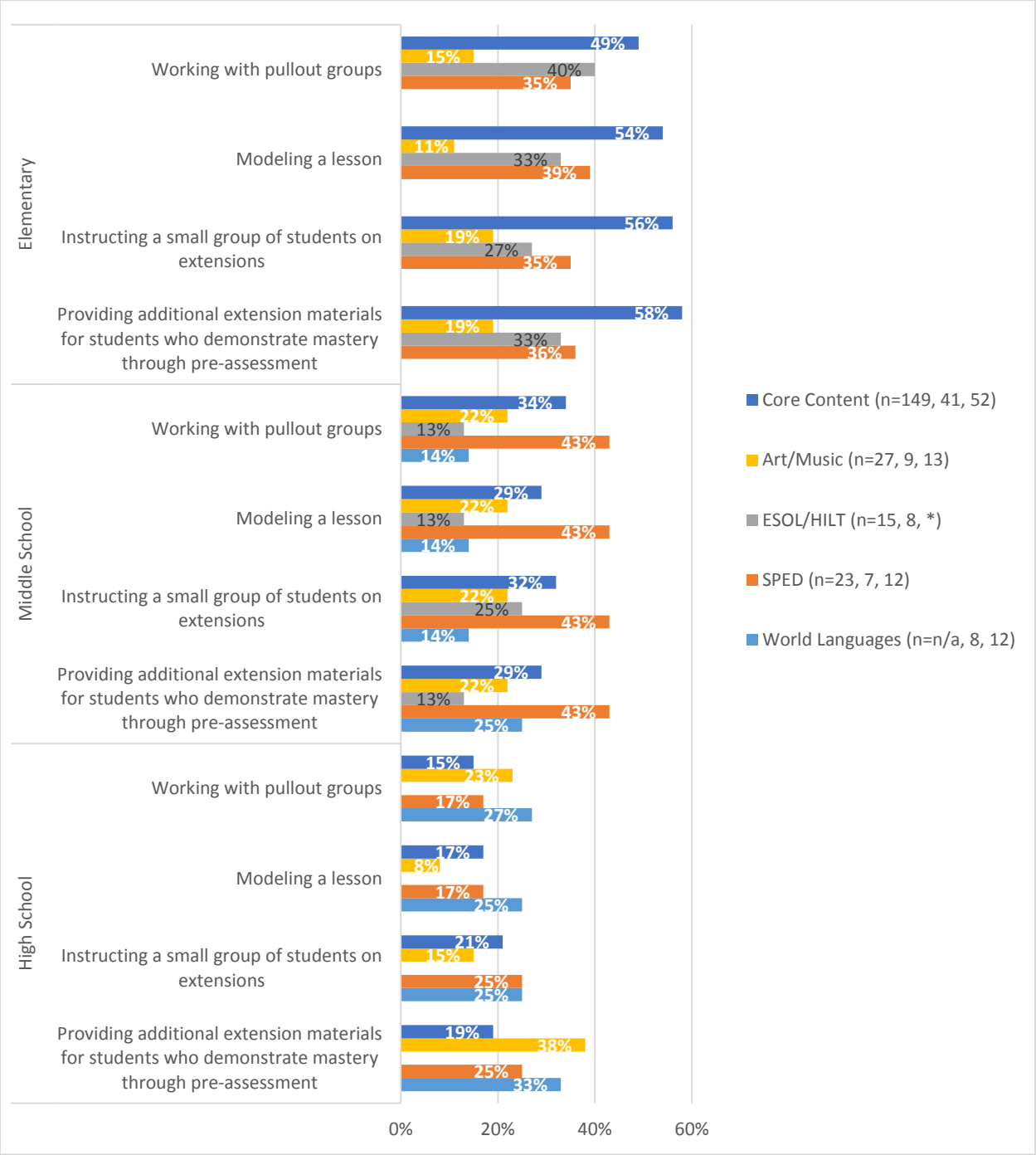
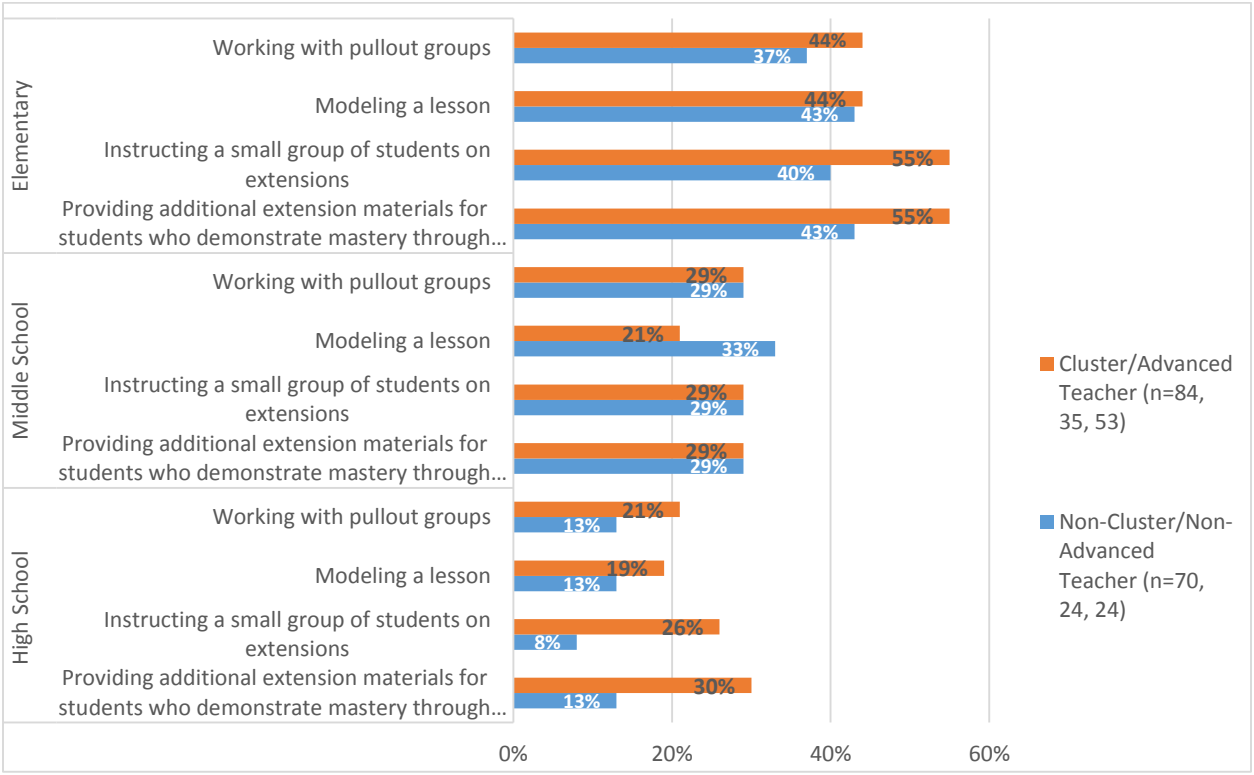


Figure 34 shows responses to the same question, for classroom teachers disaggregated by whether the teacher has a cluster of gifted students (elementary and middle school) and whether the teacher teaches advanced courses (high school). At the elementary and high school levels, cluster/advanced teachers were more likely to report that the RTG provides them any type of support. At the middle school level, cluster and non-cluster teachers were equally likely to respond *yes*, with one exception: non-cluster teachers were more likely to report that the RTG supports them by **modeling a lesson**.

Figure 34: Percentage Responding "Yes:" Does the RTG provide your class(es) with any of the following support? (Classroom Teachers by Cluster/Advanced)



Gifted Services Delivery Models in Exemplary Districts

The Office of Planning and Evaluation contracted with Hanover Research (Hanover) to conduct research on best practices in delivery of services for gifted students. Hanover's analysis consisted of a literature review as well as interviews with gifted services program staff at six exemplar school districts. Selected school districts were identified for inclusion based on:

- Recommendations from APS Gifted Services staff
- Recommendations from Dr. Joyce VanTassel-Baska
- Districts highlighted in project proposals awarded grants through the Jacob K. Javits Gifted and Talented Student Education Program in the US Department of Education
- Districts recommended in a School Superintendents Association (AASA) article, *Expanding the View of Giftedness*
- Recipient of 2014 award from the National Association for Gifted Children (NAGC)

Select findings from the literature review include:

- **Regardless of service delivery, it is important that gifted students receive some form of grouped instruction where they can interact and learn alongside peers of similar ability.** This can manifest in mainstream classrooms through regular teacher-structured group work (e.g., ability clustering) or in separate classes composed of only high-ability students (e.g., Advanced Placement courses). Although there are merits to both models, homogeneous grouping is becoming more and more prevalent, and data suggest that students in these programs (e.g., separate classes or pull-out) demonstrate higher achievement scores than their similarly high-ability peers in heterogeneous classrooms.
- **Instruction for gifted students is particularly effective when it combines elements of both acceleration and enrichment.** Acceleration—whether content-based or grade-based—has been shown to be definitively advantageous for high-ability students over the long term, and recent data confirm that it is not detrimental to students' socio-emotional development or wellbeing. Compacting typically requires that teachers receive dedicated professional development in leading differentiated lessons.
- **The National Association for Gifted Children (NAGC) recommends that programming guidelines for gifted education emphasize student outcomes rather than set practices.** This helps schools to account for the diversity among gifted student populations, as well as identify students who demonstrate giftedness in only one or two areas. The organization proposes that effective standards address six key domains: learning and development; assessment; curriculum planning and instruction; learning environments; programming; and professional development.

Select findings from the district interviews include:

- **Several of the interviewed administrators indicated that they are moving away from labeling students as "gifted" or "not gifted," instead placing students along a spectrum of advanced offerings.** This provides school districts with more flexibility in gifted programming to be able to differentiate multiple levels of giftedness and develop programs accordingly. For example, Fairfax County Public Schools maintains four levels of advanced academic education for students at varying levels, ranging from whole-class critical thinking strategies for young children to differentiated instruction and part- and full-time pull-out classrooms and schools. Similarly, Greenwich Public Schools offers enrichment and replacement programs in specific content areas to accommodate all types of gifted learners.
- **Several administrators noted the success of the Young Scholars[3] model for identifying high-ability students from underrepresented groups.** The model was initially developed by Fairfax County Public Schools to provide students from at-risk backgrounds with the opportunities to develop and demonstrate giftedness. According to the program's founder, Dr. Carol Horn, "if we did [not] start working with them early, they may not have the skills or the self-efficacy to be successful in an advanced course." The program has been adopted by other exemplar districts such as Greenwich Public Schools and Hillsborough County Public Schools.

[3] The Young Scholars Model was implemented in APS in 2015-2016 at Drew, and expanded to Randolph in 2016-2017. In addition, Barcroft held two Young Scholars intersessions in 2016-17. Starting in 2017-18, every Title I school will have a Young Scholars Innovation Academy for two weeks during the summer.

- **Substantive and ongoing professional development for teachers with gifted students is an integral aspect of gifted education programs.** Indeed, several administrators indicated a department-wide prioritization of training for gifted education teachers. For example, Virginia Beach City Public Schools recently implemented Collaborative Learning Culture Groups for teachers in gifted education across the district to regularly meet and collaboratively address key questions, develop teaching strategies, and facilitate horizontal and vertical alignment. Effective training should take multiple forms, including district-sponsored workshops, professional conferences, and presentations by external consultants.

Table 13 shows key aspects of gifted services delivery at four of the interviewed districts[4]. Each district offers a continuum of services from elementary through high school that includes options for homogenous grouping of gifted students.

Table 13: Gifted Services Delivery in Exemplar Districts

Virginia Beach City Public Schools, Virginia Beach, Virginia	
Student Population	67,214
% of Students Identified as Gifted	13.1
Gifted Identification Areas	• Intellectually gifted • Dance • Visual arts
Program Model(s)	• Resource-cluster programs, all levels • Pullout programs for dance or visual art, including Governor's School for the Arts in Norfolk (high school) • Full-time gifted school (grades 2-8)
Middle School Intensified/Advanced Coursework	Available in English, science, math, and foreign languages
Staffing	Central: unknown Schools: Each school has a full-time gifted RTG responsible for overseeing the resource-cluster education in each class, and the professional development initiatives for the Office of Gifted Programs
Fairfax County Public Schools, Fairfax County, Virginia	
Student Population	186,000
% of Students Identified as Gifted	unknown
Gifted Identification Areas	Academic (math, language arts, social studies, and science)
Program Model(s)	Differentiated level model, Advanced Academic Programs (AAP), designed to meet the needs of a broad range of advanced learners: • Level 1: Critical and creative thinking strategies, grades K-6. Part of the curriculum for all students

[4] While a total of six districts were interviewed, Hanover provided four full profiles based on the completeness of the information available. Information from the remaining two interviews was folded into the body of the narrative.

	• Level 2: Differentiated lessons in areas of academic strength (**cluster grouping).** Eligibility for differentiated lessons is determined by a school-based screening committee. • Level 3: Part-time Advanced Academic Program, grades 3-6 (**pullout**). These extend and enrich the FCPS program of studies in the four content areas. Eligibility is determined by a school-based screening committee. • Level 4: Full-time Advanced Academic Program (**center-based model**). This program focuses on academic depth and complexity in the four core content areas. Eligibility is determined through a central selection committee. High school offerings focus on advanced coursework.
Middle School Intensified/Advanced Coursework	Students may self-select to take between one and four honors classes.
Staffing	Central: • Multiple elementary specialists • One middle school specialist • One high school specialist • IB specialist • Multiple data managers Schools: • Each school has a part-time or full-time Advanced Academic RTG, who helps teachers lead heterogeneous classrooms for advanced learners. Many also lead pull-out or part-time classes.
Greenwich Public Schools, Fairfield County, Connecticut	
Student Population	8,800
% of Students Identified as Gifted	19%
Gifted Identification Areas	Language arts, math, and science
Program Model(s)	Grades 2-8: • Enrichment (cluster grouping and pullout opportunities as needed), for math, reading, or science (starting in grade 3) • Replacement: Starting in grade 3, instruction provided separately by Advanced Leaning Program (ALP) teacher for math and/or reading High school: • Honors and AP courses
Middle School Intensified/Advanced Coursework	In addition to replacement courses, interdisciplinary semester-long seminar builds on gifted students' knowledge and questioning skills throughout middle school to examine different elements of the main topic each year (e.g., "What does it mean to be human?"
Staffing	Classroom teachers who lead ALP classes. These teachers meet regularly with the ALP Program Facilitator, both in groups and individually.
Paradise Valley Unified School District, Northeast Phoenix and north Scottsdale, AZ	
Student Population	31,000
% of Students Identified as Gifted	12%

Gifted Identification Areas	Academic
Program Model(s)	• Tuition-based gifted preschool (4 locations); eligibility based on IQ score • Kindergarten: Self-contained classrooms incorporating Socratic questioning/inquiry and reasoning • Grades 1-4: cluster grouping • Grades 4-6: honors classes (content replacement for math and/or reading) • Grades 1-6: self-contained gifted programs in five schools for students who are working at least two grade levels beyond their current grade • Middle school and high school honors and advanced-level classes • Middle school and high school honors academies such as IB, project-based learning, Engineering, etc.
Middle School Intensified/Advanced Coursework	Yes; see above
Staffing	Central • Five full-time employees who serve as testing technicians and gifted mentors Schools • About 60 elementary teachers • Honors and advanced teachers at secondary level • School-based gifted specialists

Quality of Instruction

Differentiation

Differentiation includes (a) the design and/or selection of curriculum, (b) the selection and use of instructional practices, including grouping strategies, varied resources, and variations to the pacing of instruction, and (c) the assessment of learning, all of which rely on assessment evidence demonstrating learner differences. The National Association for Gifted Children (NAGC) describes differentiation for gifted learners in the following way:

> *Differentiation is grounded in an understanding that curriculum and instruction promote learning and growth when they are linked to the specific, assessed needs and capabilities of the learners involved. Gifted students learn more quickly than and differently from other children of the same age. They generally need less practice to master particular skills and are capable of intellectual engagement requiring greater complexity in the consideration of ideas and in completion of tasks. These learning characteristics suggest the need for curriculum, instruction, and assessment that are differentiated in level, complexity, depth, and pacing to ensure that gifted children have the opportunity to make continuous learning progress in school (Rogers, 2007). Effective differentiation for gifted students consists of carefully planned, coordinated learning experiences that extend the core curriculum, combine the curricular strategies of enrichment and acceleration, and integrate instructional strategies that engage learners at*

appropriate levels of challenge. Such curriculum and instruction are typically coupled with flexible grouping strategies to promote effective classroom management[5].

In summary, to provide gifted students – and all learners – opportunities for continuous learning and growth in their classrooms, schools must provide support for and emphasis on appropriate differentiation of curriculum and instruction. For gifted learners, appropriate differentiation allows for increasing levels of advanced, abstract, and complex curriculum that is substantive and responds to learner differences. The National Association for Gifted Children strongly recommends that every school provide:

- access to curricular resources that are designed for gifted learners;
- systematic and substantial professional development for all teachers regarding the needs of gifted learners, differentiation in general, and flexible grouping approaches; and
- resource specialists who can support the classroom teacher in assessing gifted learner differences, making adjustments to the curriculum, and implementing differentiated instruction.

Together these critical components will strengthen a school's response to gifted students and encourage the growth of all learners.

Observations of Instruction for Gifted Students

Classroom Assessment Scoring System (CLASS)

The Classroom Assessment Scoring System (CLASS) is an observation tool developed at the University of Virginia's Curry School of Education and managed by Teachstone. It is designed to help analyze the interactions between teachers and their students in order to boost the effectiveness of teaching and learning. Research shows that students in classrooms where teachers earn higher CLASS scores achieve at higher levels than their peers in classrooms with lower CLASS scores[6].

As part of multiple ongoing evaluations, CLASS observations were conducted throughout the 2014-15 school year. Observations included all content areas. For purposes of the Gifted Services evaluation, CLASS scores from the following types of classrooms were analyzed:

- **Elementary** homerooms with a cluster of gifted students (5-8 students)
- **Middle school** classrooms with a cluster of gifted students identified in the content area of the class
- **High school** classrooms with a cluster of gifted students identified in the content area of the class. (Due to the small number of observations with clusters in the area of art or science, these content areas are omitted.)

CLASS dimensions specifically associated with **differentiation** are listed in **Table 14**, along with indicators associated with each dimension. CLASS dimensions are scored on a 7-point scale consisting of Low (1, 2),

[5] http://www.nagc.org/sites/default/files/Position%20Statement/Differentiating%20Curriculum%20and%20Instruction.pdf

[6] Observations of effective teacher-student interactions in secondary school classrooms: predicting student achievement with the classroom assessment scoring system – Secondary (http://files.eric.ed.gov/fulltext/ED556047.pdf)

Mid (3, 4, 5), and High (6, 7) ranges. When interpreting CLASS results, Teachstone advises that typically, half a point to a point difference is considered to be **educationally significant**; in other words, a difference that would impact outcomes for students[7].

Table 14: Indicators Associated with CLASS Dimensions Relevant to Differentiation[8]

CLASS Dimension	Indicators
Teacher Sensitivity	• Awareness • Responsiveness to academic and social/emotional needs • Effectiveness in addressing problems • Student comfort
Regard for Student/Adolescent Perspectives	• Flexibility and student/adolescent focus • Connections to current life (upper elementary and secondary) • Support for autonomy and leadership • Meaningful peer interactions (upper elementary and secondary) • Student expression (lower elementary) • (Lack of) Restriction of movement (lower elementary)
Instructional Learning Formats	• Learning targets/organization • Variety of modalities, strategies, and materials • Active facilitation • Effective engagement
Concept Development (Lower Elementary)	• Analysis and Reasoning • Creating • Integration • Connections to the Real World
Analysis and Inquiry (Upper Elementary and Secondary)	• Facilitation of higher-order thinking • Opportunities for novel application • Metacognition

Figure 35 shows average scores for dimensions relevant to differentiation for observations of elementary classrooms with gifted clusters. Both lower and upper elementary observations fell into the high range for **teacher sensitivity**, and the mid range for **regard for student/adolescent perspectives**. The two levels differed for **instructional learning formats**, with lower elementary observations receiving an average score of 5.5 and upper elementary classrooms receiving an average score of 3.9. **Concept development** - a dimension on the lower elementary tool - had an average score of 3.7, and **analysis and inquiry** – a dimension on the upper elementary tool – had an average score of 4.9.

[7] Teachstone, personal communication, June 13, 2014 and January 5, 2016
[8] CLASS Dimensions Guides (2014). Teachstone Training, LLC.

Figure 35: Average Scores for Elementary CLASS Dimensions Relevant to Differentiation

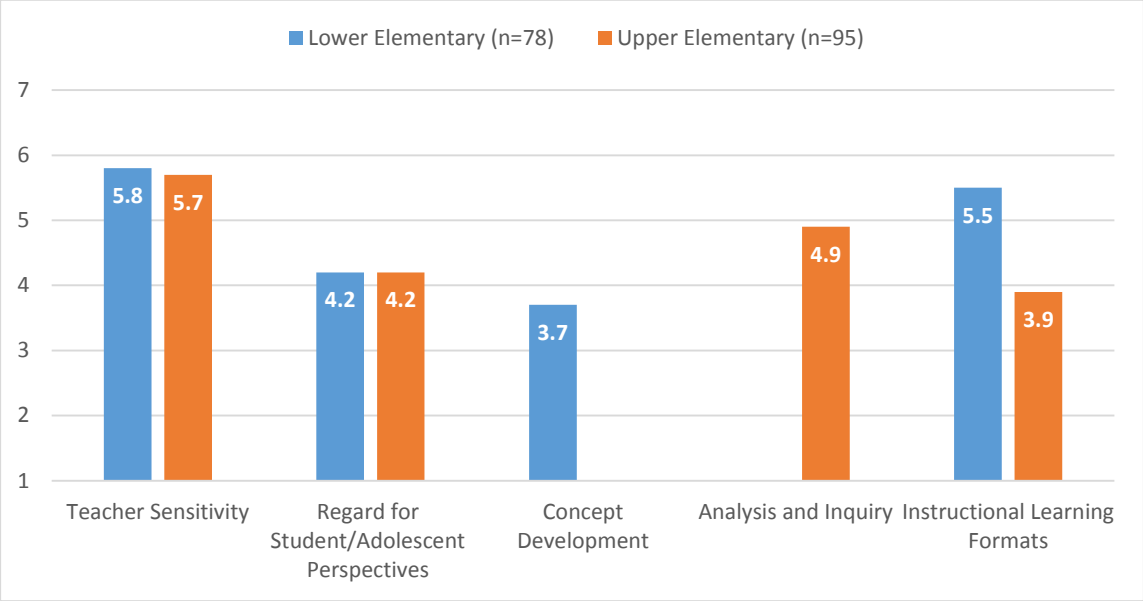


Figure 36 shows average scores for dimensions relevant to differentiation for observations of middle school classrooms with gifted clusters. All math classes included in these observations were advanced courses, such as Math 7 for 6th Graders and Algebra I Intensified. Generally, while the number of observed classrooms was smaller, middle school CLASS scores varied less than the elementary scores and tended to fall into the high range. Social studies classes stand out as having the highest average score across dimensions, all in the high range, though the difference between social studies and other content areas was typically small. The only *educationally significant* difference was for **regard for adolescent perspectives**, which had an average score of 5.3 in ELA classes, 5.0 in math classes, and 6.0 in social studies classes.

Figure 36: Average Scores for Middle School CLASS Dimensions Relevant to Differentiation

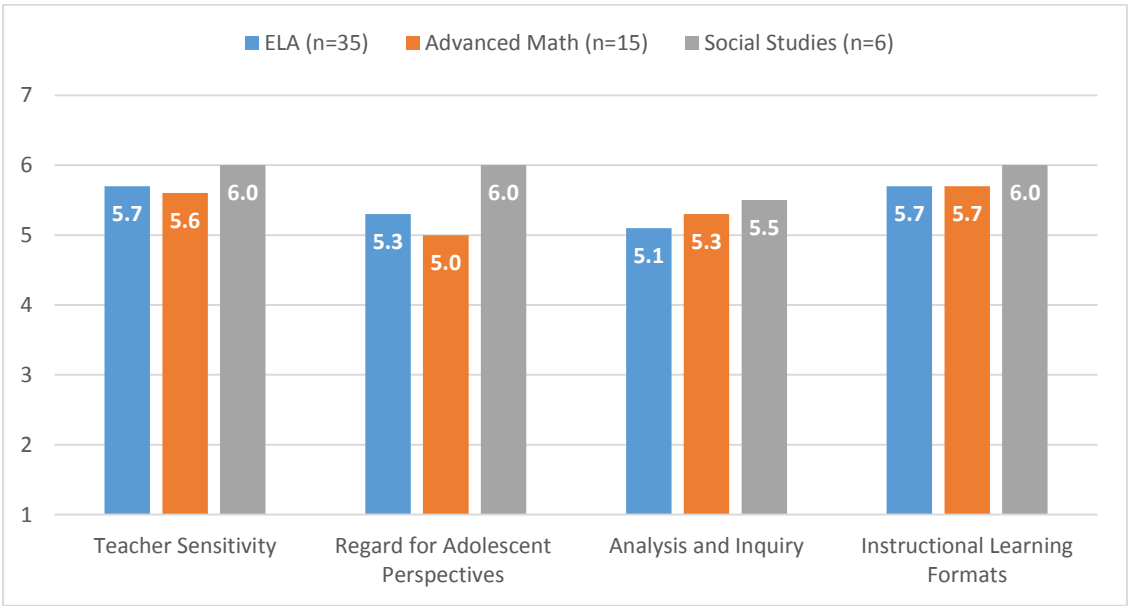
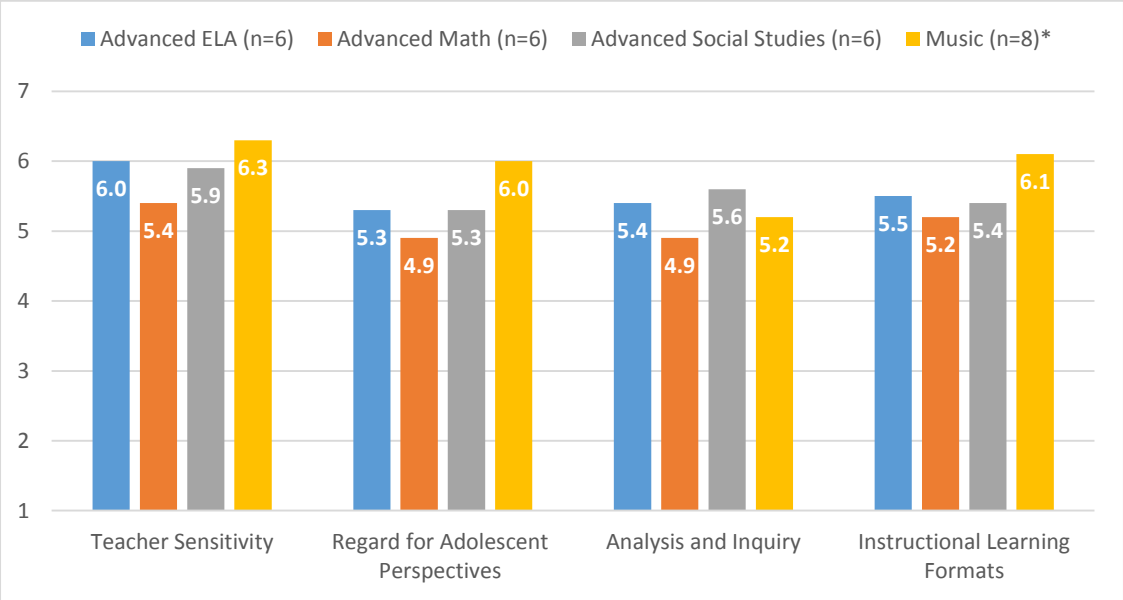


Figure 37 shows average scores for dimensions relevant to differentiation for observations of high school classrooms with gifted clusters. The English language arts (ELA), math, and social studies courses were all advanced; i.e., either intensified, AP, or IB. The eight music courses include both middle and high school courses, as there were not enough music observations to report them separately. These observations include six advanced courses and two regular courses. As with middle school, there were fewer observations than at the elementary level, and most scores fell into the high range. Music classes stand out as having the highest average score for all dimensions except **analysis and inquiry**. Math classes have the lowest average score for all dimensions, though these still fell in the high-mid or high range.

Figure 37: Average Scores for High School CLASS Dimensions Relevant to Differentiation



*This category includes both middle school and high school music classes, as there were not enough observations to separate them out. Six of the eight observed courses were advanced.

COS-R

During the 2015-16 school year, Dr. VanTassel-Baska and two additional consultants conducted a series of classroom observations for this evaluation. Dr. VanTassel-Baska is the primary author of the Classroom Observation Scale-Revised (COS-R), an observation tool used nationally to assess the use of differentiation for the gifted in classroom practice.

In consultation with Gifted Services and Planning and Evaluation staff, Dr. VanTassel-Baska made subscale changes in the COS-R to be more responsive to the needs of this evaluation. Two subscales were removed, and two new subscales - **materials and strategy utilization** and **analysis and inquiry** - were added. The tailored COS-R items were rated on a 3-point scale and included:

Curriculum Planning and Delivery. The teacher…

- set high expectations for student performance.
- incorporated activities for students to apply new knowledge.
- engaged students in planning, monitoring, or assessing their learning.

- encouraged students to express their thoughts.
- had students reflect on what they had learned.

Materials and Strategy Utilization. The teacher…

- showed evidence of using program-relevant differentiated materials for the gifted in math, science, social studies, or language arts.
- used cluster, pull-out, self-contained, or advanced class grouping to target gifted learners for instruction.
- used models of thinking to promote deeper conceptual understanding and advanced content learning.
- employed evidence-based instructional strategies, such as graphic organizers, to enhance student higher level thinking.

Accommodations for Individual Differences. ***The teacher…***

- provided opportunities for independent or group learning to promote depth in understanding content.
- accommodated individual or subgroup differences (e.g., through individual conferencing, student or teacher choice in material selection and task assignments.)
- encouraged multiple interpretations of events and situations.
- allowed students to discover key ideas individually through structured activities and/or questions.

Critical Thinking Strategies. The teacher…

- encouraged students to judge or evaluate situations, problems, or issues.
- engaged students in comparing and contrasting ideas (e.g., analyze generated ideas).
- provided opportunities for students to generalize from concrete data or information to the abstract.
- encouraged student synthesis or summary of information within or across disciplines.

Creative Thinking Strategies. The teacher…

- solicited many diverse thoughts about issues or ideas.
- engaged students in the exploration of diverse points of view to reframe ideas.
- encouraged students to demonstrate open-mindedness and tolerance of imaginative, sometimes playful solutions to problems.
- provided opportunities for students to develop and elaborate on their ideas.

Analysis and Inquiry Strategies. The teacher…

- employed the inquiry process to stimulate high level learning.
- asked high level questions that encouraged students to think and ask their own questions.
- employed activities that required analysis of text, use of models, or other symbolic sources.
- employed activities that required students to build argument orally, visually, in written form, or by using models and symbols.

- asked students to collect and draw inferences from data and represent findings in a relevant form.

Observations were conducted at eight elementary schools, two middle schools, and two high schools. Schools were selected purposively to represent a variety of demographic groups and gifted delivery models across the district. Observations focused on the four academic gifted areas. The consultants observed the following number and types of classes:

- **Elementary** 6-10 classes at each school. Observed classes included 3rd, 4th, and 5th grade homerooms with a cluster of gifted students (5-8 students).
- **Middle school** At least 12 classes at each school covering all grade levels and gifted content areas. Observed classes included classrooms with a cluster of gifted students identified in the content area of the class.
- **High school** 12 classes at each school, accounting for all grade levels and all four content areas. Observed classes included advanced courses (i.e. intensified, AP, or IB) with a cluster of gifted students identified in the content area of the class.

The consultants' **overall findings** include:

- Across grade levels, the differentiation strategies used most frequently are those associated with good teaching such as **setting high expectations** and **providing activities for students to apply new knowledge**. Also used quite frequently are strategies that accommodate **independent and group work**, and that allow students to **express ideas** in some context.
- Teachers of gifted students at all levels are under-utilizing higher-level strategies that differentiate learning for these students, and this is most notable at the middle school level. While slightly over half of the teachers are engaging in **curriculum planning and delivery** strategies and **accommodations for individual differences**, less than half are engaging in the other categories of behavior included in the COS-R. This is especially troubling for **critical, creative,** and **inquiry strategies**. **Table 15** below lists the differentiation strategies that were frequently and infrequently observed.
- Teachers of gifted students are generally somewhat effective in the higher-level strategies they *are* implementing. Lower mean scores were recorded for middle school teachers in all categories except **creative thinking**. Elementary and high school mean scores were comparable across all of the categories. The highest mean ratings were recorded for **curriculum planning and delivery** at 2.5 for elementary teachers, and **materials and strategy utilization** for high school teachers at 2.5.
- **Math and science** teachers used more differentiated strategies and used them more effectively at all levels than did English language arts or social studies teachers. This was especially true at the high school level, with effectiveness mean scores ranging from 2.7-3.0 in science and from 2.8-3.0 in math. In intensive math classes, there was strong use of problem-solving techniques that stressed the "how to approach" the problem rather than just the solution to it.
- Instructional practice appears to be dominated by subject specialist decisions, especially evident in math, or program-based decisions in programs such as AP, IB and IB Middle Years Programme

(IBMYP). These decisions on materials and instructional focus often do not consider what works with a subgroup of learners, in this case the gifted. Observers noted the materials used in each classroom and discussions with teachers in order to make this inference.

- The **absence of appropriate attention to clustering** hampers the ability of teachers to differentiate instruction in several ways. In many classrooms, whole group instruction dominated, with the use of one lesson plan for all learners, regardless of their designation as gifted. In cases where the lesson plan was derived from materials selected by content specialists, often the lessons were not high level enough for gifted learners. Math classrooms were an exception to this at all levels, with advanced opportunities in evidence in most of the math classrooms, regardless of level.

Table 15: Frequency of Use of Differentiated Teaching Behaviors

Frequently Observed Strategies	Infrequently Observed Strategies
Strategies that set high expectations for students	Strategies that promote planning, monitoring and assessing learning, or deliberate reflection
Activities for students to apply new knowledge	Strategies that support the systematic employment of higher level thinking skills
Strategies that accommodate independent and group work	Strategies that support creative thinking
Strategies that allow students to express ideas	Strategies that encourage diverse points of view
Strategies that encourage evaluation of situations	

Based on their findings, the consultants offered the following overarching recommendations. The full report, including the entire list of recommendations, can be found in **Appendix B4**.

> Findings suggest that the pattern of instruction in classrooms where gifted students are served is not sufficiently broad in respect to the use of **differentiation strategies** nor deep in respect to effective utilization of them. It suggests the need to increase the frequency of use of many more of the strategies on the COS-R form with more teachers and to enhance the effectiveness of use of selected strategies. Results also suggest the need to consider the content areas in which strategies should be embedded and provide appropriate models of use.
>
> Approaches to enhancing the use of differentiation strategies lies in the application, in equal measure, of 1) **mandated and updated training of teachers that is focused on the strategies that are under-utilized**, embedded in content applications of existing and newer materials, and 2) **follow-up monitoring of strategy use at the school level** by the person responsible for teacher evaluation. Moreover, it is suggested that the teacher evaluation form in cluster classrooms, intensives and AP and IB classrooms be cross-referenced to the COS-R so that appropriate behaviors for gifted learners are being assessed specifically. Clearly, these implications also call for the **appropriate training of building administrators** in the supervision of personnel who work with the gifted.

Use of Strategies and Curriculum Materials for Gifted Students

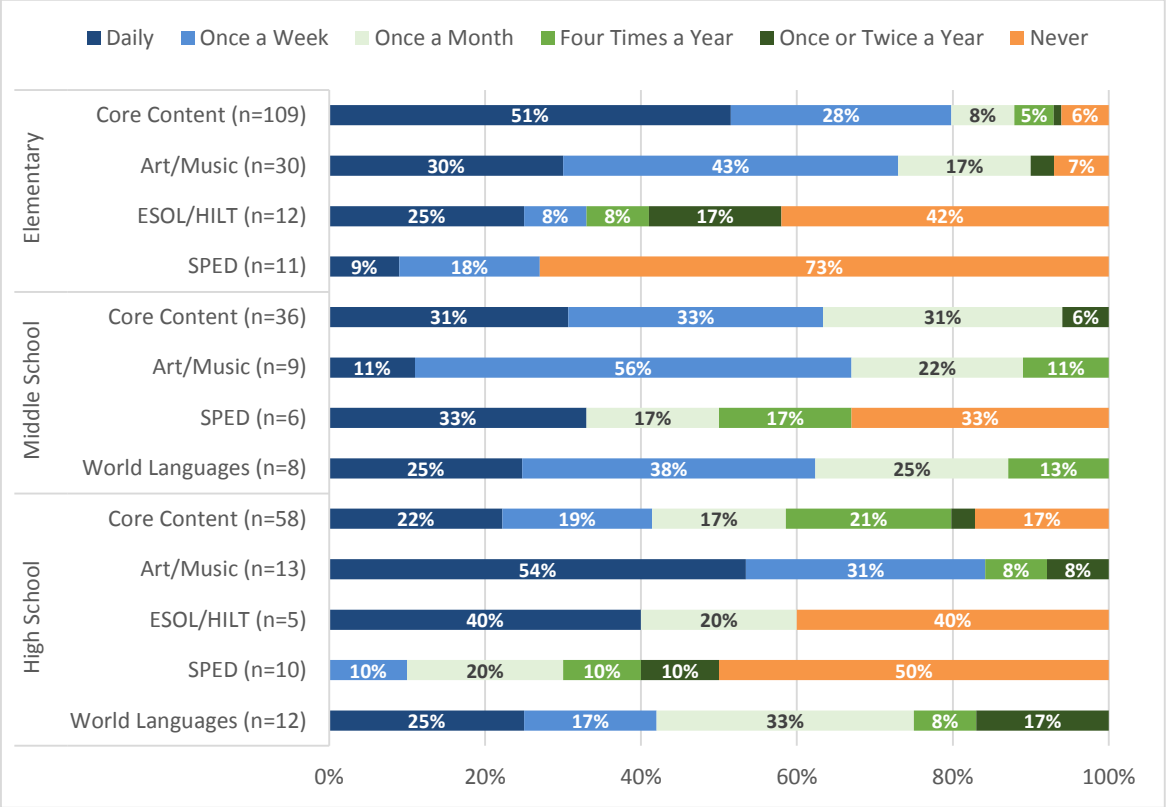
Generally, teachers are **confident in their ability to meet the needs of their gifted students**. Most teachers indicated that they *strongly* or *somewhat agree* with this statement. The following sections

address teachers' use of strategies for gifted students, and their use of curriculum materials for gifted students. The teacher survey included a series of **global questions** about teachers' use of strategies and curriculum materials for gifted students, as well as questions about their use of **specific strategies and materials**.

Use of Strategies

Figure 38 shows responses to the statement, "**I make specific plans to challenge my gifted students.**" This question was asked only if a teacher had previously indicated that they had students identified as gifted in their classes. Teachers most likely to indicate that they make specific plans for their gifted students *daily* or *once a week* include elementary and middle school core content and art/music teachers, as well as high school art/music teachers.

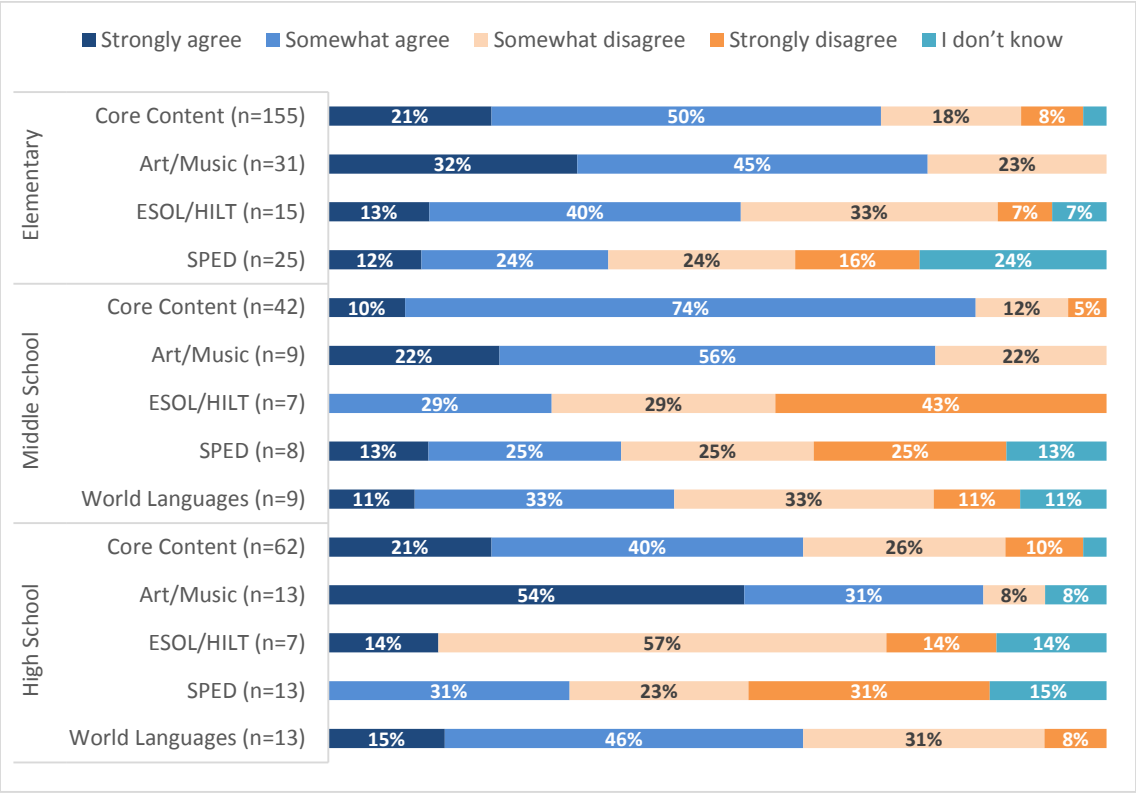
Figure 38: I make specific plans to challenge my gifted students. (Teachers who teach gifted students, by type)*



*This question was asked only if a teacher indicated that they taught students identified as gifted. Fewer than five middle school ESOL/HILT teachers responded to this question; responses omitted.

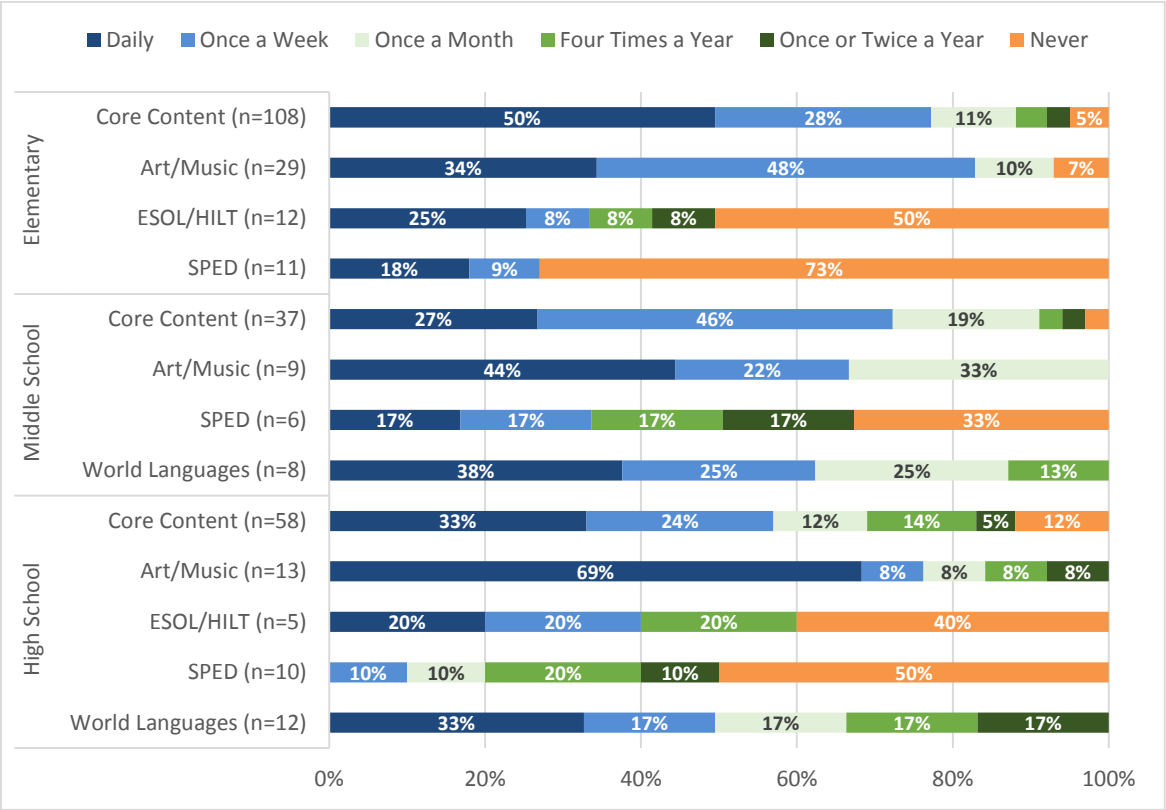
Figure 39 shows the level of agreement with the statement, "**I have a firm understanding of strategies to use with gifted students.**" Again, core content teachers and art/music teachers were the most likely to respond positively, with the majority at all levels indicating that they *strongly* or *somewhat agree* with this statement. This was higher among high school art/music teachers (85%) than high school core content teachers (61%).

Figure 39: I have a firm understanding of strategies to use with gifted students. (Teachers by Type)



Among teachers who indicated that they teach students who are identified as gifted, most indicated that **they use strategies for gifted students** either *daily* or *once a week*. As shown in **Figure 40**, these responses were most common among core content and art/music teachers.

Figure 40: I use strategies for gifted students. (Teachers who teach gifted students, by type)*



*This question was asked only if a teacher indicated that they taught students identified as gifted. Fewer than five middle school ESOL/HILT teachers responded to this question; responses omitted.

Framework for Critical and Creative Thinking

Survey questions summarized in this section address teachers' use of specific strategies for teaching gifted students. The Framework for Critical and Creative Thinking includes the following strategies:

- Analogies
- Synectics
- Mind-mapping
- deBono's hats
- Socratic seminar
- Structured academic controversy and/or debates
- SCAMPER (Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, Reverse)
- Concept-based instruction
- Habits of Mind
- RAFT (Role, Audience, Format, Topic)
- PMI (Plus, Minus/Modify, Interesting)
- FFOE (Fluency, Flexibility, Originality, Elaboration)
- QFT (Question formulation technique)

The teacher survey included the question, "**How often do you use the following strategies from the Framework for Critical and Creative Thinking to encourage creative and critical thinking in your classroom?**" Teachers at the high school level were the group most likely to indicate that they use a strategy frequently - *daily* or *once a week* – followed by middle school teachers, and then by elementary teachers. The following strategies were most frequently cited as being used *daily* or *once a week*:

Elementary

- **Analogies** (27% of core content, 47% of art/music, 40% of ESOL/HILT, and 34% of special education teachers)
- **Concept-based instruction** (35% of core content, 55% of art/music, 53% of ESOL/HILT, and 41% of special education teachers)

Middle School

- **Analogies** (39% of core content, 66% of art/music, 72% of ESOL/HILT, and 55% of world language teachers)
- **Concept-based instruction** (48% of core content, 44% of art/music, 28% of ESOL/HILT, 50% of special education, and 44% of world language teachers)

High School

- **Analogies** (65% of core content, 85% of art/music, 43% of ESOL/HILT and special education, and 69% of world language teachers)
- **Mind-mapping** (50% of ESOL/HILT teachers)
- **SCAMPER** (50% of world language teachers)
- **Habits of Mind** (62% of art/music teachers)
- **FFOE** (61% of world language teachers)
- **QFT** (61% of world language teachers)

Teachers also had the option to select "**N/A - I am not familiar with this strategy**," a response that was selected by a substantial proportion of teachers across strategies, teacher type, and levels. The percentage of teachers indicating that they are not familiar with a strategy is displayed in **Figure 41**, **Figure 42**, and **Figure 43** for elementary, middle school, and high school teachers, respectively. Generally, teachers were least familiar with Synetics, deBono's hats, PMI, FFOE, SCAMPER, RAFT, QFT, and Habits of Mind.

Figure 41: Percentage Responding "N/A - I am not familiar with this strategy:" How often do you use the following strategies from the Framework for Critical and Creative Thinking to encourage creative and critical thinking in your classroom? (Elementary Teachers by Type)

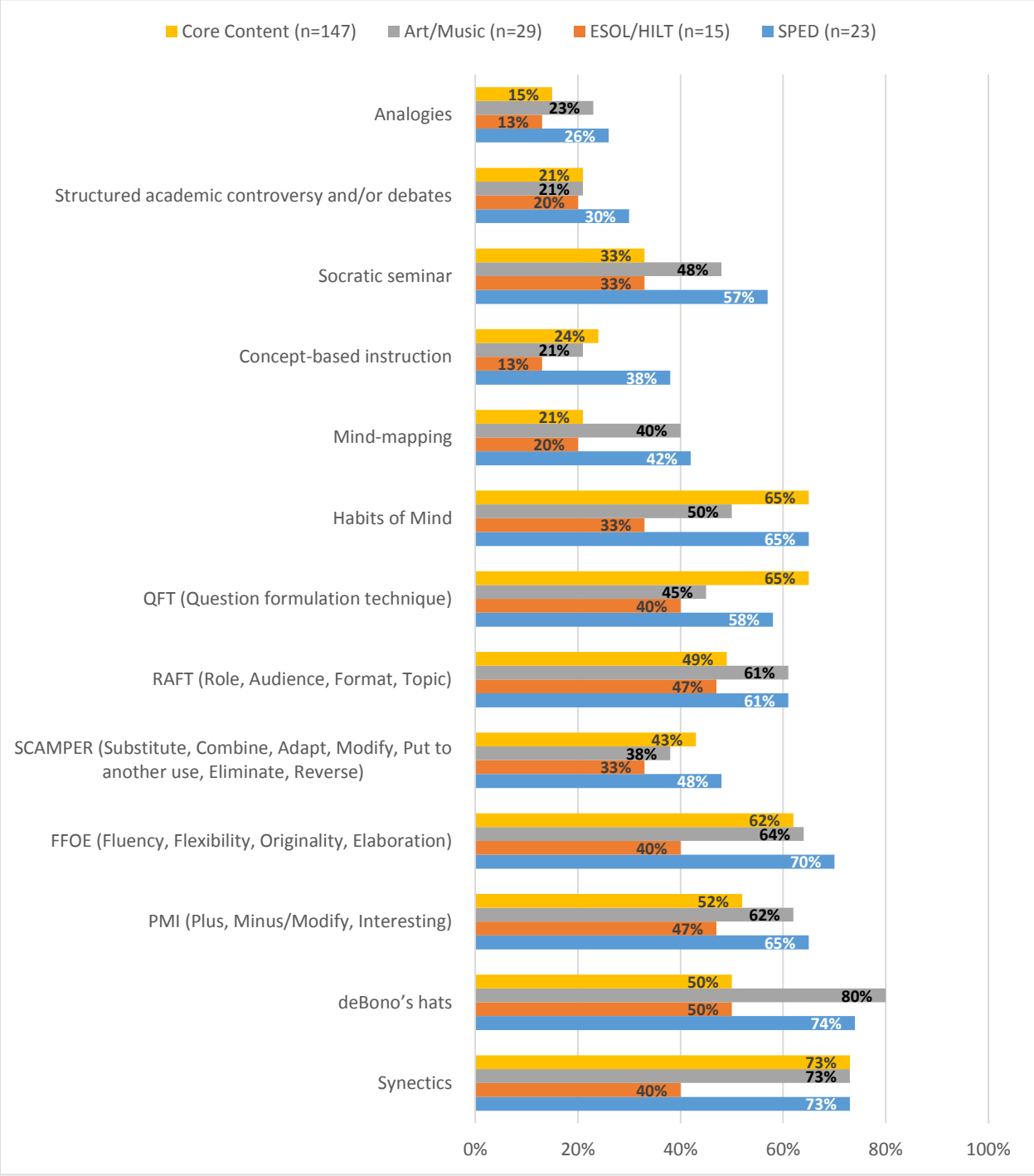


Figure 42: Percentage Responding "N/A - I am not familiar with this strategy:" How often do you use the following strategies from the Framework for Critical and Creative Thinking to encourage creative and critical thinking in your classroom? (Middle School Teachers by Type)

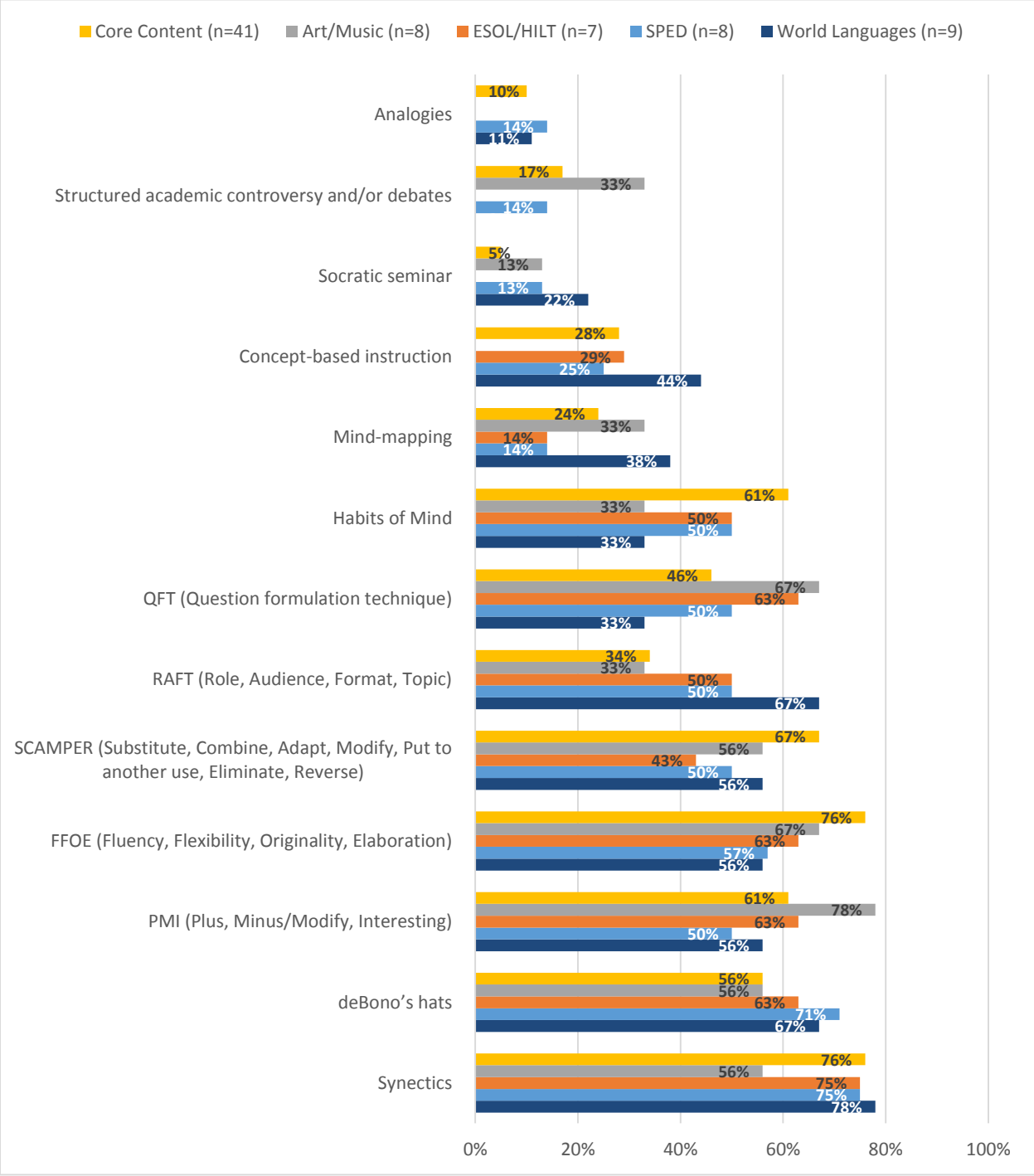
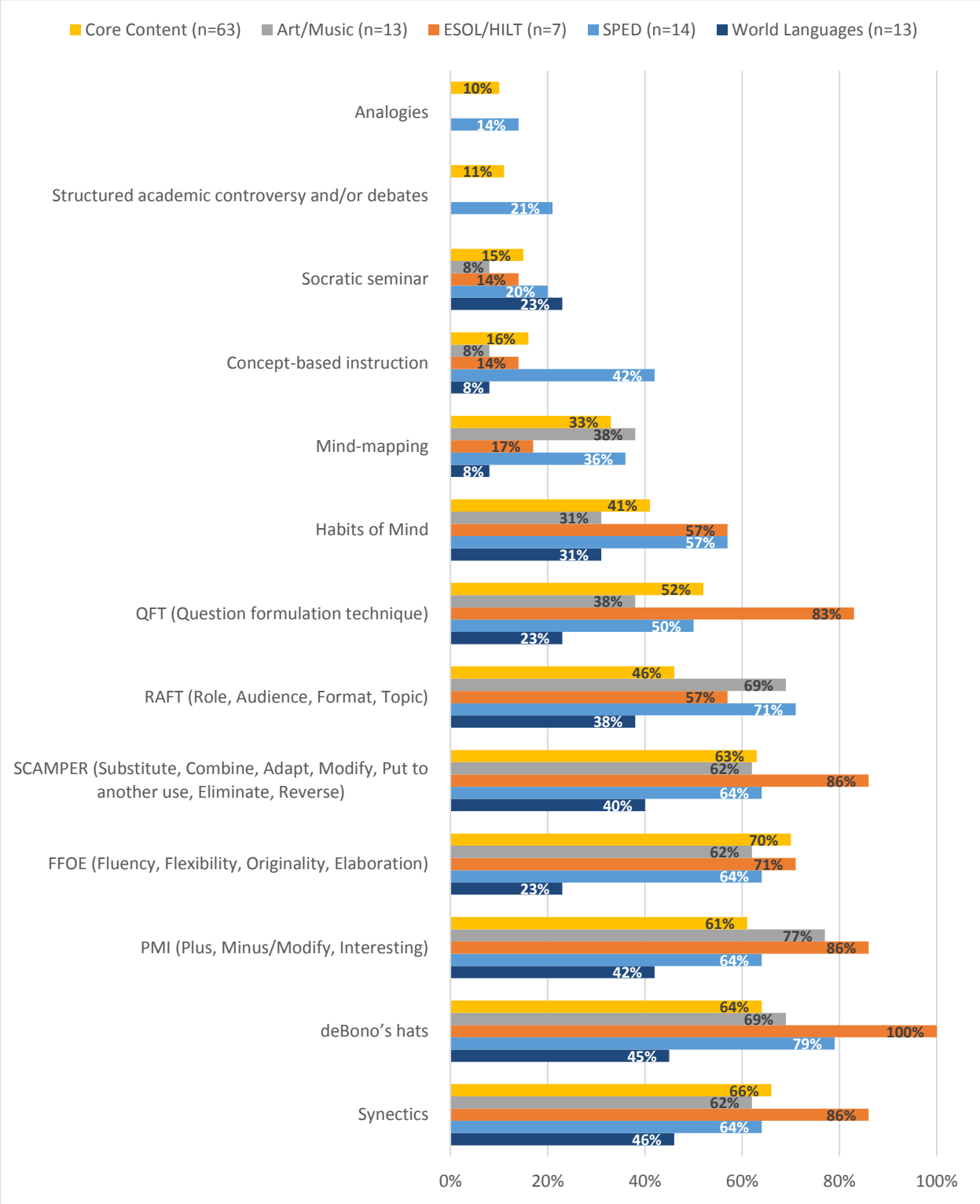


Figure 43: Percentage Responding "N/A - I am not familiar with this strategy:" How often do you use the following strategies from the Framework for Critical and Creative Thinking to encourage creative and critical thinking in your classroom? (High School Teachers by Type)



Use of Curriculum Resources

The Gifted Services Office created a document, *Best Practices for Teaching Advanced Learners*, which includes research-based best practices and ideas for implementation. All teachers have access to this information via the Gifted Services website and all RTGs work with their collaborative teams to share this publication.

When teachers attend professional development on a curricular resource, the Gifted Services Office purchases the resource for the teacher and the RTG follows up to support implementation. The RTG also has a copy of each curricular resource to share with teacher teams and individual teachers when planning. The Gifted Services Office also purchases curricular resources for teachers when collaborating and planning with the RTG to implement one or more of these resources.

Teachers were more likely to report that they **have access to curriculum materials** for gifted students than to report that they frequently **use curriculum materials** for gifted students. As shown in **Figure 44**, most core content teachers at the elementary and high school levels, and most art/music teachers at all levels, indicated that they *strongly* or *somewhat agree* with the statement, "**I have access to curriculum materials designed for gifted students.**"

Figure 44: I have access to curriculum materials designed for gifted students. (Teachers by Type)

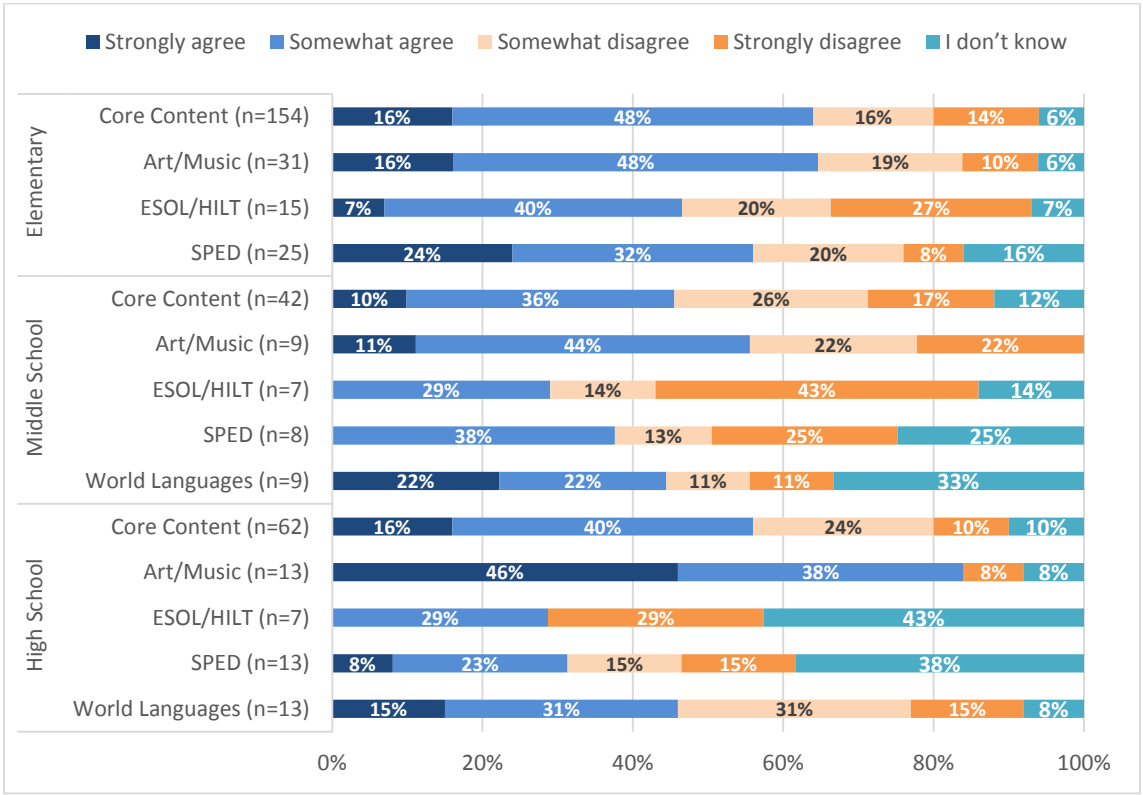
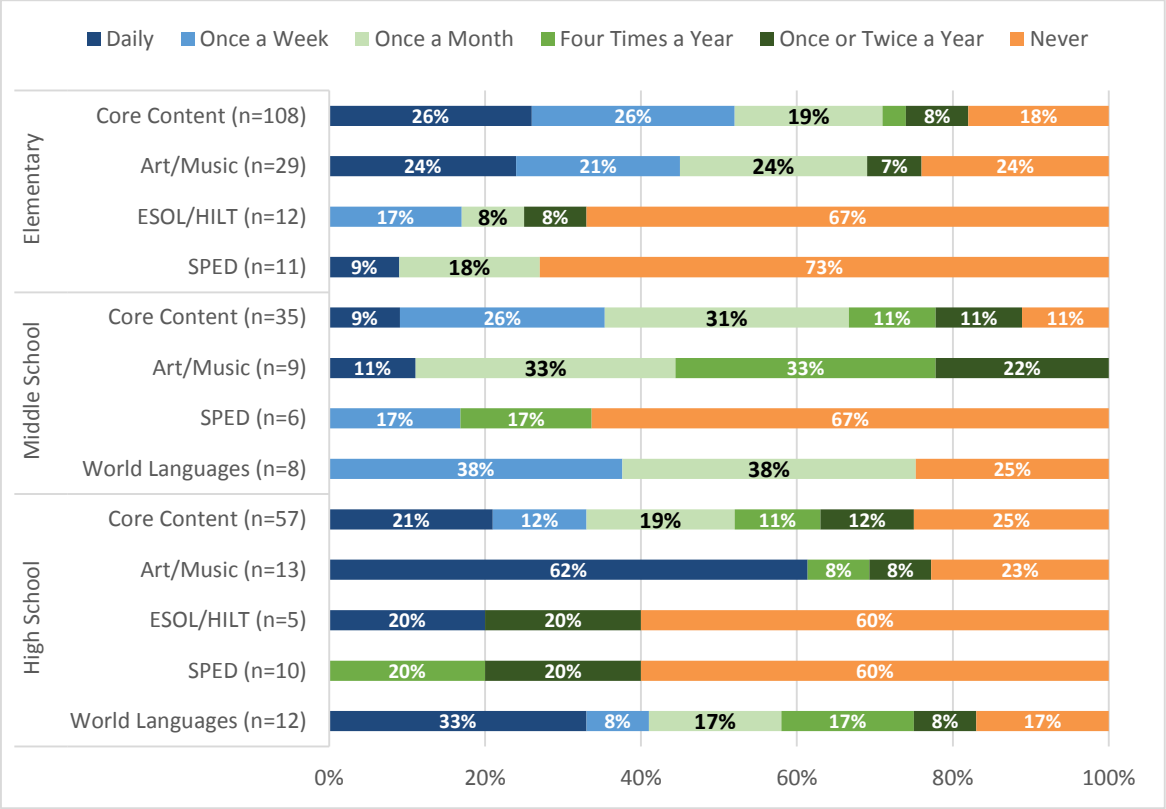


Figure 45 shows responses to the statement, "**I use curriculum materials designed for gifted students.**" This question was asked only if a teacher had previously indicated that they taught students identified as gifted. Elementary core content teachers and high school art/music teachers were the most likely to indicate that they use curriculum materials *daily* or *once a week*. Most ESOL/HILT and special education

teachers indicated that they *never* use curriculum materials designed for gifted students (note that middle school ESOL/HILT responses were omitted due to the low number of responses).

Figure 45: I use curriculum materials designed for gifted students. (Teachers who teach gifted students, by type)*



*This question was asked only if a teacher indicated that they taught students identified as gifted. Fewer than five middle school ESOL/HILT teachers responded to this question; responses omitted.

The teacher survey also included the question, "**How often do you use the following curricular resources as a way to challenge and engage students in your classroom?"** This question included as response options the following curricular resources for each grade level:

Elementary

- Project Clarion Science Units (K-4)
- Project M2: Mentoring Young Mathematicians (K-2)
- Project M3: Mentoring Mathematical Minds (3-5)

Elementary and Middle School

- Jacob's Ladder Critical Reading Comprehension (K-8)
- William and Mary Science (PBL) Units (2-8)
- William and Mary Math Units (K-8)
- Engaging with History in the Classroom (6-8)
- Schoolwide Enrichment Reading (3-8)

All Levels

- William and Mary Language Arts Units (K-12)
- Navigator Novel Guides (1-12)
- William and Mary Social Studies Units (2-10)
- Document Based Questions (Grades 4-12)

For this question, respondents had two "not applicable" options:

- N/A - I am not familiar with this curricular resource
- N/A - This is not relevant to my content area.

Responses of "**N/A - This is not relevant to my content area**" were removed from totals in order to calculate percentages for this analysis. As a result, the total number of responses is lower than in other survey response analyses included in this evaluation.

With six exceptions across levels, teacher type, and curricular resources, the most commonly selected response was "**N/A - I am not familiar with this curricular resource.**" Resources used with some level of frequency by at least a quarter of teachers per teacher group include:

- **Project M2: Mentoring Young Mathematicians**: Used by 25% of elementary core content teachers (n=90)
- **Project M3: Mentoring Mathematical Minds**: Used by 37% of elementary core content teachers (n=99)
- **Jacob's Ladder Critical Reading Comprehension**: Used by 40% of elementary core content teachers (n=139), and 31% of middle school core content teachers (n=26)
- **Schoolwide Enrichment Reading**: Used by 28% of elementary ESOL/HILT teachers (n=7), 26% of middle school core content teachers (n=27), 33% of middle school ESOL/HILT (n=6), and 40% of middle school world language teachers (n=5)
- **Navigator Novel Guides**: Used by 33% of high school world language teachers (n=9)
- **Document Based Questions**: Used by 56% of middle school core content teachers (n=30), 51% of high school core content teachers (n=42), 55% of high school special education teachers (n=9), and 63% of high school world language teachers (n=11)

Observational and Focus Group Findings on Use of Strategies and Curriculum Materials

Dr. VanTassel-Baska addressed the use of strategies and curriculum materials for the gifted through observations and the RTG focus groups. Her findings include:

- APS is to be commended for its use of integrated technology in classrooms. Smartboards, laptops, IPads, and the internet all figure prominently in the daily learning of students in the gifted program.
- Many of the bedrock strategies for use with the gifted, such as critical thinking, creative thinking, problem-solving, inquiry, and culturally responsive approaches were uneven in application, depending on the teacher. This same situation applied to materials use as well, with uneven practices evident. There was also a preference for implementing parts of units or programs rather than the whole unit or program.

- In general, there is a preponderance of the use of the basic text in a given subject area, with little use of supplementary resources that would make the class more differentiated for the gifted.
- The lack of differentiated materials for gifted learners in science and social studies at the elementary and middle school level appears to be pronounced.
- Elementary and secondary RTGs felt that usage of strategies and materials for gifted students varied considerably by individual teachers and by department at the secondary level.
- Elementary RTGs observed that some classroom teachers feel materials for the gifted are too difficult for their students and thus do not try them. Others use them when the RTG applies them in lessons but do not follow through when the RTG is not in the room.
- A few elementary RTGs seemed clear about what was being used, seeing language arts materials in use, M3 gaining traction in math, and use of inquiry and concept-based instruction in social studies. Very limited use of whole units was apparent, especially in science.
- A few RTGs noted that current APS models such as the Teachers' College Writing Program inhibit the use of gifted models.
- Elementary RTGs perceive that there is no accountability for the use of differentiation for the gifted in classrooms nor administrative support for it.
- Secondary RTGs observed that the AP and IB programs are controlled by a tight syllabus and assessment system that prohibits the use of materials or strategies that are not specifically related to particular course requirements.
- Secondary RTGs noted that in some intensive courses, differentiated content-based materials were in use, especially mathematics and chemistry. Other intensives lacked clarity in this regard. Some, like biology, did not differentiate the course syllabus through materials or strategies.
- Several schools indicated that they have sample sets available but not for use by multiple teachers.

Participation in and Effectiveness of Professional Development in the Use of Strategies and Materials for Gifted Students

School Board Policy Implementation Procedure 35-3.9 (Teacher Qualifications – Education of Gifted Students) states that:

Elementary classroom teachers (K-5), middle school core teachers (6-8), reading teachers (K- 12), music teachers (K-12) and art teachers (K-12) who instruct gifted students and secondary (6-12) mathematics, social studies, science and English teachers specifically designated to instruct gifted students in courses designated as intensified, advanced, gifted, Advanced Placement or International Baccalaureate:

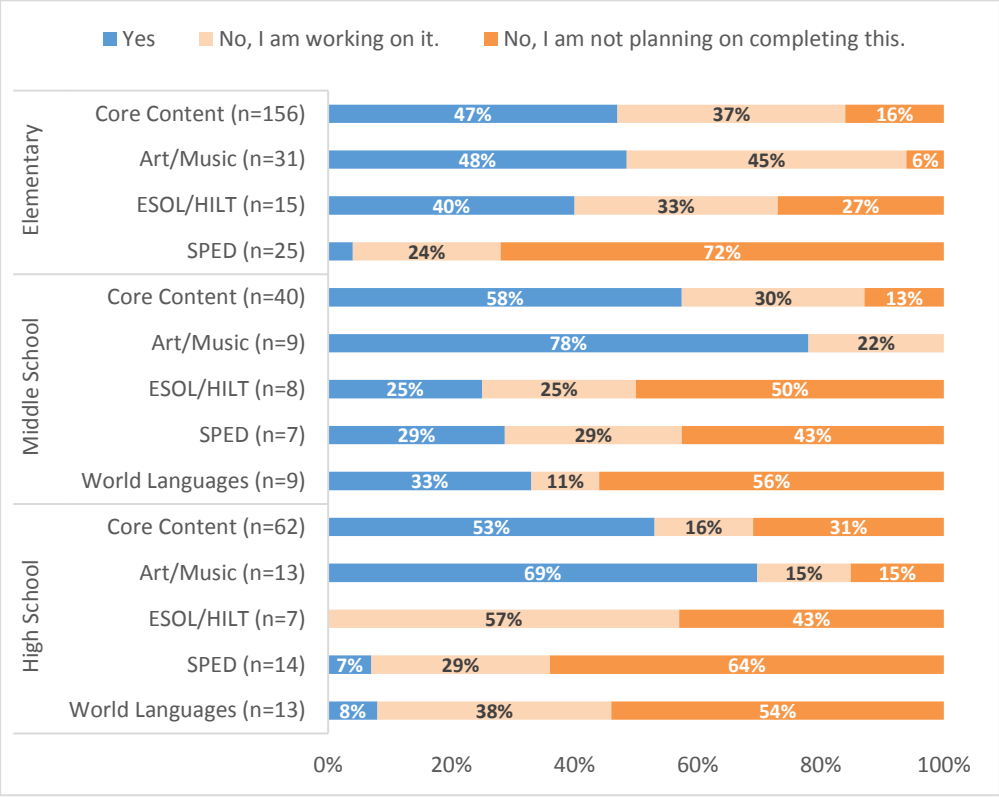
1. Must complete 3 semester hours or 40 hours of inservice training on such aspects of the education of gifted students as identification, teaching methods and models (including Advanced Placement and International Baccalaureate instructional techniques), curriculum differentiation, or evaluation within the recertification period

The Gifted Services Office has made a concerted effort to increase the availability of professional development in the area of gifted education in recent years. Electronic Registrar Online (ERO) data show

that from 2011-12 through 2015-16 there has been a steady increase in the number of professional development sessions offered, from 11 in 2011-12 to 47 in 2015-16.

Figure 46 shows the percentage of teachers who indicated that they had completed three semester hours or 40 hours of professional development in the area of gifted education. Across levels, the teachers who are required to meet this standard – core content and art/music teachers – were the most likely to respond *yes*. Around half of elementary core content and art/music teachers selected this response and over half of these teachers at the secondary level did. Among core content teachers, those at the high school level were the most likely to select, *No, I am not planning on completing this* (31%).

Figure 46: Have you completed three semester hours or 40 hours of professional development in the area of gifted education? (Teachers by Type)

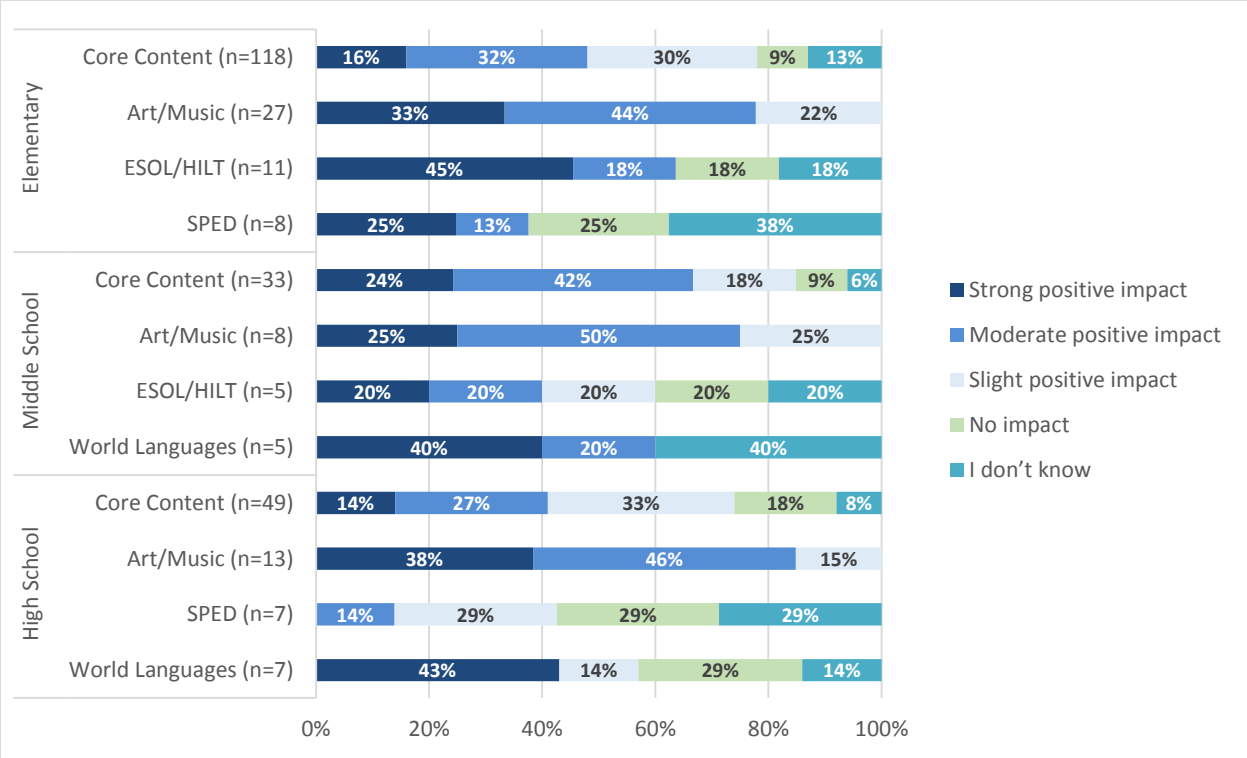


Among **classroom teachers**, those with gifted clusters or who taught advanced courses were the most likely to have completed the professional development requirement. At the middle school level, cluster teachers were more likely than non-cluster teachers to indicate that they did not plan on completing the requirement (20% compared to 13%).

Among **all teachers** who have already completed the 40-hour requirement, most indicated that they had **continued to attend professional development in gifted education after meeting the requirement**. Among **classroom teachers** who had completed the 40-hour requirement, elementary teachers with a gifted cluster and high school teachers who teach advanced courses were more likely than their peers at their respective levels to indicate that they had continued to attend professional development in the area of gifted education. The reverse was true at the middle school level.

Generally, teachers who had participated in professional development in the area of gifted education felt that it had **had some level of impact on their ability to serve gifted students**. This was particularly true among art/music teachers, with 99-100% at all levels selecting *strong*, *moderate*, or *slight positive impact*; and among core content teachers, with between 74-84% selecting these responses. Responses are displayed in **Figure 47**.

Figure 47: How much of an impact has the gifted education professional development you have participated in had on your ability to serve your gifted students? (Teachers who Participated in Any PD Related to Gifted Services, by Type)*



*Responses from middle school special education teachers and high school ESOL/HILT teachers are omitted due to low numbers.

Monitoring and Enforcement of PIP 35-3.9

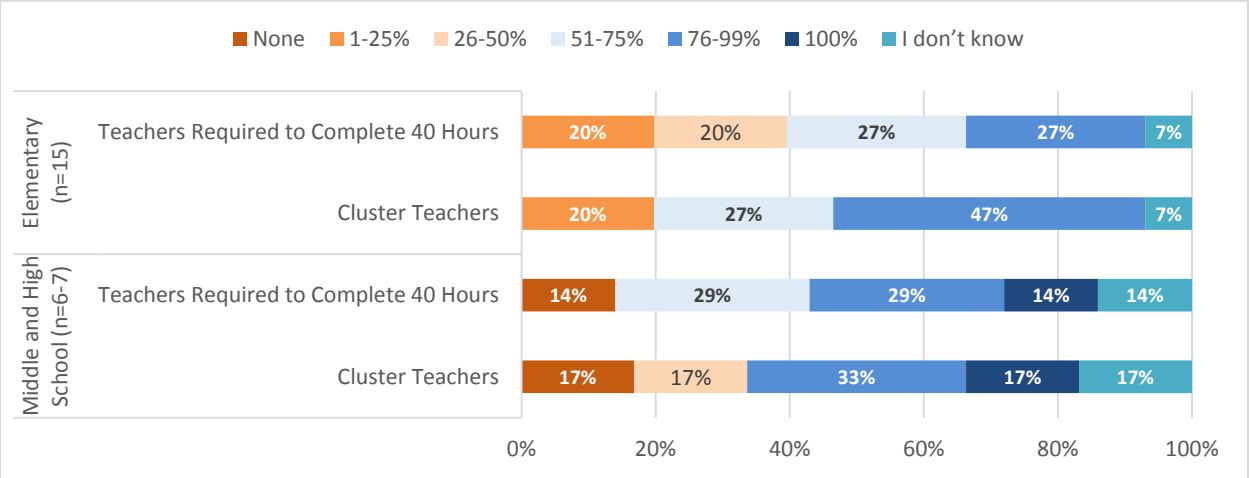
The Gifted Services Office keeps track of which teachers have met the professional development requirement throughout the year and sends updated information each fall to principals and RTGs. On the staff survey, principals were asked how many of the following types of teachers at their school had completed three semester hours or 40 hours of professional development in the area of gifted education:

- All teachers who are required to do so
- Cluster teachers

Responses are displayed in **Figure 48**. The most popular response across levels, for both questions, was that **76-99% of the school's teachers had completed the required hours/credits.** The one exception to this was elementary principals, who, when asked about all teachers who are required to complete 40

hours, were equally likely to select 76-99% and 51-75%. Secondary principals were more likely than elementary principals to select **I don't know** as a response.

Figure 48: How many of your teachers who are required to complete three semester hours or 40 hours of professional development in the area of gifted education have done so?/ How many of your cluster teachers have completed three semester hours or 40 hours of professional development in the area of gifted education? (A cluster teacher has 5-8 students identified as gifted in their classroom.) (Principals)



Principals also responded to a couple of open-ended questions about their enforcement of the PIP at their schools. Responses are summarized below.

How do you keep track of which teachers at your school have met the gifted education professional development requirements?

Elementary

- A list of teachers who have completed the requirement is provided by the Department of Instruction. (10)
- A list is provided by the RTG. (3)
- The RTG keeps track of this. (2)

Secondary:

- A list is provided by the RTG. (2)
- I do not keep track/I am not the one who keeps track. (2)
- A list of teachers who have completed the requirement is provided by the Department of Instruction. (1)
- A list is provided by HR. (1)

How do you follow up with teachers who haven't met the gifted education professional development requirements?

Elementary

- Discuss opportunities to participate in professional development that fulfills the requirement, during beginning of year, mid-year, end-of-year, and/or post-observation conferences (8)
- Comment or discussion during evaluation process (4)
- Individual meetings to discuss teacher's plan for completion (2)
- The RTG follows up individually with teachers. (1)

Secondary

- One-on-one meetings/communication (4)
- RTG takes care of it and principal follows up as needed (2)
- I haven't (1)

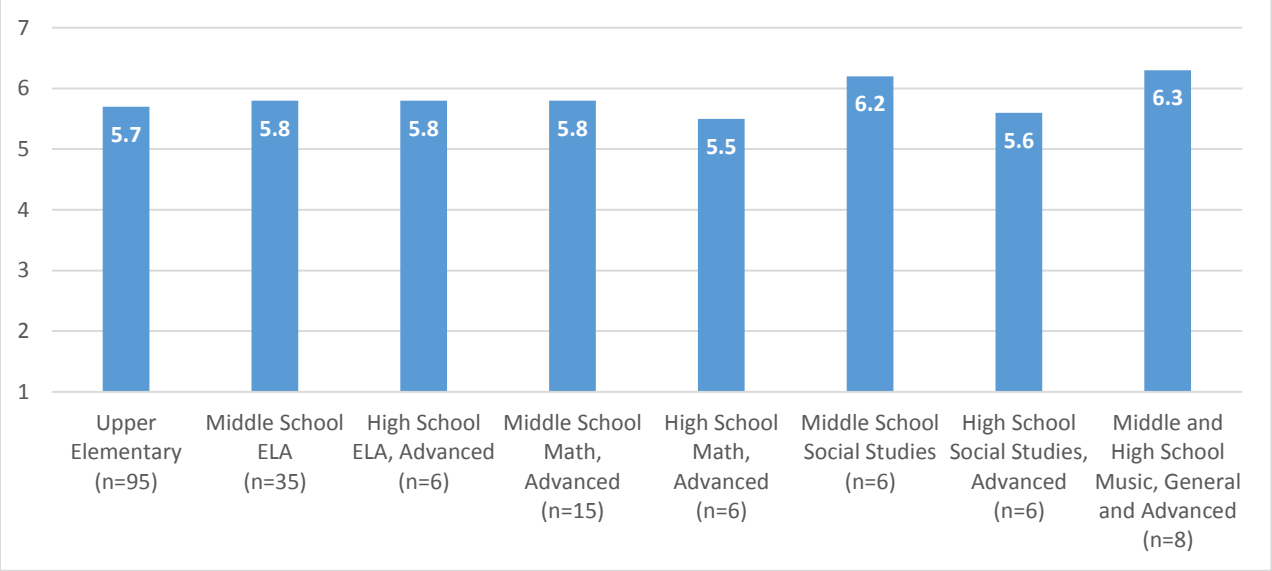
Evaluation Question #2: What were the outcomes?

Student Engagement

A goal of the Gifted Services program is that students identified as gifted will be intellectually challenged and therefore engaged in school. This evaluation addressed student engagement through two measures: CLASS observations and student and parent feedback.

Figure 49 shows CLASS student engagement scores from observations conducted during the 2014-15 school year. Observations in this analysis include classrooms with five or more gifted students enrolled. More background about these observations is available earlier in this report starting on page 80. CLASS observations show a **high level of student engagement** in observed classrooms, with average scores falling into the high range across levels and content areas.

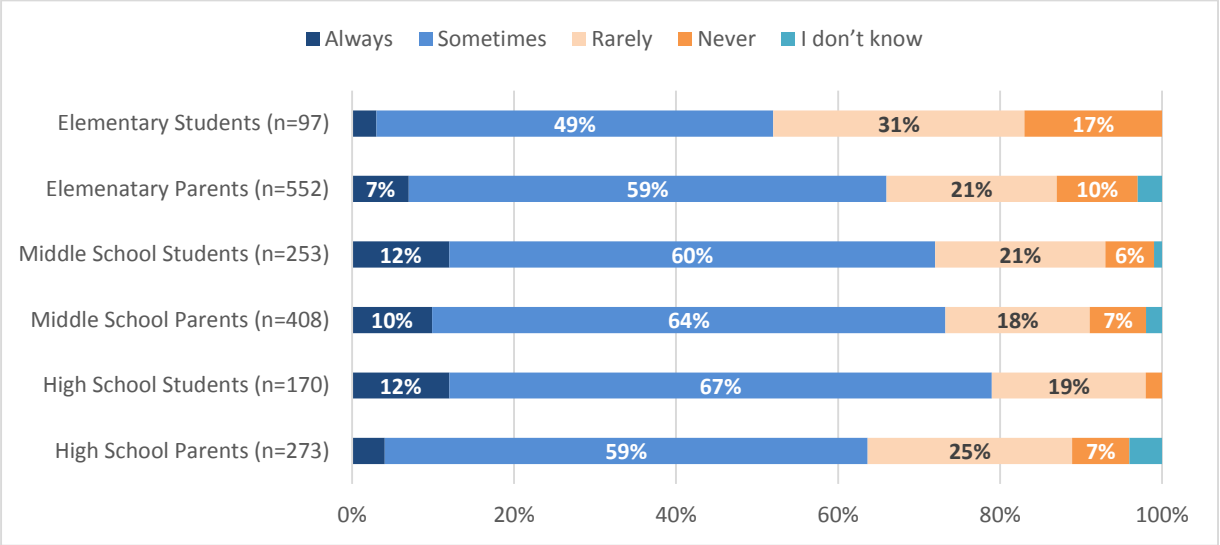
Figure 49: Student Engagement as Measured by CLASS Observations



Most students report being bored at school *sometimes*. **Figure 50** shows student responses to the statement, "I am bored at school," and parent responses to the statement, "My child is bored at school." The frequency of boredom at school increases with each level, with around half of elementary

students reporting that they are sometimes bored, 60% of middle school students, and 67% of high school students.

Figure 50: I am bored at school/My child is bored at school (Students, Parents)



Student and Parent Perceptions of Intellectual Challenge

Students and parents answered a series of survey questions related to their perception of the instruction they or their child receives. These questions focused on whether gifted students are intellectually challenged in their classes.

Figure 51 shows parent responses to the statement, "**My child is intellectually stimulated at school.**" Most parents indicated that they strongly or somewhat agree with this statement, though middle school stands out as having the lowest percentage of parents selecting these responses (71%, compared to 81-86% of elementary and high school parents).

Figure 51: My child is intellectually stimulated at school. (Parents)

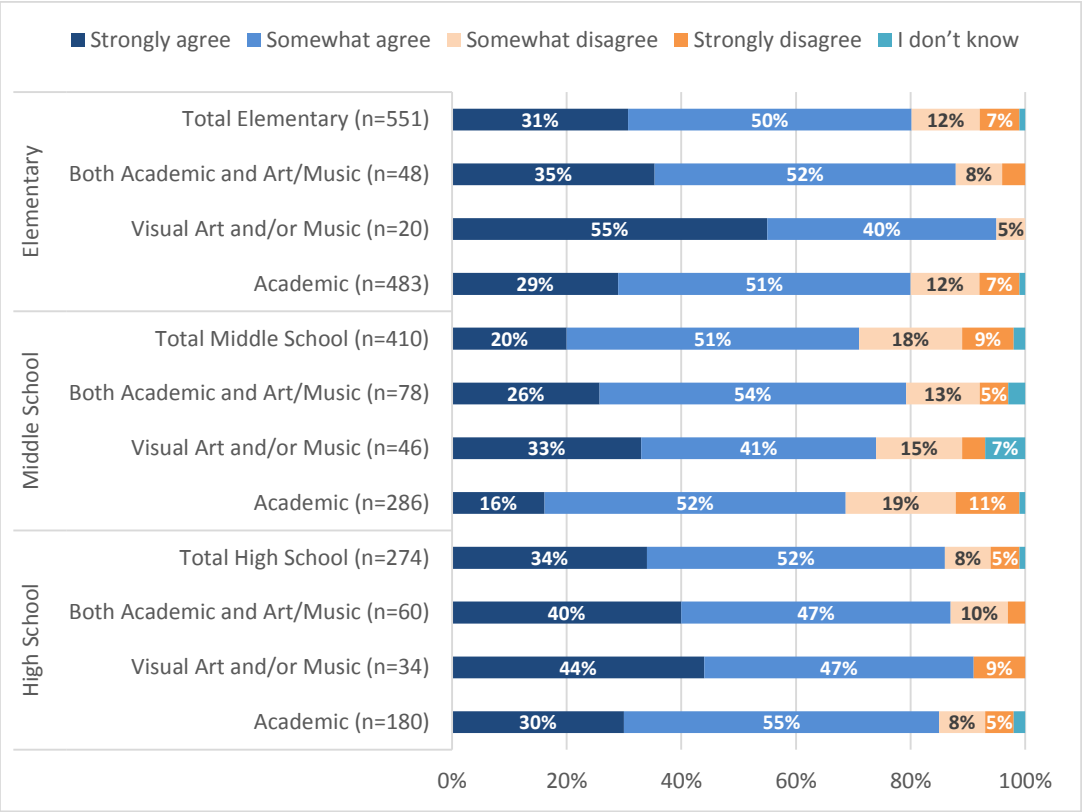
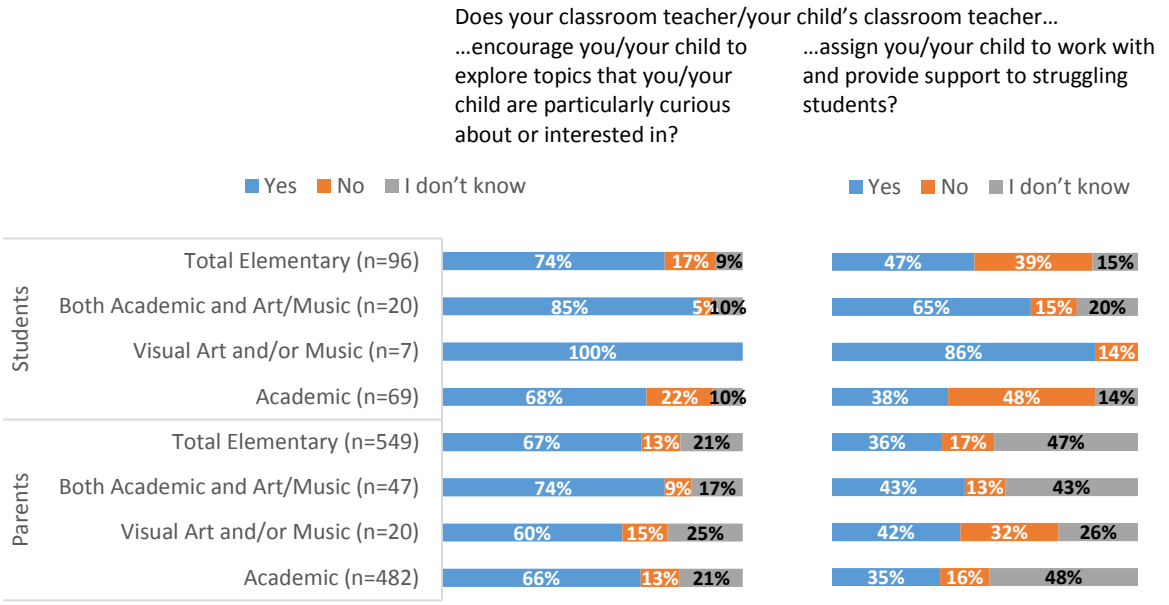


Figure 52 shows elementary students' and parents' responses to two questions:

- Does your classroom teacher/your child's classroom teacher encourage you/your child to **explore topics that you/your child are particularly curious about or interested in**?
- Does your classroom teacher/your child's classroom teacher **assign you/your child to work with and provide support to struggling students**?

Most students and parents selected **Yes** as a response. Parents were more likely than students to select **I don't know**. A large portion – just under half of students and about a third of parents - also indicated that their classroom teacher assigns them to work with and provide support to struggling students, echoing Dr. VanTassel-Baska's observation that in many elementary schools, cluster grouping is technically implemented but not with fidelity. In these classrooms, she noted that gifted students are "spread out," thus providing no context for small group gifted instruction.

Figure 52: Student and Parent Perceptions of Classroom Teacher's Instructional Practices (Elementary Students, Parents)



Middle and high school students and parents answered a parallel set of questions:

- How many of your teachers/your child's teachers encourage you/your child to explore topics that you/your child are particularly curious about or interested in?
- How many of your teachers/your child's teachers assign you/your child to work with and provide support to struggling students?

Responses are displayed in **Figure 53**. Around half of both middle and high school students indicated that either *all* or *most* of their teachers encourage them to explore topics they are interested in, compared to about a third of parents at both levels. As with elementary parents, secondary parents were more likely to select *I don't know* than students. Regarding whether teachers assign students to work with and provide support to struggling students, middle school students were more likely than high school students to indicate that *all* or *most* of their teachers do this (30% vs 23%).

Figure 53: Student and Parent Perceptions of Classroom Teacher's Instructional Practices (Secondary Students, Parents)

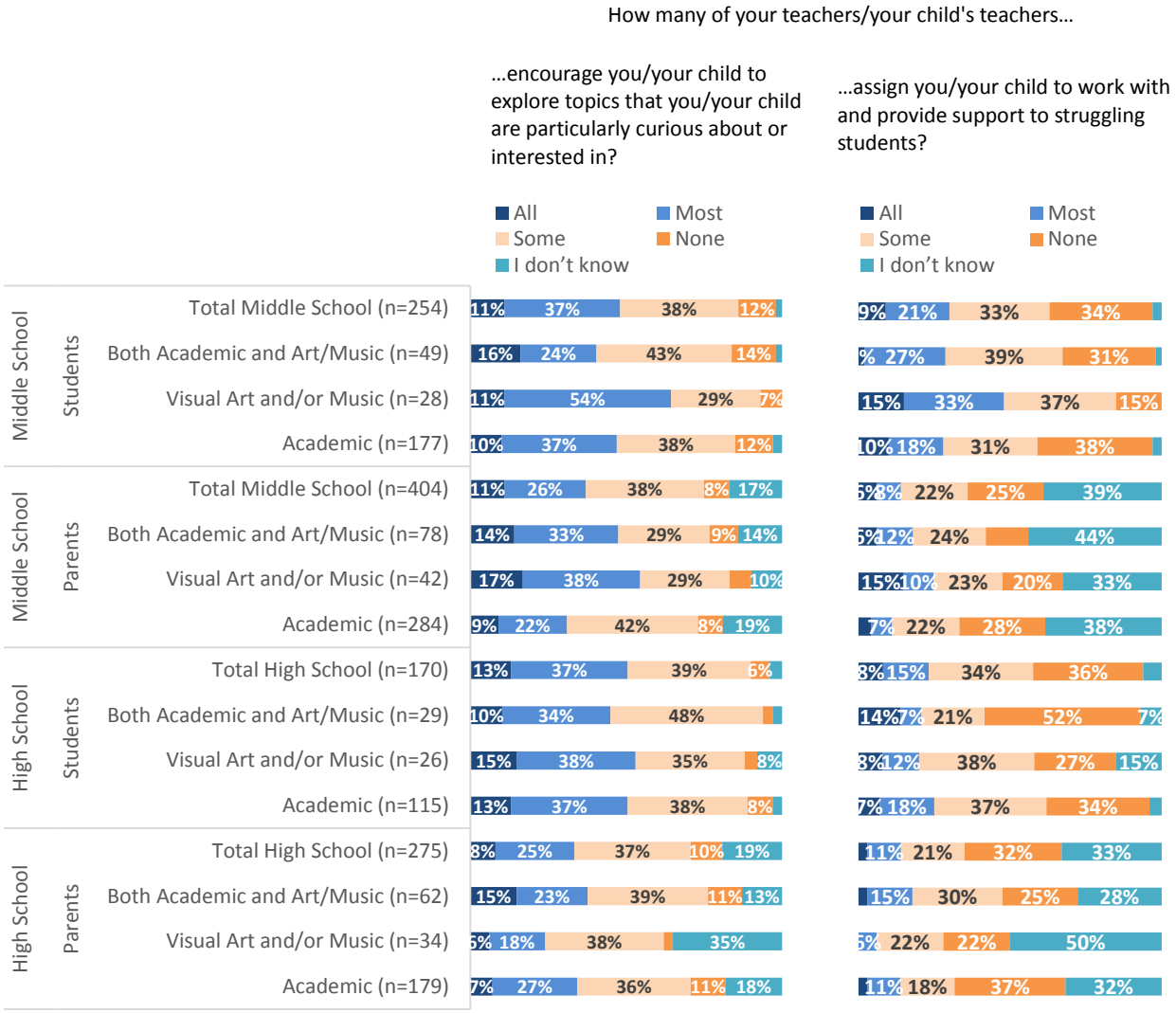


Figure 54, **Figure 55**, and **Figure 56** show student responses to a series of questions getting at whether their **classes challenge them to think at a higher level or solve problems critically and creatively**. A large majority of elementary students (81%, **Figure 51**) indicated that they *strongly* or *somewhat agree* that this happens.

At the secondary level, students were asked about general (non-advanced) classes (**Figure 52**) and advanced classes (**Figure 53**) separately. At the middle school level, advanced classes were relevant only to students identified in math. At both levels, students were far more likely to agree that their **advanced classes** challenged them to think at a higher level or solve problems critically and creatively. Almost all middle school students (94%) selected these responses, and 89% of high school students did. This is in comparison to just over half of middle school students, and a third of high school students, selecting these responses for their **general classes**.

Figure 54: My classes challenge me to think at a higher level or solve problems critically and creatively. (Elementary Students)

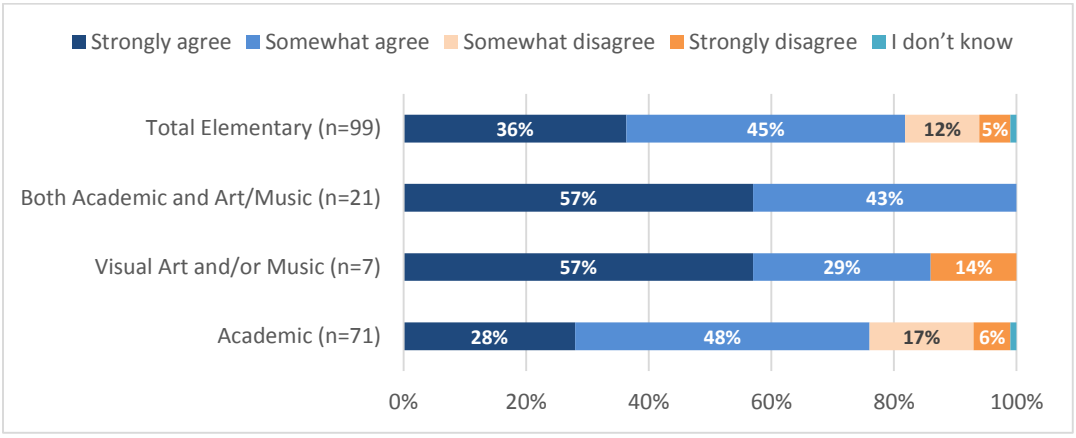


Figure 55: The general classes I take (non-advanced) challenge me to think at a higher level or solve problems creatively. (Middle School and High School Students)

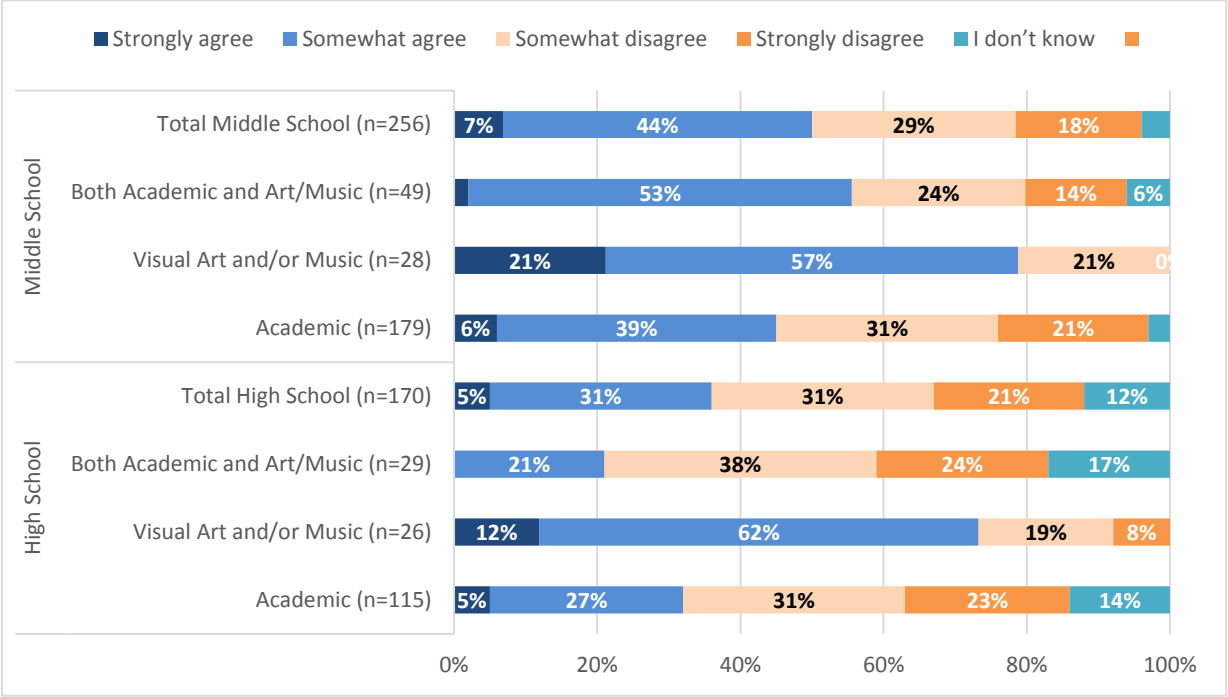
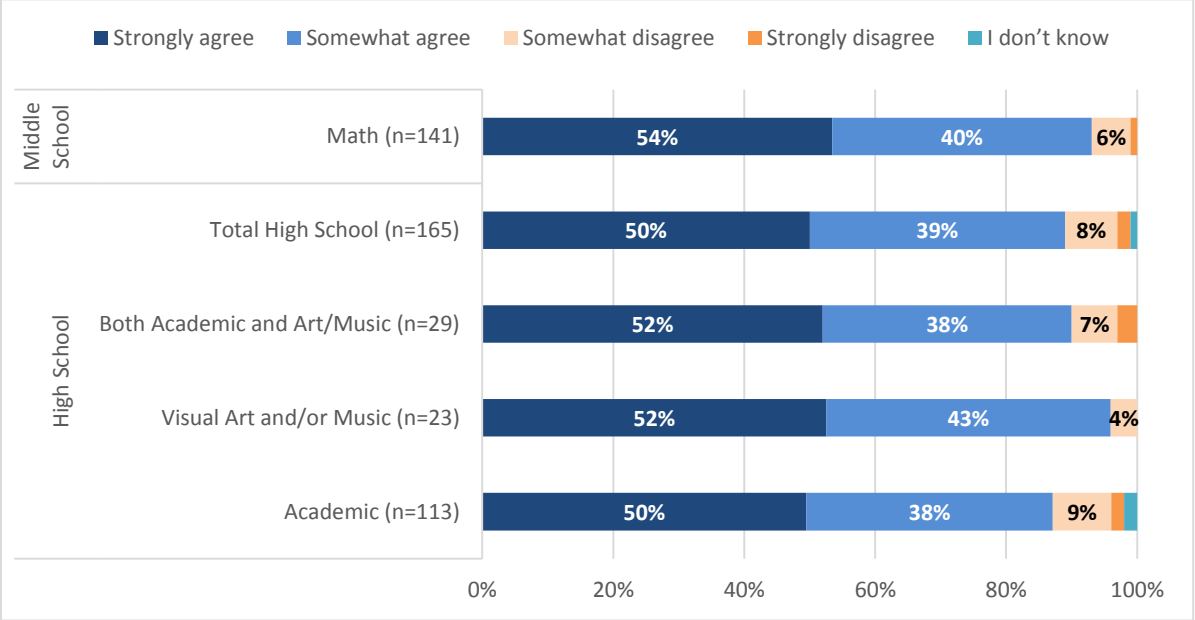


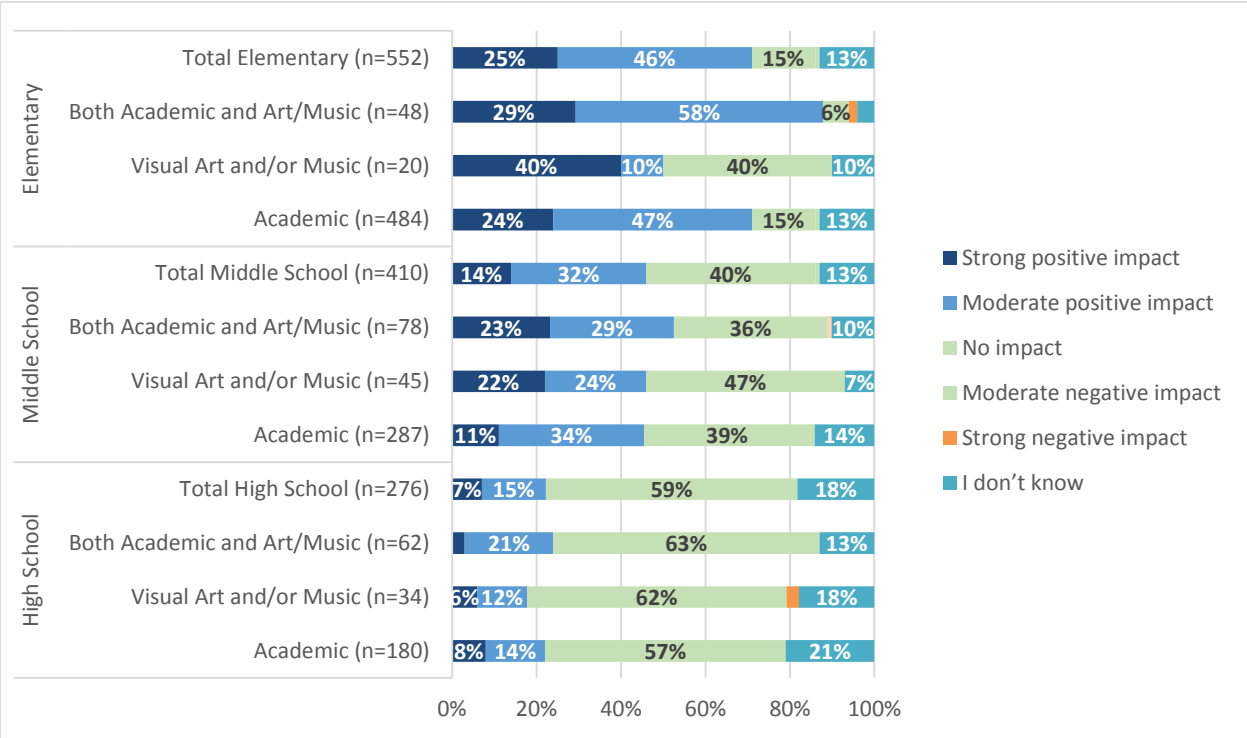
Figure 56: The advanced math class I take challenges me to think at a higher level or solve problems creatively./The advanced classes I take (intensified, AP, or IB) challenge me to think at a higher level or solve problems creatively. (Secondary Students Identified as Gifted and Enrolled in MS Advanced Math or HS Intensified, AP, or IB Classes in their Gifted Area)



Parents were asked **how much of an impact being identified as gifted has on the instruction their child receives**. Responses are displayed in **Figure 54**. The percentage of parents indicating that their child's identification has a *strong* or *moderate positive impact* decreases from elementary (71%) to middle school (46%) to high school (22%), while the percentage of parents selecting *no impact* increases with each grade level (15%, 40%, and 59%). Elementary parents of students identified in **art or music** stand out at that level, with 50% indicating that being identified has a *positive impact* and 40% indicating it has *no impact*.

These responses may seem inconsistent with other responses in this section that indicate that students at all levels are intellectually stimulated, and where there are differences, this seems to be occurring most frequently at the elementary and high school levels. A possible explanation for this apparent inconsistency is that, as the gifted delivery model changes by level, parents become less likely to connect gifted services with the instruction that their child receives. For example, if high school students identified as gifted enroll in an advanced class, this is most likely not seen as a direct service provided as a result of being identified.

Figure 57: How much of an impact does being identified as gifted have on the instruction that your child receives? (Parents)



Selection of Academically Challenging Coursework

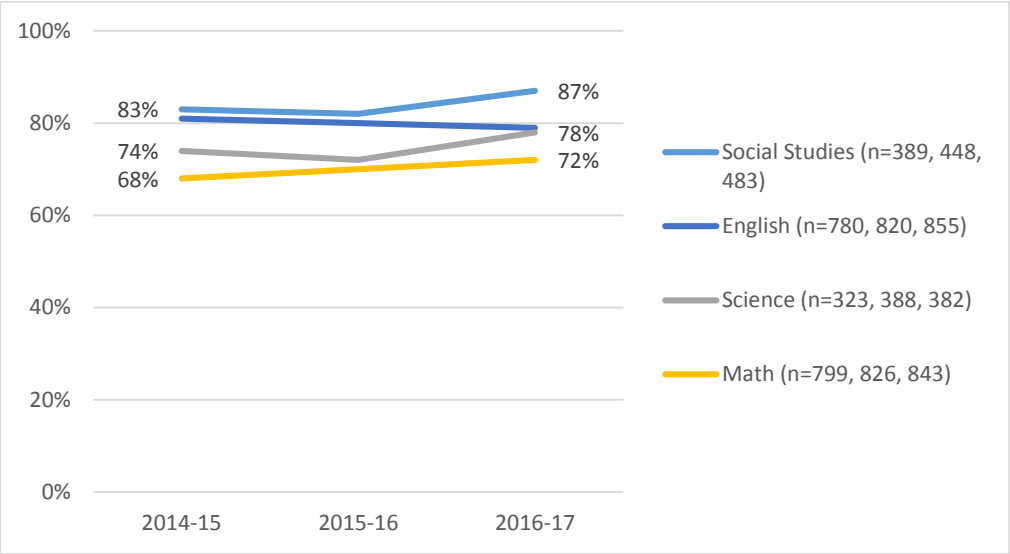
One goal of the Gifted Services program is that gifted students will select academically challenging courses. This evaluation examines the success of this goal through three questions:

- Do middle school students gifted in math enroll in advanced math classes?
- Do middle school students gifted in math take Algebra I before 8th grade?
- Do high school gifted students enroll in advanced coursework in their area of gifted identification?

Most gifted students identified in an academic area enroll in available advanced coursework in the area of their gifted identification. In the last three years, between 84-91% of middle school students gifted in math enrolled in an advanced math class, with the highest percentage occurring in the most recent year, 2016-17. In the past three years, around two-thirds of middle school students gifted in math had completed Algebra I prior to 8th grade.

Figure 58 shows that high school students most likely to enroll in advanced coursework in their area of gifted identification are those identified in social studies, followed by English, science, and math.

Figure 58: Percentage of Gifted High School Students Enrolled in and Advanced Class by Gifted Identification Area



Academic Performance and Growth

A major APS goal for all students is that they will experience academic growth every year. Growth can be hard to measure for gifted students as they tend to perform on an advanced level. Most standardized assessments in APS measure proficiency against grade-level standards rather than growth.

In her evaluation of the APS gifted services program, Dr. VanTassel-Baska noted that APS does not systematically collect pre-assessment data to use for curriculum and program planning. Likewise, she found that suitable outcome data was not systematically collected or reported, and noted that "SOL results are only gross indicators of gifted students' performance and should be used cautiously in rendering judgments about individual learner capabilities or program efficacy."

The academic outcome measures included in this evaluation consist of one measure of growth - the middle school Reading Inventory – and several proficiency assessments: SOL, AP, and IB exams. In preparation for this evaluation, a couple of avenues for measuring growth were considered and deemed not to be appropriate for inclusion in the evaluation at this time:

- **Performance assessment tasks (PATs)** are available in social studies in grades 3-12, science in grades 3-5, and writing in grade 5. PATs are required as district-level alternative assessments to replace the SOL exams formerly administered at certain grade levels, which vary by subject area. PATs can be used as a measure of growth. For example, the social studies PATs show grow in historical thinking. Currently, APS collects data centrally on the administration of these assessments at the required grade levels and notifies the Virginia Department of Education (VDOE) of completion. PAT scores are not collected or reported centrally, though it is anticipated that VDOE will provide further guidelines about scoring in the future.
- **Math Inventory (MI)**. This assessment is a computer-adaptive universal screener and progress-monitoring tool that assesses student performance in five strands of mathematics. Starting in 2015-16, it was administered to all students in grades 5-8. It was also piloted at three

elementary schools for grades 2 through 4. All students take the assessment in the fall and spring, and those placing at the basic or below basic levels in the fall also take a mid-year assessment. The results are reported using a measure called the Quantile, which indicates how well a student understands mathematical skills and concepts along a developmental continuum. As of 2016-17, MI results are not available centrally and could not be included in this report. MI data will soon be available in the data warehouse.

Middle School Reading Inventory

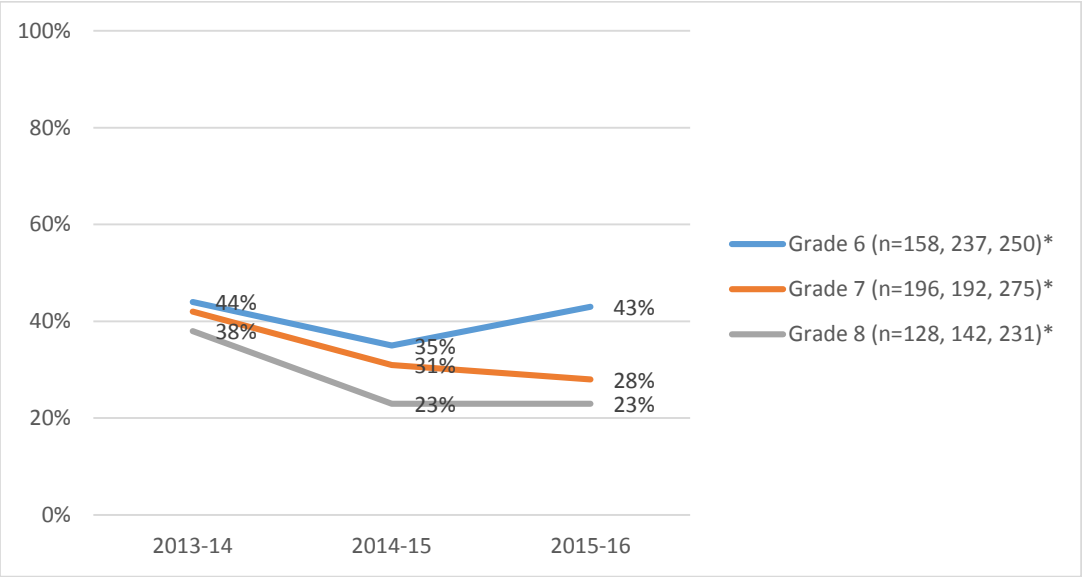
The Reading Inventory (RI) is a computer-adaptive reading assessment that measures reading comprehension using Lexile measures. Lexile measures indicate a student's reading level and can be used to match readers with appropriately leveled text[9].

Middle schools in APS administer the RI in the fall and spring to measure students' growth in reading levels. The expected growth within a school year is 75 Lexiles. This evaluation includes an analysis of growth in Lexiles for middle school students identified as gifted in English. Growth is examined for two groups of gifted students: those whose fall Lexiles placed them in the advanced band, and those whose fall Lexiles placed them below advanced.

Most students identified as gifted in English had Lexiles in the advanced band on their fall RI assessment. **Figure 59** shows the percentage of these students who made a year's worth of growth from fall to spring; in other words, it shows the percentage whose Lexile increased by at least 75. In all cases, less than half of students showed a year's worth of growth from fall to spring. Over three years, the percentage of students gaining 75 Lexiles was highest for 6th graders, followed by 7th graders and then 8th graders. In both 7th and 8th grade, the percentage of students gaining 75 Lexiles has decreased over the past three years.

[9] https://lexile.com

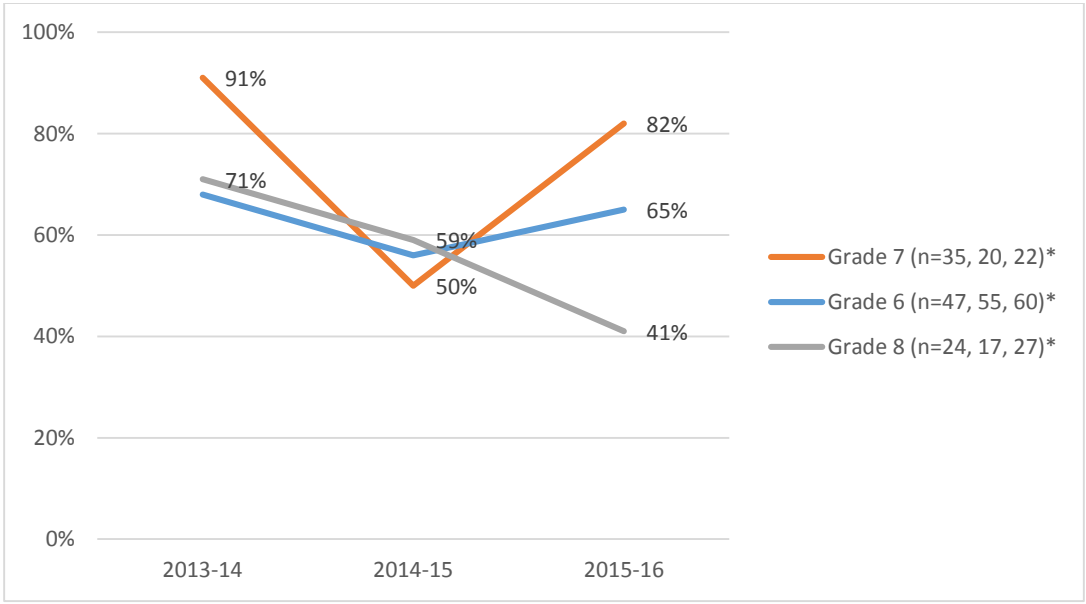
Figure 1: Percentage of Middle School Students Identified as Gifted in English who Gained at Least 75 Lexiles from Fall to Spring, among Those Whose Fall Score Fell into Advanced Category*



*n represents the number of students identified as gifted in English who took the RI each year, in chronological order. For example, in 2013-14, 158 6th graders, 196 7th graders, and 128 8th graders took the RI.

Among students identified as gifted in English whose fall Lexiles fell below advanced, the percentage showing a year's worth of growth was substantially higher. These percentages have decreased between 2013-14 and 2015-16. Results are shown in **Figure 60**.

Figure 60: Percentage of Middle School Students Identified as Gifted in English who Gained at Least 75 Lexiles from Fall to Spring, among Those Whose Fall Score Fell Below Advanced



*n represents the number of students identified as gifted in English who took the RI each year, in chronological order. For example, in 2013-14, 47 6th graders, 35 7th graders, and 24 8th graders took the RI.

Standards of Learning Assessments

Almost universally, students identified as gifted pass the SOL assessment in the content area of their gifted identification, and with one exception, most students pass advanced. The exception is the high school end of course reading SOL test. Over the last three years, between 32% and 46% of students identified as gifted in English have passed this assessment at the advanced level. SOL results are shown in **Figure 61**, **Figure 62**, and **Figure 63**.

Figure 61: Elementary SOL Performance for Students Identified as Gifted in Content Area of Test

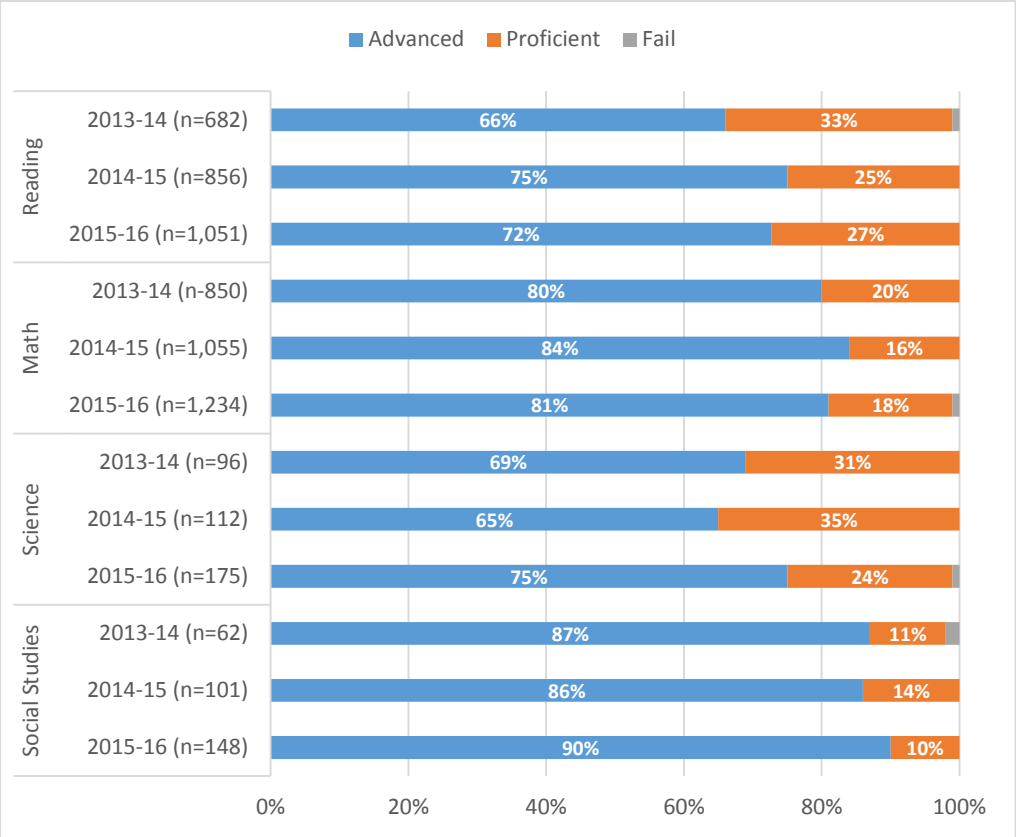


Figure 62: Middle School SOL Performance for Students Identified as Gifted in Content Area of Test

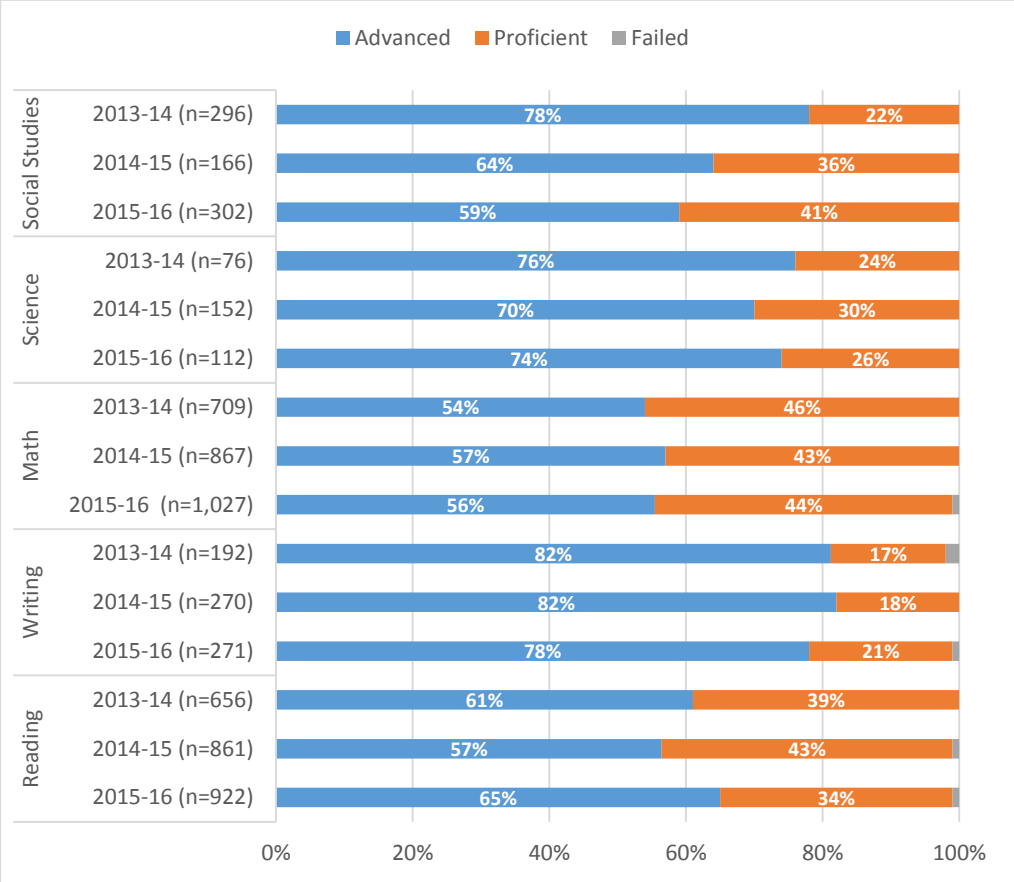
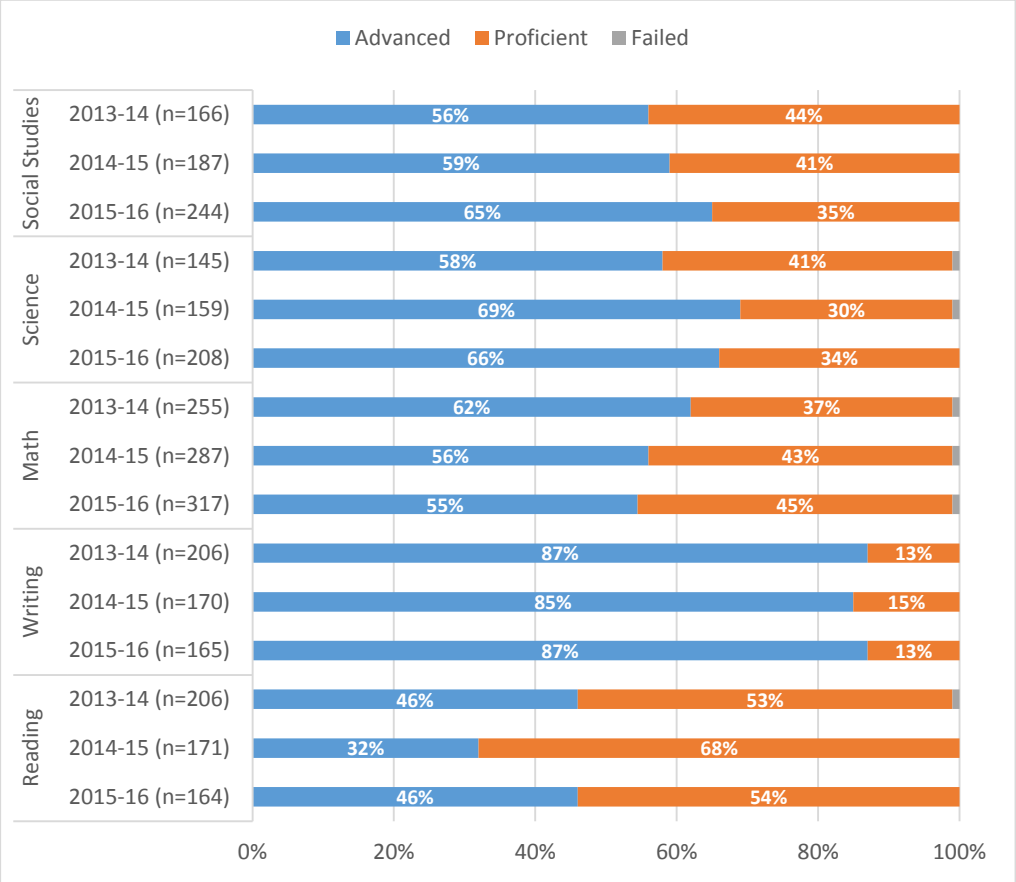


Figure 63: High School SOL Performance for Students Identified as Gifted in Content Area of Test

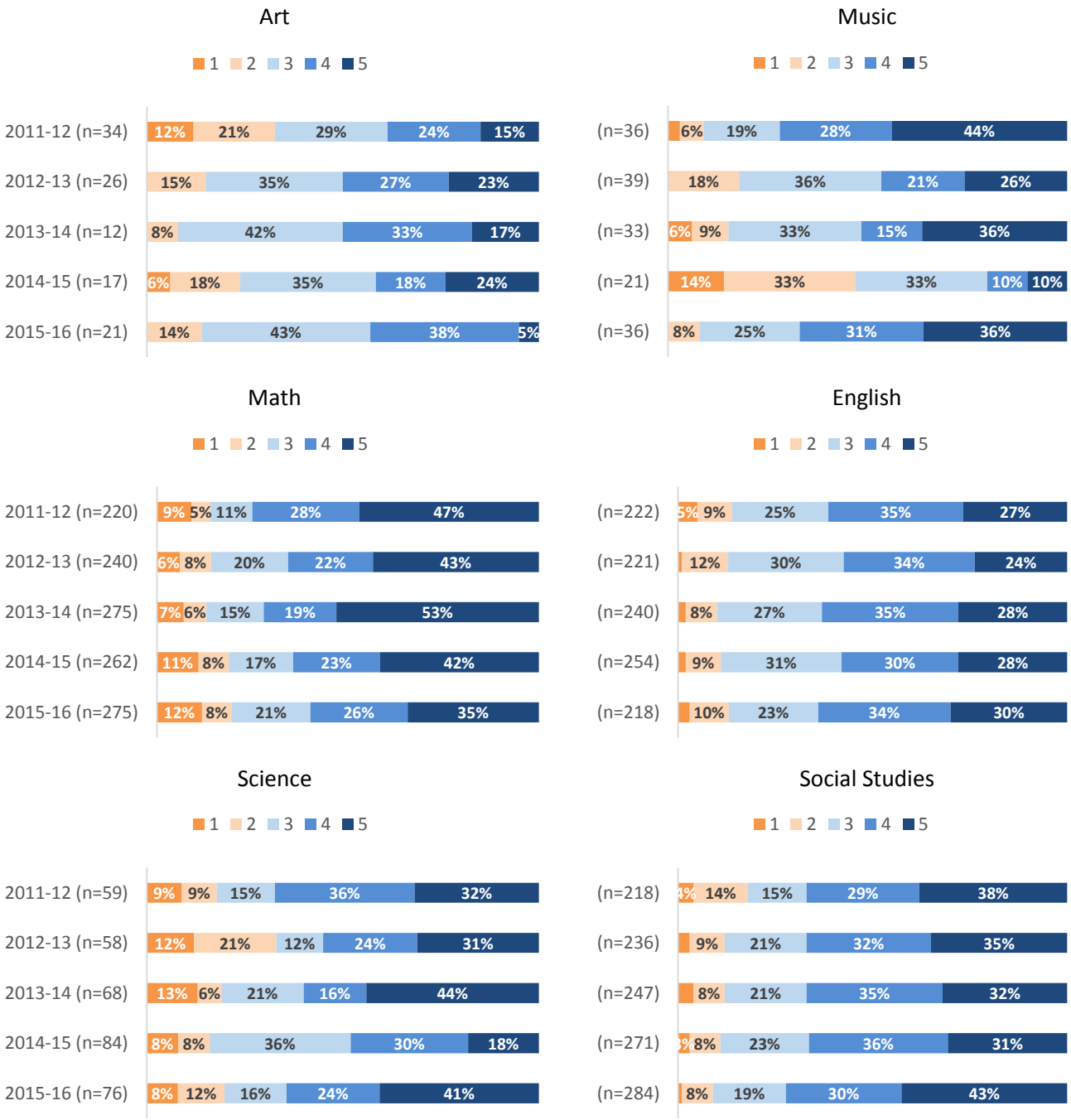


Advanced Placement Exams

Advanced Placement (**AP)** is an intensive program developed by the College Board that offers students an opportunity to develop their academic strengths through rigorous college-level curricula and challenging national exams. AP classes are available at all APS comprehensive high schools. AP exams are scored on a scale of 1 to 5, with 3 or above considered a passing score. Students who pass may earn college credit. Colleges set individual policies on accepting AP scores as credits for their classes.

AP exam scores for students identified as gifted in the content area of the test are displayed in **Figure 64**. Most gifted students pass the exam with a 3 or higher in their gifted identification area, and for most assessments, most students pass with a 4 or higher.

Figure 64: AP Exam Scores for Students Identified as Gifted in Content Area of Test



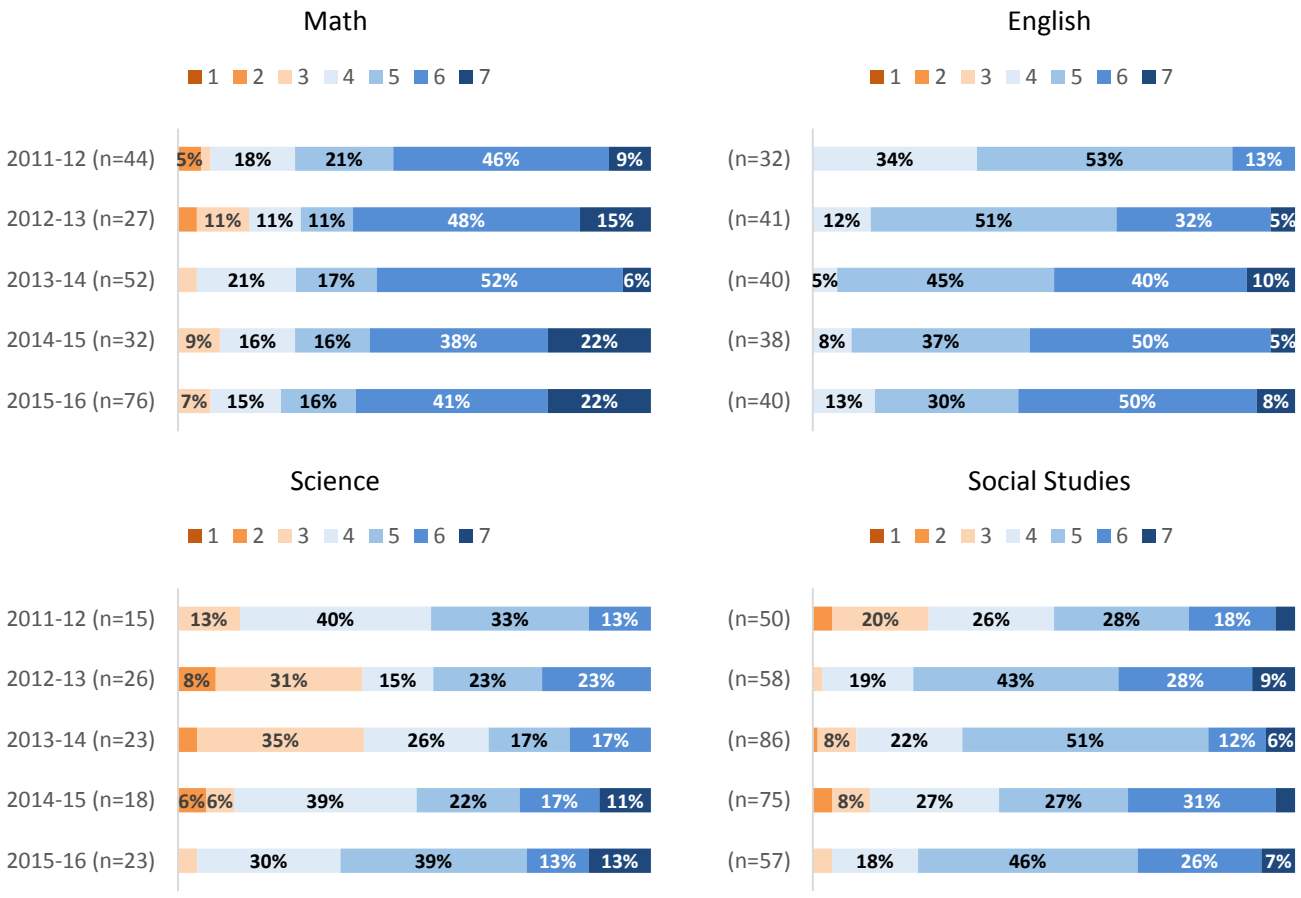
International Baccalaureate Exams

International Baccalaureate (IB) is an academic program licensed by the International Baccalaureate Organization (IBO) that, upon successful completion, results in the awarding of a high school degree. The curriculum emphasizes the importance of international awareness and responsible citizenship. IB courses are available at Washington Lee High School.

At the completion of certain IB courses, students take a test scored on a scale of 1 to 7; a score of 4 or above is considered passing. Similar to AP exams, students who pass may earn college credit, and colleges set individual policies on accepting IB scores as credits for their classes.

IB exam scores for students identified as gifted in the content area of the test are displayed in **Figure 65**. While most gifted students pass the IB exam in the area of their gifted identification, English and math exams stand out as having the highest percentage of students pass with the highest scores – 6 and 7. In English this has been a growing trend over the past five years while for math this percentage has been consistently high throughout the past five years.

Figure 65: IB Exam Scores for Students Identified as Gifted in Content Area of Test



IB exams are also available in visual art. The participation of students identified as gifted in visual art has been relatively low, with fewer than eight participants over the last five years. These scores are not included.

SECTION 3: STAFF RESPONSE TO EVALUATION FINDINGS

In examining the findings of the evaluation, staff identified the following key recommendations and associated action steps. These are also reflected in the Gifted Services Local Plan that is submitted to the Virginia Department of Education. Implicit in the implementation of all the recommendations is the importance of: (1) alignment with system-wide initiatives such as the APS Strategic Plan, Whole Child Framework, personalized learning and Aspire2Excellence; and (2) synchronization among offices and schools in support of the successful delivery of gifted services.

Recommendation #1

Increase the use of differentiation strategies and personalized learning with gifted learners.

Across grade levels, teachers of gifted students frequently use differentiation strategies commonly associated with good teaching. Observations and surveys indicate the need to increase classroom use of higher-level learning practices; clustering; and implementation of strategies, curriculum, and materials designed for gifted students.

This recommendation aims to systemically engage appropriate APS office staffs, principals, and teachers in developing and implementing challenging, engaging, differentiated and personalized learning experiences for gifted learners.

Action Steps

1. Create teams consisting of principals, RTGs, classroom teachers and central office representatives to develop, embed, and implement a consistent, system-wide model of personalized learning for gifted learners.
2. Implement learning experiences using curricular resources written for advanced learners that reinforce critical and creative thinking strategies.
3. Define with principals and RTGs communication methods for understanding and application of differentiation for gifted learners, which benefits all students as well as classroom management for cluster groups.
4. Continue the expansion of Young Scholars across all Title I schools.
5. Define and determine the measures of growth to guide instruction for gifted students.

Recommendation #2:

Clearly articulate expectations for gifted instruction and align these expectations with the roles and responsibilities of RTGs, classroom teachers, and principals, with a focus on the middle school level.

The evaluation shows:

- RTGs assume different roles at different levels, from working directly with students to facilitating, coaching and supporting teachers, and providing professional development.

- To varying degrees from school to school, the gifted program meets the basic social-emotional needs of gifted students, with room to more effectively equip students with strategies to handle psycho-social growth.
- Collaboration between teachers and RTGs can be improved in both frequency and consistency, particularly at the middle school level.

This recommendation aims to align APS expectations for gifted instruction with school-based staff's understanding of and accountability for meeting those expectations.

Action Steps

1. Provide professional learning to increase the use of coaching, collaboration, and co-teaching skills among principals, RTGs and cluster teachers through structured, systemic, and sustained opportunities.
2. Evaluate and revise the existing RTG and cluster teacher job descriptions, with a focus on middle school.
3. Develop performance evaluation criteria that correspond with expectations outlined in job descriptions.
4. Provide professional learning opportunities for principals, school counselors, social workers and special educators to address the socio-emotional needs of gifted learners, such as performance anxiety, perfectionism, asynchronous development, and underachievement.

Recommendation #3:

Take steps to improve the availability of data that will facilitate ready identification of trends and focus areas for gifted services and, subsequently, appropriate response.

Collection, reporting, availability, and analysis of data—both at the district and school level—are essential to identify and respond to trends and focus areas in program implementation and outcomes. For the gifted program, these data include referrals, identification, cluster group implementation, student growth measures, and teachers' completion of professional development requirements.

As an example, the Gifted Services Office needs ready access to data to accurately measure the number of referrals and identifications across the district. APS uses referrals as a measure of success in increasing access to the gifted program, with the goal of referring and identifying students in elementary school. In recent years the district has seen a sharp increase in referrals at the elementary level in all academic areas, along with a corresponding need for continued emphasis on inclusiveness of all students.

The evaluation revealed that gifted students tend to perform well on standardized assessments, most of which measure proficiency. There are challenges in measuring true academic progress among students who are already high performers since proficiency and growth are two very different benchmarks for academic progress. Most gifted students perform in the upper proficiency strata on the SOL, AP and IB tests, the latter two of which are not administered until the high school level. Beyond the Reading Inventory administered in middle school, APS has limited standardized methodology for measuring

growth, and thus no reports available for analysis; growth measures are important for gifted students as so many of them are already performing at an advanced level.

The evaluation indicated the need for improved, additional, and/or new reporting mechanisms in some data areas, greater "cross-walking" among reports, and full access to data in easily accessible formats for the GS Office and other relevant offices. The action steps below address these points as well as associated professional development and communication with principals and teachers.

Action Steps

1. Direct Information Services to:
    - provide the Gifted Services Office access to all data related to the program.
    - create reports on referral and identification data by school to track progress and identify focus areas.
    - create reports that enable monitoring of clustering and credit roster data.
2. Provide training to staff at schools that have referral and identification gaps to support increased access to gifted services for all students.
3. Provide an implementation plan for principals and RTGs to:
    - increase the understanding of the universal screening process.
    - identify and use measures of growth to guide instruction for gifted students.
    - monitor the referral process on a quarterly basis at the school and district levels.

Recommendation #4:

Develop and implement a plan to clearly and regularly communicate gifted services information to students and families.

Survey results showed that parents of elementary gifted students report greater knowledge about the gifted services their child receives and greater communication about their child's progress than do middle and high school parents. As staff reviewed these findings, the question became "Are schools not supplying the information or do parents (and students) not realize that what they receive pertains to gifted services?" This recommendation addresses the need for a communication plan and common vocabulary.

Action Steps

1. Communicate expectations with principals and RTGs responsible for identifying the frequency and nature of communications with parents and families. Make revisions to current practices as needed in order to provide frequent and clear communication to families on a quarterly basis and ensure communication expectations are met.
2. Meet with stakeholders annually to determine strengths and areas of improvement related to communication strategies.

3. Develop a communication plan with Gifted Services and School and Community Relations staff that includes strategies for engaging families and staff in all schools regarding gifted services opportunities.
4. Develop and implement a common vocabulary for messaging.
5. Ensure that messaging is consistent across all APS media.